3GPP TS 29.519 V18.4.0 (2023-12)

Technical Specification

3rd Generation Partnership Project;

Technical Specification Group Core Network and Terminals;

5G System; Usage of the Unified Data Repository service for Policy Data, Application Data and Structured Data for Exposure;  
Stage 3

(Release 18)

**



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# Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

x the first digit:

1 presented to TSG for information;

2 presented to TSG for approval;

3 or greater indicates TSG approved document under change control.

y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

z the third digit is incremented when editorial only changes have been incorporated in the document.

# 1 Scope

The present specification provides the stage 3 definition for the usage of the Unified Data Repository service (Nudr\_DataRepository) of 5G System for Policy Data, Application Data and Structured Data for Exposure.

The Unified Data Repository (UDR) provides the Unified Data Repository service. This service provides a repository for policy data, application data and exposure data.

The stage 3 protocol definition for Nudr Service Based Interface which is common for subscription data, policy data, application data and exposure data is specified in 3GPP TS 29.504 [6].

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] Void.

[3] OpenAPI: "OpenAPI Specification Version 3.0.0",<https://spec.openapis.org/oas/v3.0.0>.

[4] 3GPP TS 29.500: "5G System; Technical Realization of Service Based Architecture; Stage 3".

[5] 3GPP TS 29.501: "5G System; Principles and Guidelines for Services Definition; Stage 3".

[6] 3GPP TS 29.504:"5G System; Unified Data Repository Services; Stage 3".

[7] 3GPP TS 29.571: "5G System; Common Data Types for Service Based Interfaces Stage 3".

[8] 3GPP TS 29.551: "5G System; Packet Flow Description Management Service; Stage 3".

[9] 3GPP TS 29.122: "T8 reference point for Northbound APIs".

[10] 3GPP TS 29.518: "5G System; Access and Mobility Management Services; Stage 3".

[11] 3GPP TS 24.501: "Non-Access-Stratum (NAS) protocol for 5G System (5GS); Stage 3".

[12] 3GPP TS 29.512: "5G System; Session Management Policy Control Service; Stage 3".

[13] 3GPP TS 29.554: "5G System; Background Data Transfer Policy Control Service; Stage 3".

[14] Void.

[15] 3GPP TS 29.505: "5G System; Usage of the Unified Data Repository services for Subscription Data; Stage 3".

[16] 3GPP TS 29.514: "5G System; Policy Authorization Service; Stage 3".

[17] IETF RFC 4122: "A Universally Unique IDentifier (UUID) URN Namespace".

[18] 3GPP TR 21.900: "Technical Specification Group working methods".

[19] 3GPP TS 29.522: "5G System; Network Exposure Function Northbound APIs; Stage 3".

[20] IETF RFC 6901: "JavaScript Object Notation (JSON) Pointer".

[21] IETF RFC 9110: "HTTP Semantics".

[22] 3GPP TS 29.534: "5G System; Access and Mobility Policy Authorization Service; Stage 3".

[23] 3GPP TS 29.591: "5G System; Network Exposure Function Southbound Services; Stage 3".

[24] 3GPP TS 29.510: "Network Function Repository Services; Stage 3".

[25] 3GPP TS 29.543: "5G System; Data Transfer Policy Control Services; Stage 3".

[26] 3GPP TS 32.421: "Telecommunication management; Subscriber and equipment trace; Trace concepts and requirements".

[27] 3GPP TS 29.565: "5G System; Time Sensitive Communication and Time Synchronization Function Services; Stage 3".

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

## 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

A2X Aircraft-to-Everything

AM Access and Mobility Management

ATSSS Access Traffic Steering, Switching, Splitting

BDT Background Data Transfer

DNAI DN Access Identifier

DNN Data Network Name

EAS Edge Application Server

ECS Edge Configuration Server

GPSI Generic Public Subscription Identifier

JSON JavaScript Object Notation

MA Multi Access

NEF Network Exposure Function

NR New Radio

NRF Network Repository Function

PCF Policy Control Function

PDTQ Planned Data Transfer with QoS requirements

PFD Packet Flow Description

PSA PDU Session Anchor

SFC Service Function Chain

SM Session Management

S-NSSAI Single Network Slice Selection Assistance Information

SUPI Subscription Permanent Identifier

TNAP Trusted Network Access Point

UDR Unified Data Repository

UPF User Plane Function

UPSI UE Policy Section Identifier

URSP UE Route Selection Policy

# 4 Overview

The resources, data model and usage defined in the present document are used by the 5GC NFs (e.g. PCF, NEF) to access the policy data, application data or exposure data via the Unified Data Repository services as specified in 3GPP TS 29.504 [6].

# 5 Usage of Nudr\_DataRepository Service API for Policy Data

## 5.1 Introduction

The following clauses specify the usage of Nudr\_DataRepository service for policy data. The principles specified in 3GPP TS 29.504 [6] are followed unless explicitly specified otherwise in the following clauses.

## 5.2 Resources

### 5.2.1 Overview

This clause specifies the resources for the usage of the Unified Data Repository service for Policy Data.

### 5.2.2 Resource Structure

This clause describes the structure for the Resource URIs and the resources and methods used for the service.

Figure 5.2.2-1 depicts the resource URIs structure for the Nudr\_DataRepository API for policy data.



Figure 5.2.2-1: Resource URI structure of the Nudr\_DataRepository API for policy data

Table 5.2.2-1 provides an overview of the resources and applicable HTTP methods.

Table 5.2.2-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| PolicyDataForIndividualUe | /policy-data/ues/{ueId} | GET | Retrieve multiple policy data sets (access and mobility policy data, UE policy set data, session management policy data, usage monitoring data, operator specific policy data) for a subscriber. |
| AccessAndMobilityPolicyData | /policy-data/ues/{ueId}/ am-data | GET | Retrieve the access and mobility policy data for a subscriber. |
| UEPolicySet | /policy-data/ues/{ueId}/ ue-policy-set | GET | Retrieve the UE policy set data for a subscriber. |
| PUT | Create or modify the UE policy set data for a subscriber. |
| PATCH | Modify the UE policy set data for a subscriber. |
| SessionManagementPolicyData | /policy-data/ues/{ueId}/ sm-data | GET | Retrieve the session management policy data for a subscriber. |
| PATCH | When the feature "SessionManagementPolicyDataPatch" is supported, modify the session management policy data for a subscriber. |
| UsageMonitoringInformation | /policy-data/ues/{ueId}/ sm-data/{usageMonId} | GET | Retrieve a usage monitoring resource. |
| PUT | Create a usage monitoring resource. |
| DELETE | Delete a usage monitoring resource. |
| OperatorSpecificData | /policy-data/ues/{ueId}/ operator-specific-data | GET | Retrieve the operator specific policy data of a UE |
| PATCH | Modify the operator specific policy data of a UE. |
| PUT | Create or modify the operator specific policy data of a UE. |
| DELETE | Delete the operator specific policy data for a UE. |
| SponsorConnectivityData | /policy-data/sponsor-connectivity-data/{sponsorId} | GET | Retrieve the sponsored connectivity information for a given sponsorId. |
| BdtData | /policy-data/bdt-data | GET | Retrieve the BDT data collection. |
| IndividualBdtData | /policy-data/bdt-data/ {bdtReferenceId} | GET | Retrieve the BDT data information associated with a BDT reference Id. |
| PUT | Create a BDT data resource associated with a BDT reference Id. |
| PATCH | Modifies an BDT data resource associated with an BDT reference Id. |
| DELETE | Delete a BDT data resource associated with a BDT reference Id. |
| PolicyDataSubscriptions | /policy-data/subs-to-notify | GET | Retrieve Individual Policy Data Subscriptions from the Policy Data Subscriptions collection. |
| POST | Create a subscription to receive notifications of policy data changes. |
| IndividualPolicyDataSubscription | /policy-data/subs-to-notify/ {subsId} | GET | Retrieve a subscription identified by {subsId}. |
| PUT | Modify a subscription to receive notifications of policy data changes. |
| DELETE | Delete a subscription identified by {subsId}. |
| PlmnUePolicySet | /policy-data/plmns/{plmnId}/ ue-policy-set | GET | Retrieve the UE policy set data for an H-PLMN. |
| SlicePolicyControlData | /policy-data/slice-control-data/{snssai} | GET | Retrieve network slice specific policy control data for a given S-NSSAI. |
| PATCH | Modify network slice specific policy control data for a given S-NSSAI. |
| MBSSessionPolicyControlData | /policy-data/mbs-session-pol-data/{polSessionId} | GET | Retrieve MBS Session Policy Control Data for an MBS Session based on the MBS Session Identifier or an AF Application Identifier. |
| PdtqData | /policy-data/pdtq-data | GET | Retrieve the PDTQ data collection. |
| IndividualPdtqData | /policy-data/pdtq-data/ {pdtqReferenceId} | GET | Retrieve the PDTQ data information associated with a PDTQ reference Id. |
| PUT | Create a PDTQ data resource associated with a PDTQ reference Id. |
| PATCH | Modifies a PDTQ data resource associated with an PDTQ reference Id. |
| DELETE | Delete a PDTQ data resource associated with a PDTQ reference Id. |
| GroupPolicyControlData | /policy-data/group-control-data/{intGroupId} | GET | Retrieve group specific policy control data for a 5G VN group. |
| PATCH | Modify group specific policy control data for a 5G VN group. |

### 5.2.3 Resource: AccessAndMobilityPolicyData

#### 5.2.3.1 Description

The resource represents all UE related mobility and access policies attributes in the UDR for a given "ueId".

#### 5.2.3.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/ues/{ueId}/am-data**

This resource shall support the resource URI variables defined in table 5.2.3.2-1.

Table 5.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1 |
| ueId | VarUeId | Represents the Subscription Identifier SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7]. |

#### 5.2.3.3 Resource Standard Methods

##### 5.2.3.3.1 GET

This method shall support the URI query parameters specified in table 5.2.3.3.1-1.

Table 5.2.3.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.3.3.1-2 and the response data structures and response codes specified in table 5.2.3.3.1-3.

Table 5.2.3.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.3.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| AmPolicyData | M | 1 | 200 OK | Upon success, a response body containing access and mobility policies shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.4 Resource: UEPolicySet

#### 5.2.4.1 Description

The resource represents UE policy set for a given "ueId" stored in the UDR of the H-PLMN.

#### 5.2.4.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/ues/{ueId}/ue-policy-set**

This resource shall support the resource URI variables defined in table 5.2.4.2-1.

Table 5.2.4.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1 |
| ueId | VarUeId | Represents the Subscription Identifier SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7]. |

#### 5.2.4.3 Resource Standard Methods

##### 5.2.4.3.1 PUT

This method shall support the URI query parameters specified in table 5.2.4.3.1-1.

Table 5.2.4.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.4.3.1-2 and the response data structures and response codes specified in table 5.2.4.3.1-3.

Table 5.2.4.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| UePolicySet | M | 1 | Create or modify the UE policy set resource for a given subscriber. |

Table 5.2.4.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| UePolicySet | M | 1 | 201 Created | Successful case.  The resource has been successfully created and a response body containing a representation of the created UEPolicySet resource shall be returned. |
| UePolicySet | M | 1 | 200 OK | Successful case.  The resource has been successfully updated and a response body containing UE policies shall be returned. |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully updated and no additional content is to be sent in the response message. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 5.2.4.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure:{apiRoot}/nudr-dr/<apiVersion>/policy-data/ues/{ueId}/ue-policy-set |

##### 5.2.4.3.2 PATCH

This method shall support the URI query parameters specified in table 5.2.4.3.2-1.

Table 5.2.4.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.4.3.2-2 and the response data structures and response codes specified in table 5.2.4.3.2-3.

Table 5.2.4.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| UePolicySetPatch | M | 1 | Modify the UE policy set resource for a given subscriber. |

Table 5.2.4.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully updated and no additional content is to be sent in the response message. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.4.3.3 GET

This method shall support the URI query parameters specified in table 5.2.4.3.3-1.

Table 5.2.4.3.3-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.4.3.3-2 and the response data structures and response codes specified in table 5.2.4.3.3-3.

Table 5.2.4.3.3-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.4.3.3-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| UePolicySet | M | 1 | 200 OK | Upon success, a response body containing the UE policies shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.5 Resource: SessionManagementPolicyData

#### 5.2.5.1 Description

The resource represents all PDU session related subscription attributes in the UDR for a given ueId.

#### 5.2.5.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/ues/{ueId}/sm-data**

This resource shall support the resource URI variables defined in table 5.2.5.2-1.

Table 5.2.5.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| ueId | VarUeId | Represents the Subscription Identifier SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7]. |

#### 5.2.5.3 Resource Standard Methods

##### 5.2.5.3.1 GET

This method shall support the URI query parameters specified in table 5.2.5.3.1-1.

Table 5.2.5.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| snssai | Snssai | O | 0..1 | Identifies a Single Network Slice Selection Assistance Information. |
| dnn | Dnn | O | 0..1 | Identifies a Data Network Name. |
| fields | array(string) | C | 1..N | When the NF consumer only retrieves a subset of the resource, the "fields" query parameter shall be included. The "fields" query parameter contains the pointers of the attribute(s) to be retrieved. |
| supp-feat | SupportedFeatures | O | 0..1 | Identifies the features supported by the NF service consumer. |

When an optional query parameter is not included, the UDR shall return session management policy data per DNN matching the value of the included query parameter(s) for all the possible values of the omitted query parameter. E.g. if "snssai" is not included, and "dnn" is included, UDR shall return the session management policy data per DNN for the DNN identified by "dnn" for all network slices where such DNN is available.

This method shall support the request data structures specified in table 5.2.5.3.1-2 and the response data structures and response codes specified in table 5.2.5.3.1-3.

Table 5.2.5.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.5.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| SmPolicyData | M | 1 | 200 OK | Upon success, a response body containing SmPolicyData shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

NOTE: This release supports that only one PCF can access to the UDR to retrieve the SM Policy Data under one S-NSSAI and DNN association.

##### 5.2.5.3.2 PATCH

This method shall support the URI query parameters specified in table 5.2.5.3.2-1.

Table 5.2.5.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
|  |  |  |  |  |

This method shall support the request data structures specified in table 5.2.5.3.2-2 and the response data structures and response codes specified in table 5.2.5.3.2-3.

Table 5.2.5.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| SmPolicyDataPatch | M | 1 | When the "SessionManagementPolicyDataPatch" feature is supported, it requests the modification of the session management policy data for a subscriber. |

Table 5.2.5.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully updated and no additional content is to be sent in the response message. (NOTE 2)(NOTE 3) |
| SmPolicyData | M | 1 | 200 OK | Upon success, the execution report is returned. (NOTE 2)(NOTE 3) |
| NOTE 1: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: If all the modification instructions in the PATCH request have been implemented, the UDR shall respond with 204 No Content response; if some of the modification instructions in the PATCH request have been discarded, and the NF service consumer supported the "PatchReport" feature, the UDR shall respond with SmPolicyData.  NOTE 3: When the resource is successfully updated, if the SmPolicyDataPatch in the request requires the creation, removal, or update of an entry of the "umData" attribute, the UDR shall create, remove or update the corresponding UsageMonitoringInformation resource for the indicated limit identifier. | | | | |

### 5.2.6 Resource: UsageMonitoringInformation

#### 5.2.6.1 Description

The resource represents an individual usage monitoring resource created in the UDR and associated with a ueId and a usageMonId.

#### 5.2.6.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/ues/{ueId}/sm-data/{usageMonId}**

This resource shall support the resource URI variables defined in table 5.2.6.2-1.

Table 5.2.6.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| ueId | VarUeId | Represents the Subscription Identifier SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7]. |
| usageMonId | string | Unique identifier of the individual SM Policy usage monitoring resource. It contains the identity of the corresponding limit as defined in the "limitId" attribute of the UsageMonDataLimit data type (see clause 5.4.2.6). |

#### 5.2.6.3 Resource Standard Methods

##### 5.2.6.3.1 PUT

This method shall support the URI query parameters specified in table 5.2.6.3.1-1.

Table 5.2.6.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.6.3.1-2 and the response data structures and response codes specified in table 5.2.6.3.1-3.

Table 5.2.6.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| UsageMonData | M | 1 | Create the usage monitoring resource. |

Table 5.2.6.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| UsageMonData | M | 1 | 201 Created | Successful case.  The resource has been successfully created and a response body is returned containing a representation of the resource. (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: When the resource is successfully created, the UDR shall create a new entry within the "umData" attribute of the SessionManagementPolicyData resource for the corresponding "limitId" accordingly. | | | | |

Table 5.2.6.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/policy-data/ues/{ueId}/sm-data/{usageMonId} |

##### 5.2.6.3.2 DELETE

This method shall support the URI query parameters specified in table 5.2.6.3.2-1.

Table 5.2.6.3.2-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.6.3.2-2 and the response data structures and response codes specified in table 5.2.6.3.2-3.

Table 5.2.6.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.6.3.2-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully deleted.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: When the resource is successfully deleted, the UDR shall delete within the "umData" attribute of the SessionManagementPolicyData resource the corresponding "limitId" entry accordingly. | | | | |

##### 5.2.6.3.3 GET

This method shall support the URI query parameters specified in table 5.2.6.3.3-1.

Table 5.2.6.3.3-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.6.3.3-2 and the response data structures and response codes specified in table 5.2.6.3.3-3.

Table 5.2.6.3.3-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.6.3.3-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| UsageMonData | M | 1 | 200 OK | Successful case.  The usage monitoring data is returned. |
| n/a |  |  | 204 No Content | The resource was found but no usage monitoring data is available. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.7 Resource: SponsorConnectivityData

#### 5.2.7.1 Description

The resource represents sponsored data connectivity related information stored in the UDR for a given sponsorId.

#### 5.2.7.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/sponsor-connectivity-data/{sponsorId}**

This resource shall support the resource URI variables defined in table 5.2.7.2-1.

Table 5.2.7.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| sponsorId | string | Represents the sponsor identity. |

#### 5.2.7.3 Resource Standard Methods

##### 5.2.7.3.1 GET

This method shall support the URI query parameters specified in table 5.2.7.3.1-1.

Table 5.2.7.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.7.3.1-2 and the response data structures and response codes specified in table 5.2.7.3.1-3.

Table 5.2.7.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.7.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| SponsorConnectivityData | M | 1 | 200 OK | Upon success, a response body containing Sponsor Connectivity Data shall be returned. |
| n/a |  |  | 204 No Content | The resource was found but no Sponsor Connectivity Data is available. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.8 Resource: BdtData

#### 5.2.8.1 Description

The resource represents background data transfer data stored in the UDR.

#### 5.2.8.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/bdt-data**

This resource shall support the resource URI variables defined in table 5.2.8.2-1.

Table 5.2.8.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 5.2.8.3 Resource Standard Methods

##### 5.2.8.3.1 GET

This method shall support the URI query parameters specified in table 5.2.8.3.1-1.

Table 5.2.8.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| bdt-ref-ids | array(BdtReferenceId) | O | 1..N | If included, this IE shall contain a list of the BDT reference identifiers.  Each member of the array is an individual BDT reference identifier. |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.8.3.1-2 and the response data structures and response codes specified in table 5.2.8.3.1-3.

Table 5.2.8.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.8.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(BdtData) | M | 0..N | 200 OK | Upon success, a response body containing the BDT data shall be returned.  Each member of the array is an individual BDT data. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.9 Resource: IndividualBdtData

#### 5.2.9.1 Description

The resource represents individual background data transfer data stored in the UDR for a given "bdtReferenceId".

#### 5.2.9.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/bdt-data/{bdtReferenceId}**

This resource shall support the resource URI variables defined in table 5.2.9.2-1.

Table 5.2.9.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| bdtReferenceId | BdtReferenceId | Represents the transfer policy of background data transfer for provided ASP. Data type BdtReferenceId is defined in 3GPP TS 29.122 [9]. |

#### 5.2.9.3 Resource Standard Methods

##### 5.2.9.3.1 GET

This method shall support the URI query parameters specified in table 5.2.9.3.1-1.

Table 5.2.9.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.9.3.1-2 and the response data structures and response codes specified in table 5.2.9.3.1-3.

Table 5.2.9.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.9.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| BdtData | M | 1 | 200 OK | Upon success, a response body containing the BDT data shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.9.3.2 PUT

This method shall support the URI query parameters specified in table 5.2.9.3.2-1.

Table 5.2.9.3.2-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.9.3.2-2 and the response data structures and response codes specified in table 5.2.9.3.2-3.

Table 5.2.9.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| BdtData | M | 1 | Create the BDT data for a given bdtReferenceId. |

Table 5.2.9.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| BdtData | M | 1 | 201 Created | Successful case.  The resource has been successfully created. |
| ProblemDetails | O | 0..1 | 403 Forbidden | The resource is not allowed to be updated.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The "cause" attribute within the "ProblemDetails" data structure may be set to "MODIFICATION\_NOT\_ALLOWED" as defined in table 5.2.7.2-1 of 3GPP TS 29.500 [4]. | | | | |

Table 5.2.9.3.2-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/policy-data/bdt-data/{bdtReferenceId} |

##### 5.2.9.3.3 DELETE

This method shall support the URI query parameters specified in table 5.2.9.3.3-1.

Table 5.2.9.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.9.3.3-2 and the response data structures and response codes specified in table 5.2.9.3.3-3.

Table 5.2.9.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.9.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully deleted. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.9.3.4 PATCH

This method shall support the URI query parameters specified in table 5.2.9.3.4-1.

Table 5.2.9.3.4-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.9.3.4-2 and the response data structures and response codes specified in table 5.2.9.3.4-3.

Table 5.2.9.3.4-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| BdtDataPatch | M | 1 | Modify the BDT data for a given bdtReferenceId. |

Table 5.2.9.3.4-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| BdtData | M | 1 | 200 OK | The resource has been successfully updated and a response body containing BDT data shall be returned. |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully updated and no additional content is to be sent in the response message. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.10 Resource: PolicyDataSubscriptions

#### 5.2.10.1 Description

This resource is used to represent subscriptions to notification of policy data modification.

#### 5.2.10.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/subs-to-notify**

This resource shall support the resource URI variables defined in table 5.2.10.2-1.

Table 5.2.10.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 5.2.10.3 Resource Standard Methods

##### 5.2.10.3.1 POST

This method shall support the URI query parameters specified in table 5.2.10.3.1-1.

Table 5.2.10.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.10.3.1-2 and the response data structures and response codes specified in table 5.2.10.3.1-3.

Table 5.2.10.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| PolicyDataSubscription | M | 1 | Identifies the subscription to notification of policy data modification. |

Table 5.2.10.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PolicyDataSubscription | M | 1 | 201 Created | Upon success, a response body containing a representation of each Individual subscription resource shall be returned.  The HTTP response shall include a "Location" HTTP header that contains the resource URI of the created resource. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 5.2.10.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/policy-data/subs-to-notify/{subsId} |

##### 5.2.10.3.2 GET

This method shall support the URI query parameters specified in table 5.2.10.3.2-1.

Table 5.2.10.3.2-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| mon-resources | array(string) | C | 1..N | Indicate the resources for which it is requested to return the existing subscriptions to notifications on data changes. It contains the <apiSpecificResourceUriPart> of a monitored resource.  When present, the UDR shall return the IndividualPolicyDataSubscription resource(s) for which one or more of the indicated resources in the "mon-resources" query parameter matches with the <apiSpecificResourceUriPart> of one or more entries of the "monitoredResourceUris" property of the resource (i.e. within the resource representation in the PolicyDataSubscription data structure). |
| ue-id | VarUeId | C | 0..1 | Represents the Subscription Identifier SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7].  When present, the UDR shall return the IndividualPolicyDataSubscription resource(s) for the indicated UE. |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer, as per clause 6.6 of 3GPP TS 29.500 [4]. |
| NOTE: Either the "mon-resources” or "ue-id” query parameters shall be present in the request. | | | | |

This method shall support the request data structures specified in table 5.2.10.3.2-2 and the response data structures and response codes specified in table 5.2.10.3.2-3.

Table 5.2.10.3.2-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.10.3.2-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(PolicyDataSubscription) | M | 0..N | 200 OK | Upon success, a response body containing the the requested Individual Policy Data Subscription(s) shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.11 Resource: IndividualPolicyDataSubscription

#### 5.2.11.1 Description

This resource is used to represent an individual subscription to notification of policy data modification.

#### 5.2.11.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/subs-to-notify/{subsId}**

This resource shall support the resource URI variables defined in table 5.2.11.2-1.

Table 5.2.11.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| subsId | string | The subsId identifies an individual policy data subscription to notifications. The value is allocated by the UDR during creation of the PolicyDataSubscriptions resource. |

#### 5.2.11.3 Resource Standard Methods

##### 5.2.11.3.1 PUT

This method shall support the URI query parameters specified in table 5.2.11.3.1-1.

Table 5.2.11.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.11.3.1-2 and the response data structures and response codes specified in table 5.2.11.3.1-3.

Table 5.2.11.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| PolicyDataSubscription | M | 1 | Updates the subscription to notification of policy data modification. |

Table 5.2.11.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PolicyDataSubscription | M | 1 | 200 OK | The individual subscription resource was updated successfully. |
| n/a |  |  | 204 No Content | The individual subscription resource was updated successfully and no additional content is to be sent in the response message. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.11.3.2 DELETE

This method shall support the URI query parameters specified in table 5.2.11.3.2-1.

Table 5.2.11.3.2-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.11.3.2-2 and the response data structures and response codes specified in table 5.2.11.3.2-3.

Table 5.2.11.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  | The request body shall be empty. |

Table 5.2.11.3.2-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon success, an empty response body shall be returned. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.11.3.3 GET

This method shall support the URI query parameters specified in table 5.2.11.3.3-1.

Table 5.2.11.3.3-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.11.3.3-2 and the response data structures and response codes specified in table 5.2.11.3.3-3.

Table 5.2.11.3.3-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.11.3.3-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PolicyDataSubscription | M | 1 | 200 OK | Upon success, a response body containing the resource representation of the requested Individual Policy Data Subscription. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.12 Resource: OperatorSpecificData

#### 5.2.12.1 Description

This resource represents the UE's operator specific data.

NOTE: This resource can be used for operator specific data that is related to any policy data (e.g., AM policy data).

This resource is modelled with the Document resource archetype (see clause C.1 of 3GPP TS 29.501 [5]).

#### 5.2.12.2 Resource Definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/ues/{ueId}/operator-specific-data**

This resource shall support the resource URI variables defined in table 5.2.12.2-1.

Table 5.2.12.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| ueId | VarUeId | Represents the Subscription Identifier SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7]. |

#### 5.2.12.3 Resource Standard Methods

##### 5.2.12.3.1 GET

This method is used to retrieve operator specific data from the UDR.

This method shall support the URI query parameters specified in table 5.2.12.3.1-1.

Table 5.2.12.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| fields | array(string) | C | 1..N | When the NF consumer only retrieves a subset of the resource, the "fields" query parameter shall be included. The "fields" query parameter contains the pointers of the attribute(s) to be retrieved. |
| supp-feat | SupportedFeatures | O | 0..1 | Identifies the features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.12.3.1-2 and the response data structures and response codes specified in table 5.2.12.3.1-3.

Table 5.2.12.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.12.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| map(OperatorSpecificDataContainer) | M | 0..N | 200 OK | Upon success, a response body containing a map shall be returned. The key of the map is an operator specific data element name and the value is the operator specific data of such data element, for the current UE (identified by the {ueId} variable in the resource path).  If the resource does not contain any keys, the response consists of an empty JSON object (empty map). |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.12.3.2 PATCH

This method is used to modify operator specific data in the UDR.

This method shall support the URI query parameters specified in table 5.2.12.3.2-1.

Table 5.2.12.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.12.3.2-2 and the response data structures and response codes specified in table 5.2.12.3.2-3.

Table 5.2.12.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| array(PatchItem) | M | 1..N | Contains the delta data to the operator specific data |

Table 5.2.12.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon successful modification there is no body in the response message.(NOTE 2) |
| PatchResult | M | 1 | 200 OK | Upon success, the execution report is returned. (NOTE 2) |
| ProblemDetails | O | 0..1 | 403 Forbidden | The resource is not allowed to be updated.  (NOTE 3) |
| NOTE 1: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: If all the modification instructions in the PATCH request have been implemented, the UDR shall respond with 204 No Content response; if some of the modification instructions in the PATCH request have been discarded, and the NF service consumer supported the "PatchReport" feature, the UDR shall respond with PatchResult.  NOTE 3: The "cause" attribute within the "ProblemDetails" data structure may be set to "MODIFICATION\_NOT\_ALLOWED" as defined in table 5.2.7.2-1 of 3GPP TS 29.500 [4]. | | | | |

##### 5.2.12.3.3 PUT

This method is used to create or modify operator specific data in the UDR.

This method shall support the URI query parameters specified in table 5.2.12.3.3-1.

Table 5.2.12.3.3-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.12.3.3-2 and the response data structures and response codes specified in table 5.2.12.3.3-3.

Table 5.2.12.3.3-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| map(OperatorSpecificDataContainer) | M | 1..N | A map containing the new representation of the operator specific data. The key of the map is operator specific data element name and the value is the operator specific data of the UE. |

Table 5.2.12.3.3-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| map(OperatorSpecificDataContainer) | M | 1 | 200 OK | Upon successful modification a response body containing a map shall be returned. The key of the map is operator specific data element name and the value is the operator specific data of the UE. |
| map(OperatorSpecificDataContainer) | M | 1 | 201 Created | If the "OSDResource\_Create\_Delete" feature is supported and the resource has been successfully created, a response body is returned. The key of the map is operator specific data element name and the value is the operator specific data of the UE. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| ProblemDetails | O | 0..1 | 403 Forbidden | The resource is not allowed to be updated.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The "cause" attribute within the "ProblemDetails" data structure may be set to "MODIFICATION\_NOT\_ALLOWED" as defined in table 5.2.7.2-1 of 3GPP TS 29.500 [4]. | | | | |

Table 5.2.12.3.3-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/policy-data/ ues/{ueId}/operator-specific-data. |

##### 5.2.12.3.4 DELETE

This method shall support the URI query parameters specified in table 5.2.12.3.4-1.

Table 5.2.12.3.4-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.12.3.4-2 and the response data structures and response codes specified in table 5.2.12.3.4-3.

Table 5.2.12.3.4-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.12.3.4-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case, applicable when the "OSDResource\_Create\_Delete" feature is supported.  The resource has been successfully deleted. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.13 Resource: PlmnUePolicySet

#### 5.2.13.1 Description

The resource represents the UE policy set for a given "plmnId" representing an H-PLMN stored in the UDR of a V‑PLMN.

#### 5.2.13.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/plmns/{plmnId}/ue-policy-set**

This resource shall support the resource URI variables defined in table 5.2.13.2-1.

Table 5.2.13.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| plmnId | string | Concatenating a Mcc and Mnc as defined in 3GPP TS 29.505 [15]. |

#### 5.2.13.3 Resource Standard Methods

##### 5.2.13.3.1 GET

This method shall support the URI query parameters specified in table 5.2.13.3.1-1.

Table 5.2.13.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.13.3.1-2 and the response data structures and response codes specified in table 5.2.13.3.1-3.

Table 5.2.13.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.13.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| UePolicySet | M | 1 | 200 OK | Upon success, a response body containing the UE policies shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.14 Resource: PolicyDataForIndividualUe

#### 5.2.14.1 Description

The resource represents all UE related policy data sets in the UDR for a given "ueId".

#### 5.2.14.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/ues/{ueId}**

This resource shall support the resource URI variables defined in table 5.2.14.2-1.

Table 5.2.14.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1 |
| ueId | VarUeId | Represents the Subscription Identifier SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7]. |

#### 5.2.14.3 Resource Standard Methods

##### 5.2.14.3.1 GET

This method shall support the URI query parameters specified in table 5.2.14.3.1-1.

Table 5.2.14.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer, as per clause 6.6 of 3GPP TS 29.500 [4]. |
| data-subset-names | array(PolicyDataSubset) | O | 2..N | The policy data subsets (e.g. AM policies, SM policies, etc.) requested by the NF service consumer.  If this query parameter is not provided by the NF service consumer, this means that all the available policy data subsets shall be returned. |
| NOTE: When two or more policy data subsets sets shall be retrieved, it is recommended to use a single GET request with query parameters. | | | | |

This method shall support the request data structures specified in table 5.2.14.3.1-2 and the response data structures and response codes specified in table 5.2.14.3.1-3.

Table 5.2.14.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.14.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PolicyDataForIndividualUE | M | 1 | 200 OK | Upon success, a response body containing the policy data subsets requested by the NF service consumer or all the policy data subsets shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.15 Resource: SlicePolicyControlData

#### 5.2.15.1 Description

The resource represents the network slice specific policy control subscription data stored in the UDR for a given S-NSSAI.

#### 5.2.15.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/slice-control-data/{snssai}**

This resource shall support the resource URI variables defined in table 5.2.15.2-1.

Table 5.2.15.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| snssai | Snssai | The S-NSSAI value used in the last segment of the resource URI is encoded as a string as defined in 3GPP TS 29.571 [7], clause 5.4.4.2. |

#### 5.2.15.3 Resource Standard Methods

##### 5.2.15.3.1 GET

This method shall support the URI query parameters specified in table 5.2.15.3.1-1.

Table 5.2.15.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.15.3.1-2 and the response data structures and response codes specified in table 5.2.15.3.1-3.

Table 5.2.15.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.15.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| SlicePolicyData | M | 1 | 200 OK | Upon success, a response body containing network slice specific policy control data shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.15.3.2 PATCH

This method shall support the URI query parameters specified in table 5.2.15.3.2-1.

Table 5.2.15.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
|  |  |  |  |  |

This method shall support the request data structures specified in table 5.2.15.3.2-2 and the response data structures and response codes specified in table 5.2.15.3.2-3.

Table 5.2.15.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| SlicePolicyDataPatch | M | 1 | Modify a network slice specific policy control data resource for a given S-NSSAI. |

Table 5.2.15.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| SlicePolicyData | M | 1 | 200 OK | The resource has been successfully updated and a response body containing network slice specific policy control data shall be returned. |
| n/a |  |  | 204 No Content | The resource has been successfully updated and no additional content is to be sent in the response message. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.16 Resource: MBSSessionPolicyControlData

#### 5.2.16.1 Description

The resource represents the MBS Session Policy Control Data for an MBS Session.

#### 5.2.16.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/mbs-session-pol-data/{polSessionId}**

This resource shall support the resource URI variables defined in table 5.2.16.2-1.

Table 5.2.16.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| polSessionId | MbsSessPolDataId | Represents the identifier of the MBS Session Policy Control Data. |

#### 5.2.16.3 Resource Standard Methods

##### 5.2.16.3.1 GET

This method shall support the URI query parameters specified in table 5.2.16.3.1-1.

Table 5.2.16.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

Table 5.2.16.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.16.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MbsSessPolCtrlData | M | 1 | 200 OK | Successful case. The requested MBS Session Policy Control Data is successfully returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.17 Resource: PdtqData

#### 5.2.17.1 Description

The resource represents planned data transfer with QoS requirements data stored in the UDR.

#### 5.2.17.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/pdtq-data**

This resource shall support the resource URI variables defined in table 5.2.17.2-1.

Table 5.2.17.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 5.2.17.3 Resource Standard Methods

##### 5.2.17.3.1 GET

This method shall support the URI query parameters specified in table 5.2.8.3.1-1.

Table 5.2.17.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| pdtq-ref-ids | array(PdtqReferenceId) | O | 1..N | If included, this IE shall contain a list of the PDTQ reference identifiers.  Each member of the array is an individual PDTQ reference identifier. |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.17.3.1-2 and the response data structures and response codes specified in table 5.2.17.3.1-3.

Table 5.2.17.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.17.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(PdtqData) | M | 0..N | 200 OK | Upon success, a response body containing the PDTQ data shall be returned.  Each member of the array is an individual PDTQ data. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.18 Resource: IndividualPdtqData

#### 5.2.18.1 Description

The resource represents individual planned data transfer with QoS requirements data stored in the UDR for a given "pdtqReferenceId".

#### 5.2.18.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/pdtq-data/{pdtqReferenceId}**

This resource shall support the resource URI variables defined in table 5.2.18.2-1.

Table 5.2.18.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| pdtqReferenceId | PdtqReferenceId | Represents the PDTQ policy of planned data transfer with QoS requirements for provided ASP. Data type PdtqReferenceId is defined in 3GPP TS 29.543 [25]. |

#### 5.2.18.3 Resource Standard Methods

##### 5.2.18.3.1 GET

This method shall support the URI query parameters specified in table 5.2.18.3.1-1.

Table 5.2.18.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.18.3.1-2 and the response data structures and response codes specified in table 5.2.9.3.1-3.

Table 5.2.18.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.18.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PdtqData | M | 1 | 200 OK | Upon success, a response body containing the PDTQ data shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.18.3.2 PUT

This method shall support the URI query parameters specified in table 5.2.18.3.2-1.

Table 5.2.18.3.2-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.18.3.2-2 and the response data structures and response codes specified in table 5.2.18.3.2-3.

Table 5.2.18.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| PdtqData | M | 1 | Create the PDTQ data for a given pdtqReferenceId. |

Table 5.2.18.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PdtqData | M | 1 | 201 Created | Successful case.  The resource has been successfully created. |
| ProblemDetails | O | 0..1 | 403 Forbidden | The resource is not allowed to be updated.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The "cause" attribute within the "ProblemDetails" data structure may be set to "MODIFICATION\_NOT\_ALLOWED" as defined in table 5.2.7.2-1 of 3GPP TS 29.500 [4]. | | | | |

Table 5.2.18.3.2-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/policy-data/pdtq-data/{pdtqReferenceId} |

##### 5.2.18.3.3 DELETE

This method shall support the URI query parameters specified in table 5.2.18.3.3-1.

Table 5.2.18.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.18.3.3-2 and the response data structures and response codes specified in table 5.2.18.3.3-3.

Table 5.2.18.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.18.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully deleted. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.18.3.4 PATCH

This method shall support the URI query parameters specified in table 5.2.18.3.4-1.

Table 5.2.18.3.4-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.2.18.3.4-2 and the response data structures and response codes specified in table 5.2.18.3.4-3.

Table 5.2.18.3.4-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| PdtqDataPatch | M | 1 | Modify the PDTQ data for a given pdtqReferenceId. |

Table 5.2.18.3.4-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| PdtqData | M | 1 | 200 OK | The resource has been successfully updated and a response body containing PDTQ data shall be returned. |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully updated and no additional content is to be sent in the response message. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 5.2.19 Resource: GroupPolicyControlData

#### 5.2.19.1 Description

The resource represents the group specific policy control subscription data stored in the UDR for a 5G VN group.

#### 5.2.19.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/policy-data/group-control-data/{intGroupId}**

This resource shall support the resource URI variables defined in table 5.2.19.2-1.

Table 5.2.19.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| intGroupId | GroupId | Identifies a 5G VN group as defined in clause 5.3.2 of 3GPP TS 29.571 [7]. |

#### 5.2.19.3 Resource Standard Methods

##### 5.2.19.3.1 GET

This method shall support the URI query parameters specified in table 5.2.19.3.1-1.

Table 5.2.19.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 5.2.19.3.1-2 and the response data structures and response codes specified in table 5.2.19.3.1-3.

Table 5.2.19.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.19.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| GroupPolicyData | M | 1 | 200 OK | Upon success, a response body containing group specific policy control data for a 5G VN group shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 5.2.19.3.2 PATCH

This method shall support the URI query parameters specified in table 5.2.19.3.2-1.

Table 5.2.19.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
|  |  |  |  |  |

This method shall support the request data structures specified in table 5.2.19.3.2-2 and the response data structures and response codes specified in table 5.2.19.3.2-3.

Table 5.2.19.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| GroupPolicyDataPatch | M | 1 | Modify a group specific policy control data resource for a 5G VN group. |

Table 5.2.19.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| GroupPolicyData | M | 1 | 200 OK | The resource has been successfully modified and a response body containing the updated group specific policy control data for the targeted 5G VN group shall be returned. |
| n/a |  |  | 204 No Content | The resource has been successfully modified and no additional content is to be sent in the response body. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

## 5.3 Notifications

### 5.3.1 General

Notifications shall comply with clause 6.2 of 3GPP TS 29.500 [4] and clause 4.6.2.3 of 3GPP TS 29.501 [5].

This clause describes the resources to provide notification to NF service consumers which have subscribed to be notified when policy data is changed.

Table 5.3.1-1: Notifications overview

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | Callback URI | HTTP method or custom operation | Description  (service operation) |
| Policy Data Change Notification | {notificationUri} | POST | Used for policy data change notification |

### 5.3.2 Policy Data Change Notification

The POST method shall be used for policy data change notification and the URI shall be provided during the subscription procedure.

Callback URI: **{notificationUri}**

This method shall support the URI query parameters specified in table 5.3.2-1.

Table 5.3.2-1: URI query parameters supported by the POST method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 5.3.2-2 and the response data structures and response codes specified in table 5.3.2-3.

Table 5.3.2-2: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| array(PolicyDataChangeNotification) | M | 1..N | Notification of policy data changes. |

Table 5.3.2-3: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The reception of the notification is acknowledged. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

## 5.4 Data Model

### 5.4.1 General

This clause specifies the application data model supported by the API.

Table 5.4.1-1 specifies the data types defined for the Nudr\_DataRepository for Policy Data service based interface protocol.

Table 5.4.1-1: Nudr\_DataRepository specific Data Types for Policy Data

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| AmPolicyData | 5.4.2.2 | Contains the AM policy data for a given subscriber. |  |
| BdtData | 5.4.2.9 | Contains the background data transfer data. |  |
| BdtDataPatch | 5.4.2.27 | Contains the modifiable background data transfer data |  |
| BdtPolicyStatus | 5.4.3.5 | Contains the validation status for a negotiated BDT policy. |  |
| DnnRouteSelectionDescriptor | 5.4.2.20 | Contains the route selector parameters per DNN. |  |
| UpdatedItem | 5.4.2.26 | An updated resource fragment, represented by its location in a resource and its data type. | ConditionalSubscriptionwithPartialNotification |
| LimitIdToMonitoringKey | 5.4.2.16 | Contains the limit identifier and the corresponding monitoring key for a given S-NSSAI and DNN. |  |
| MbsSessPolCtrlData | 5.4.2.31 | Contains MBS Session Policy Control Data. |  |
| MbsSessPolDataId | 5.4.2.32 | Represents the identifier used to access the MBS Session Policy Control Data. |  |
| NotificationItem | 5.4.2.25 | Contains the list of resource fragments included in the notification triggered by the modification of a given resource fragment. | ConditionalSubscriptionwithPartialNotification |
| OsId | 5.4.3.2 | Operating System supported by the UE. |  |
| PdtqData | 5.4.2.33 | Contains the planned data transfer with QoS requirements data. |  |
| PdtqDataPatch | 5.4.2.34 | Contains the modifiable planned data transfer with QoS requirements data |  |
| Periodicity | 5.4.3.4 | Indicates a type of time period. |  |
| PlmnRouteSelectionDescriptor | 5.4.2.18 | Contains the route selectors for a serving PLMN. |  |
| PolicyDataChangeNotification | 5.4.2.11 | Contains changed policy data for which notification was requested. |  |
| PolicyDataForIndividualUe | 5.4.2.28 | Contains policy data sets for a given subscriber. |  |
| PolicyDataSubscription | 5.4.2.10 | Identifies a subscription to policy data change notification. |  |
| PolicyDataSubset | 5.4.3.6 | Indicates a policy data subset (e.g. AM policy data, SM policy data). |  |
| SlicePolicyData | 5.4.2.29 | Contains network slice specific policy control information for an S-NSSAI. |  |
| SlicePolicyDataPatch | 5.4.2.30 | Contains modifiable network slice specific policy control information for an S-NSSAI. |  |
| SmPolicyData | 5.4.2.5 | Contains SM policy data for a subscriber. |  |
| SmPolicyDataPatch | 5.4.2.21 | Contains modifiable SM policy data for a subscriber. | SessionManagementPolicyDataPatch |
| SmPolicyDnnData | 5.4.2.15 | Contains SM policy data for a DNN and S-NSSAI. |  |
| SmPolicyDnnDataPatch | 5.4.2.23 | Contains modifiable SM policy data for a DNN and S-NSSAI. | SessionManagementPolicyDataPatch |
| SmPolicySnssaiData | 5.4.2.14 | Contains SM policy data for an S-NSSAI. |  |
| SmPolicySnssaiDataPatch | 5.4.2.22 | Contains modifiable SM policy data for an S-NSSAI. | SessionManagementPolicyDataPatch |
| SnssaiRouteSelectionDescriptor | 5.4.2.19 | Contains the route selector parameters per SNSSAI. |  |
| SponsorConnectivityData | 5.4.2.8 | Contains the sponsored data connectivity related information for a sponsor identifier. |  |
| ResourceItem | 5.4.2.24 | Represents list of fragments of a resource, i.e. a list of subsets of resource data monitored for notification of data changes. | ConditionalSubscriptionwithPartialNotification |
| ItemPath | 5.4.3.2 | Represents a fragment of a resource, i.e. a subset of resource data. | ConditionalSubscriptionwithPartialNotification |
| TimePeriod | 5.4.2.12 | Contains the periodicity for the defined usage monitoring data limits. |  |
| UePolicySetPatch | 5.4.2.17 | Contains the UE policy data that can be modified by the PCF. |  |
| UePolicySection | 5.4.2.3 | Contains the UE policy section. |  |
| UePolicySet | 5.4.2.4 | Contains the UE policy set for a given subscriber. |  |
| UsageMonLevel | 5.4.3.3 | Indicates the level of the usage monitoring instance (PDU Session level or per Service) |  |
| UsageMonData | 5.4.2.7 | Contains remain allowed usage data for a subscriber. |  |
| UsageMonDataLimit | 5.4.2.6 | Contains usage monitoring control data for a subscriber. |  |
| UsageMonDataScope | 5.4.2.13 | Contains SNSSAI and DNN combinations to which the UsageMonData instance belongs to. |  |

Table 5.4.1-2 specifies data types re-used by the Nudr\_DataRepository for Policy Data service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Nudr\_DataRepository for Policy Data service based interface.

Table 5.4.1-2: Nudr\_DataRepository re-used Data Types for Policy Data

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| 5Qi | 3GPP TS 29.571 [7] | Indicates the 5G QoS Identifier. |  |
| ApplicationId | 3GPP TS 29.571 [7] | Contains the application identifier. |  |
| ArpPriorityLevel | 3GPP TS 29.571 [7] | Indicates the allocation and retention priority level. |  |
| BdtReferenceId | 3GPP TS 29.122 [9] | Indicates the background data transfer reference ID for the transfer policy. |  |
| BitRate | 3GPP TS 29.571 [7] | String representing a bit rate that shall be formatted as follows:  pattern: "^\d+(\.\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"  Examples:  "125 Mbps", "0.125 Gbps", "125000 Kbps". |  |
| Bytes | 3GPP TS 29.571 [7] | String with format "byte" as defined in OpenAPI Specification [3], i.e., base64-encoded characters. |  |
| ChargingInformation | 3GPP TS 29.512 [12] | The address(es), and if available, the instance ID and the set ID of the Charging Function. |  |
| DateTime | 3GPP TS 29.571 [7] | String with format "date-time" as defined in OpenAPI Specification [3]. |  |
| Dnn | 3GPP TS 29.571 [7] | Data Network Name. (NOTE) |  |
| MbsSessionId | 3GPP TS 29.571 [7] | Contains the MBS Session Identifier. |  |
| Metadata | 3GPP TS 29.571 [7] | Contains opaque information for the service functions in the N6-LAN that is provided by AF and transparently sent to UPF. | SFC |
| NetworkAreaInfo | 3GPP TS 29.554 [13] | Represents a network area information. |  |
| OperatorSpecificDataContainer | 3GPP TS 29.505 [15] | Container for operator specific data |  |
| PatchResult | 3GPP TS 29.571 [7] |  |  |
| PatchItem | 3GPP TS 29.571 [7] | Data structure used for JSON patch. |  |
| PdtqPolicy | 3GPP TS 29.543 [25] | Represents a PDTQ policy. |  |
| PdtqReferenceId | 3GPP TS 29.543 [25] | Indicates the planned data transfer with QoS requirements reference ID for the PDTQ policy. |  |
| PduSessionType | 3GPP TS 29.571 [7] | PDU Session Type. |  |
| Pei | 3GPP TS 29.571 [7] | Personal Equipment Identifier. |  |
| PlmnId | 3GPP TS 29.571 [7] | PLMN Identity. |  |
| PresenceInfo | 3GPP TS 29.571 [7] | Presence Reporting Area Information. |  |
| ProblemDetails | 3GPP TS 29.571 [7] | Used in error responses to provide more detailed information about an error. |  |
| SliceMbr | 3GPP TS 29.571 [7] | Contains the slice Maximum Bit Rate including UL and DL. | NSAC |
| Snssai | 3GPP TS 29.571 [7] | Identifies the S-NSSAI. |  |
| SscMode | 3GPP TS 29.571 [7] | SSC mode. |  |
| SupportedFeatures | 3GPP TS 29.571 [7] | Used to negotiate the applicability of the optional features |  |
| TnapId | 3GPP TS 29.571 [7] | Trusted Network Access Point identifier. | AfGuideTNAPs |
| TrafficDescriptor | 3GPP TS 29.122 [9] | Identifies the traffic descriptor of the background data. |  |
| TransferPolicy | 3GPP TS 29.554 [13] | Represents a transfer policy. |  |
| Uinteger | 3GPP TS 29.571 [7] | Unsigned Integer, i.e. only value 0 and integers greater than 0 are allowed. |  |
| Uri | 3GPP TS 29.571 [7] | String providing an URI. |  |
| UsageThreshold | 3GPP TS 29.122 [9] | Usage Thresholds (a data volume expected to be transferred per UE and/or time duration in seconds). |  |
| VarUeId | 3GPP TS 29.571 [7] | String represents the SUPI or GPSI. |  |
| NOTE: The UDR uses the DNN as received from the NF service consumer without applying any transformation. To successfully perform DNN matching, in a specific deployment a DNN shall always be encoded either with the full DNN (e.g., because there are multiple Operator Identifiers for a Network Identifier) or the DNN Network Identifier only. | | | |

### 5.4.2 Structured data types

#### 5.4.2.1 Introduction

This clause defines the structures to be used in resource representations.

#### 5.4.2.2 Type AmPolicyData

Table 5.4.2.2-1: Definition of type AmPolicyData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| praInfos | map(PresenceInfo) | O | 1..N | Presence reporting area information. Each PresenceInfo element shall include the Presence Reporting Area Identifier within the "praId" attribute and, for a UE-dedicated presence reporting area, shall also include the list of elements composing the presence reporting area.  A "praId" may indicate a Presence Reporting Area Set.  The "praId" attribute within the PresenceInfo data type shall also be the key of the map.  The attribute "presenceState" shall not be present. |  |
| subscCats | array(string) | O | 1..N | List of categories associated with the subscriber |  |
| chfInfo | ChargingInformation | O | 0..1 | The address(es) and, if available, the CHF instance ID and the CHF set ID of the Charging Function.  (NOTE) | CHFInformation |
| subscSpendingLimits | boolean | O | 0..1 | Indicates whether the PCF must enforce Access and Mobility management related policies based on subscriber spending limits.  True: Spending limit control is enabled; False: Spending limit control is not enabled.  The absence of this attribute means that spending limit control is not provisioned for the UE. | SLAMUP |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  This parameter shall be provided if the NF service consumer has provided a list of supported features in its request. |  |
| NOTE: When the feature "CHFInformation" is supported, the "secondaryChfAddress" may be omitted. | | | | | |

#### 5.4.2.3 Type UePolicySection

Table 5.4.2.3-1: Definition of type UePolicySection

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| uePolicySectionInfo | Bytes | M | 1 | Contains the UE Policy Section Information for the given UPSI as specified in clause D.6.2 of 3GPP TS 24.501 [11]. |
| upsi | string | M | 1 | Identifier for UE Policy Section. The format is represented in 3GPP TS 24.501 [11] clause D.6.2. |

#### 5.4.2.4 Type UePolicySet

Table 5.4.2.4-1: Definition of type UePolicySet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| praInfos | map(PresenceInfo) | O | 1..N | Presence reporting area information. Each PresenceInfo element shall include the Presence Reporting Area Identifier within the "praId" attribute and, for a UE-dedicated presence reporting area, shall also include the list of elements composing the presence reporting area.  A "praId" may indicate a Presence Reporting Area Set.  The "praId" attribute within the PresenceInfo data type shall also be the key of the map.  The attribute "presenceState" shall not be present. |  |
| subscCats | array(string) | O | 1..N | List of categories associated with the subscriber |  |
| uePolicySections | map(UePolicySection) | O | 1..N | Contains the UE Policy Sections.  The UPSI (UE Policy Section Identifier) is used as the key in the map. |  |
| upsis | array(string) | O | 1..N | List of identifiers for the "uePolicySections". The format of the UPSI is represented in 3GPP TS 24.501 [11] clause D.6.2 |  |
| allowedRouteSelDescs | map(PlmnRouteSelectionDescriptor) | O | 1..N | Contains allowed route selection descriptors per serving PLMN for a UE. The serving PLMN identifier is the key of the map. |  |
| andspInd | boolean | O | 0..1 | Indication of UE supporting ANDSP.  True: The UE supports ANDSP;  False: The UE does not support ANDSP. |  |
| epsUrspInd | boolean | O | 0..1 | Indication of UE supporting URSP provisioning in EPS.  True: The UE supports URSP provisioning in EPS;  False: The UE does not support URSP provisioning in EPS. | EpsUrsp |
| vpsUrspInd | boolean | O | 0..1 | Indication of UE supporting VPLMN-specific URSP.  True: The UE supports VPLMN-specific URSP;  False: The UE does not support VPLMN-specific URSP. | VPLMNSpecificURSP |
| urspEnfInd | boolean | O | 0..1 | Indication of UE supporting URSP enforcement report.  True: The UE supports URSP enforcement report;  False: The UE does not support URSP enforcement report. | URSPEnforcement |
| pei | Pei | O | 0..1 | Personal Equipment Identifier. |  |
| osIds | array(OsId) | O | 1..N | Identification of the UE Operating System(s). |  |
| chfInfo | ChargingInformation | O | 0..1 | The address(es) and, if available, the CHF instance ID and the CHF set ID of the Charging Function.  (NOTE 2) | CHFInformation |
| subscSpendingLimits | boolean | O | 0..1 | Indicates whether the PCF must enforce UE policies based on subscriber spending limits.  True: Spending limit control is enabled;  False: Spending limit control is not enabled.  The absence of this attribute means that spending limit control is not provisioned for the UE. | SLAMUP |
| tracingReq | array(string) | O | 1..N | Tracing requirements as defined in TS 32.421 [26] | EnhancedUePolicy |
| suppFeat | SupportedFeatures | C | 0..1 | This IE represents a list of Supported features used as described in clause 5.6.  This attribute shall be provided in the PUT request and in the response of successful resource creation, and in the HTTP GET response if the "supp-feat" attribute query parameter is included in the HTTP GET request.  (NOTE 1). |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| NOTE 1: In the HTTP request, it represents the set of features supported by the NF service consumer. In the HTTP response, it represents the set of features supported by both the NF service consumer and the UDR.  NOTE 2: When the feature "CHFInformation" is supported, the "secondaryChfAddress" may be omitted. | | | | | |

#### 5.4.2.5 Type SmPolicyData

Table 5.4.2.5-1: Definition of type SmPolicyData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| smPolicySnssaiData | map(SmPolicySnssaiData) | M | 1..N | Session Management Policy data per S-NSSAI for all the SNSSAIs of the subscriber.  The key of the map is the S-NSSAI. (NOTE 2) |  |
| umDataLimits | map(UsageMonDataLimit) | O | 1..N | Contains a list of usage monitoring profiles associated with the subscriber. The limit identifier is used as the key of the map. |  |
| umData | map(UsageMonData) | O | 1..N | Contains the remaining allowed usage data associated with the subscriber.  The limit identifier is used as the key in the map. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  This parameter shall be supplied by the UDR in the response to the GET request when the GET request includes the "supp-feat" query parameter and the UDR supports feature negotiation for Session Management Policy Data. |  |
| NOTE 1: In this Release of the specification the "limitId" corresponds to the Monitoring Key.  NOTE 2: The S-NSSAI value used as key of the map is encoded as a string as defined in 3GPP TS 29.571[7], clause 5.4.4.2. | | | | | |

#### 5.4.2.6 Type UsageMonDataLimit

Table 5.4.2.6-1: Definition of type UsageMonDataLimit

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| limitId | string | M | 1 | Identifies the limit, i.e. the usage monitoring control instance |
| scopes | map(UsageMonDataScope) | O | 1..N | Identifies the SNSSAI and DNN combinations to which the usage monitoring data limit applies.  The S-NSSAI is the key of the map. (NOTE 2)  If the "scopes" attribute is omitted, the limit applies to every S-NSSAI and DNN. |
| umLevel | UsageMonLevel | O | 0..1 | Indicates the level of the usage monitoring instance (PDU Session level or per Service). |
| startDate | DateTime | C | 0..1 | Start date and time when the usage monitoring instance applies. It shall be provided when the resetPeriod attribute is provided. |
| endDate | DateTime | O | 0..1 | End date and time when the usage monitoring instance applies. |
| usageLimit | UsageThreshold | O | 0..1 | Maximum allowed traffic volume/time usage for a usage monitoring instance. If a resetPeriod is specified, this limit applies to every period separately and not for the entire time between the start and end dates. So for example, if the resetPeriod is daily, the usageLimit is applicable for each day until the end date is specified. |
| resetPeriod | TimePeriod | O | 0..1 | Time period to reset the remaining allowed usage for a periodic usage monitoring instance (postpaid subscriptions). This attribute along with the startDate determine the actual absolute time at which usage needs to be reset. |
| NOTE 1: In this Release of the specification the "limitId" attribute is the Monitoring Key, and the "scopes" attribute shall always be present including one distinct SNSSAI and DNN pair.  NOTE 2: The S-NSSAI value used as key of the map is encoded as a string as defined in 3GPP TS 29.571[7], clause 5.4.4.2. | | | | |

#### 5.4.2.7 Type UsageMonData

Table 5.4.2.7-1: Definition of type UsageMonData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| limitId | string | M | 1 | Identifies the limit as defined in the "limitId" attribute of the UsageMonDataLimit data type (see clause 5.4.2.6). |  |
| scopes | map(UsageMonDataScope) | O | 1..N | Identifies the SNSSAI and DNN combinations to which the remaining usage monitoring data applies.  The S-NSSAI is the key of the map.  (NOTE 3) |  |
| umLevel | UsageMonLevel | O | 0..1 | Indicates the level of the usage monitoring instance (PDU Session level or per Service). |  |
| allowedUsage | UsageThreshold | O | 0..1 | Remaining allowed traffic volume usage and/or resource time usage. |  |
| resetTime | DateTime | O | 0..1 | Time to reset the allowed usage back to the usageLimit of the corresponding UsageMonDataLimit. This is computed based on the corresponding startDate, resetPeriod and endDate of the corresponding UsageMonDataLimit. The allowedUsage is only applicable if the resetTime is in the future relative to the current time. |  |
| suppFeat | SupportedFeatures | C | 0..1 | This IE represents a list of Supported features used as described in clause 5.6.  This attribute shall be provided in the PUT request and in the response of successful resource creation, and in the HTTP GET response if the "supp-feat" attribute query parameter is included in the HTTP GET request. (NOTE 2). |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| NOTE 1: In this Release of the specification the "limitId" attribute is the Monitoring Key, and the "scopes" attribute shall always be present including one distinct SNSSAI and DNN pair.  NOTE 2: In the HTTP request, it represents the set of features supported by the NF service consumer. In the HTTP response, it represents the set of features supported by both the NF service consumer and the UDR.  NOTE 3: The S-NSSAI value used as key of the map is encoded as a string as defined in 3GPP TS 29.571 [7], clause 5.4.4.2. | | | | | |

#### 5.4.2.8 Type SponsorConnectivityData

Table 5.4.2.8-1: Definition of type SponsorConnectivityData

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| aspIds | array(string) | M | 1..N | Identifies a list of Application Service Provider Identifiers associated with the sponsor identity. |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  This parameter shall be provided if the NF service consumer has provided a list of supported features in its request. |

#### 5.4.2.9 Type BdtData

Table 5.4.2.9-1: Definition of type BdtData

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| aspId | string | M | 1 | This IE contains an identity of an application service provider. |
| transPolicy | TransferPolicy | M | 1 | This IE contains the transfer policy. |
| bdtRefId | BdtReferenceId | O | 0..1 | This IE indicates the background data transfer reference ID for the transfer policy. |
| nwAreaInfo | NetworkAreaInfo | O | 0..1 | This IE represents a network area information. |
| numOfUes | Uinteger | O | 0..1 | This IE contains the number of UEs using the indicated transfer policy. It shall be present when available. |
| volPerUe | UsageThreshold | O | 0..1 | This IE contains a data volume expected to be transferred per UE for the indicated transfer policy. It shall be present when available. |
| dnn | Dnn | O | 0..1 | This IE identifies a DNN. |
| snssai | Snssai | O | 0..1 | This IE identifies a slice. |
| trafficDes | TrafficDescriptor | O | 0..1 | Contains the traffic descriptor of the background data. |
| bdtpStatus | BdtPolicyStatus | O | 0..1 | Contains the validation status for a negotiated BDT policy. It shall be included when available. Default value is "VALID" if omitted. |
| warnNotifEnabled | boolean | O | 0..1 | This IE indicates whether the BDT warning notification is enabled or disabled.  true: enabled;  false: disabled (default value). |
| notifUri | Uri | O | 0..1 | This IE contains an URI of the recipient of the BDT warning notification. |
| suppFeat | SupportedFeatures | C | 0..1 | This IE represents a list of Supported features used as described in clause 5.6.  This attribute shall be provided in the PUT request and in the response of successful resource creation, and in the HTTP GET response if the "supp-feat" attribute query parameter is included in the HTTP GET request. (NOTE). |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |
| NOTE: In the HTTP request, it represents the set of features supported by the NF service consumer. In the HTTP response, it represents the set of features supported by both the NF service consumer and the UDR. | | | | |

#### 5.4.2.10 Type PolicyDataSubscription

Table 5.4.2.10-1: Definition of type PolicyDataSubscription

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| notificationUri | Uri | M | 1 | URI provided by the NF service consumer indicating where to receive the subscribed notifications from the UDR. |  |
| notifId | string | C | 0..1 | Notification Correlation ID assigned by the NF service consumer. It shall be included when the "ConditionalSubscriptionwithPartialNotification" or the "ConditionalSubscriptionWithExcludeNotification" feature is supported. | ConditionalSubscriptionwithPartialNotification  ConditionalSubscriptionWithExcludeNotification |
| monitoredResourceUris | array(Uri) | M | 1..N | A set of URIs provided by the NF service consumer that identify the resources as defined in table 5.2.2-1 for which a modification triggers a notification.  (NOTE 1) |  |
| monResItems | array(ResourceItem) | O | 1..N | A set of monitored resource fragments provided by the NF service consumer.  When present, this IE indicates the trigger of the notification is conditioned to the data change occurs in one or more of the attributes contained in a resource fragment as defined by the ResourceItem data type, and that the triggered notification shall only include the resource fragment as defined by the ResourceItem data type.  (NOTE 2) | ConditionalSubscriptionwithPartialNotification |
| excludedResItems | array(ResourceItem) | O | 1..N | A set of resource fragments provided by the NF service consumer that are excluded from data change monitoring.  When present, this IE indicates the trigger of the notification is conditioned to the data change occurs in any attribute contained in the resource(s) identified by "monitoredResourceUris", except when the changed data is in one or more of the attributes contained in a resource fragment as defined by the ResourceItem data type.  (NOTE 2) (NOTE 3) (NOTE 4) | ConditionalSubscriptionWithExcludeNotification |
| immRep | boolean | O | 0..1 | If provided by the NF service consumer and set to "true", it indicates to the UDR that existing entries that match this subscription shall be immediately reported within the "immReports" attribute in the response. The default value is false. | ImmediateReportPcc |
| immReports | array(PolicyDataChangeNotification) | C | 1..N | Contains entries stored in the UDR that match this subscription.  It shall be included in the POST response body of a subscription creation if the request included the "immRep" attribute set to true and the UDR needs to include an immediate report in the response.  It shall be included in the PUT response body of a subscription modification if the UDR needs to include an immediate report in the response and:  - if the modification request included the "immRep" attribute set to true and it was previously set to false or not provided;  - if the modification request added the monitoring of new resources within the "monitoredResourceUris" attribute and/or new monitored resource fragments within the "monResItems" attribute, and the "immRep" attribute was previously set to true; and/or  - if the modification request updated the set of excluded resources within the "excludedResItems" attribute and the "immRep" attribute was previously set to true. | ImmediateReportPcc |
| expiry | DateTime | C | 0..1 | This IE shall be included in a subscription response if, based on operator policy and taking into account the expiry time included in the request, the UDR needs to include an expiry time.  This IE may be included in a subscription request. When present, this IE shall represent the time after which the subscription becomes invalid.  The absence of this attribute in the subscription response means the subscription to be valid without an expiry time. |  |
| subsId | string | C | 0..1 | It represents the variable part of the IndividualPolicyDataSubscription resource URI, as specified in clause 5.2.11.2-1.  This attribute shall be present if the PolicyDataSubscription is sent in a GET response message to the PolicyDataSubscriptions collection resource.  This is a Read Only attribute and shall not be provided by the NF service consumer in any request. | PolSubscRetrieval |
| supportedFeatures | SupportedFeatures | C | 0..1 | Used to negotiate the applicability of the optional features.  This attribute shall be provided in the POST request and in the response of successful resource creation. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided by the UDR in the response of successful resource creation. |  |
| NOTE 1: Neither the resource URI of the IndividualPolicyDataSubscription resource nor the resource URI of the PolicyDataSubscriptions resource shall be included in the "monitoredResourceUris" attribute.  NOTE 2: If both ConditionalSubscriptionwithPartialNotification and ConditionalSubscriptionWithExcludeNotification are supported, the fragments defined in "monResItems" attribute and in "excludedResItems" attribute shall refer to different resources defined in "monitoredResourceUris".  NOTE 3: When "excludedResItems" attribute is included, and a change is detected in the monitored part of a resource (i.e., in those properties not included in the "excludedResItems" attribute), the triggered notification shall include the complete resource representation.  NOTE 4: The "excludedResItems" attribute may only be used with the OperatorSpecificData resource. E.g. if the OperatorSpecificData resource contains a map with two elements, one with key "operatorSpecificData1" and the other one with key "operatorSpecificData2", to excude the notification of changes in the "operatorSpecificData1" element the "excludedResItems" attribute will contain the value "/operatorSpecificData1" within the "items" array. | | | | |  |

#### 5.4.2.11 Type PolicyDataChangeNotification

Table 5.4.2.11-1: Definition of type PolicyDataChangeNotification

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| amPolicyData | AmPolicyData | O | 0..1 | Access and Mobility Policy Data, if changed and notification was requested, or if it existed and immediate reporting was requested. |  |
| uePolicySet | UePolicySet | O | 0..1 | UE Policy Set, if changed and notification was requested, or if it existed and immediate reporting was requested. |  |
| plmnUePolicySet | UePolicySet | O | 0..1 | PLMN UE Policy Set, if changed and notification was requested, or if it existed and immediate reporting was requested. |  |
| smPolicyData | SmPolicyData | O | 0..1 | Session Management Policy Data, if changed and notification was requested, or if it existed and immediate reporting was requested. |  |
| usageMonData | UsageMonData | O | 0..1 | Usage Monitoring Data, if changed and notification was requested, or if it existed and immediate reporting was requested. |  |
| SponsorConnectivityData  (NOTE 4) | SponsorConnectivityData | O | 0..1 | Sponsor data connectivity profile information, if changed and notification was requested, or if it existed and immediate reporting was requested. |  |
| bdtData | BdtData | O | 0..1 | Background Data Transfer Data, if changed and notification was requested, or if it existed and immediate reporting was requested. |  |
| opSpecData | OperatorSpecificDataContainer | O | 0..1 | Operator Specific Data, if changed and notification was requested, or if it existed and immediate reporting was requested. It may only be used when the receiver of the notification is able to univocally identify the changed operator specific data.  (NOTE 3) |  |
| opSpecDataMap | map(OperatorSpecificDataContainer) | O | 1..N | Operator Specific Data resource data, if changed and notification was requested, or if it existed and immediate reporting was requested.  The key of the map is operator specific data element name and the value is the operator specific data of the UE. | OpSpecDataMapNotification |
| ueId | VarUeId | C | 0..1 | Represents the UE subscription identifier SUPI or GPSI. It shall only be present when the "amPolicyData", "uePolicySet", "smPolicyData", "opSpecData" and/or "usageMonData" attribute is present. |  |
| sponsorId | string | C | 0..1 | Represents the sponsor identity. It shall only be present when the "sponsorConnectivityData" attribute is present. |  |
| bdtRefId | BdtReferenceId | C | 0..1 | Represents the BDT reference identifier. It shall only be present when the "bdtData" attribute is present. |  |
| usageMonId | string | C | 0..1 | Represents the unique identifier of the individual SM Policy usage monitoring resource. It shall only be present when the "usageMonData" attribute is present. |  |
| plmnId | PlmnId | C | 0..1 | Represents the PLMN identifier. It shall only be present when the "plmnUePolicySet" attribute is present. |  |
| delResources | array(Uri) | O | 1..N | The resources, as defined in table 5.2.2-1, if removed from UDR and notification on resource data change was requested. Not applicable for immediate reports. (NOTE 2) | ResourceRemovalNotificationPolicyData |
| notifId | string | C | 0..1 | Notification Correlation ID assigned by the NF service consumer.  (NOTE 5) | ConditionalSubscriptionwithPartialNotification |
| reportedFragments | array(NotificationItem) | C | 1..N | This attribute contains the resource fragments indicated in the "monResItems" attribute of the PolicyDataSubscription data type.  (NOTE 5) | ConditionalSubscriptionwithPartialNotification |
| slicePolicyData | SlicePolicyData | O | 0..1 | Network slice specific policy control data for an S-NSSAI, if changed and notification was requested, or if it existed and immediate reporting was requested. |  |
| snssai | Snssai | C | 0..1 | Represents the S-NSSAI identifier, the unique identifier of the SlicePolicyControlData resource. It shall only be present when the "slicePolicyData" attribute is present. |  |
| pdtqData | PdtqData | O | 0..1 | Planned Data Transfer with QoS requirements Data, if changed and notification was requested, or if it existed and immediate reporting was requested. | PDTQ |
| pdtqRefId | pdtqReferenceId | C | 0..1 | Represents the PDTQ reference identifier. It shall only be present when the "pdtqData" attribute is present. | PDTQ |
| groupPolicyData | GroupPolicyData | O | 0..1 | Contains group specific policy control data for a 5G VN group, if changed and notification was requested, or if it existed and immediate reporting was requested. | GMEC |
| intGroupId | GroupId | C | 0..1 | Represents the group identifier of a 5G VN group, the unique identifier of the GroupPolicyControlData resource.  It shall only be present when the "groupPolicyData" attribute is present. | GMEC |
| NOTE 1: When the "ResourceRemovalNotificationPolicyData" feature and/or "ConditionalSubscriptionwithPartialNotification" feature is not supported or supported but the applicable attribute(s) are not provided, at least one of the "amPolicyData", "uePolicySet", "smPolicyData", "usageMonData", "SponsorConnectivityData", "bdtData", "opSpecData", "plmnUePolicySet" or "slicePolicyData" or "groupPolicyData" shall be present.  NOTE 2: When the "ResourceRemovalNotificationPolicyData" feature is supported, and the "delResources" attribute is present, the attributes that correspond with the values included in the "delResources" attribute shall be omitted. E.g., when the "delResources" attribute includes the value "../policy-data/ues/{ueId}/am-data" the attribute "amPolicyData" shall be omitted.  NOTE 3: This attribute should not be used if the receiver of the notification is not able to univocally identify the changed operator specific data, and "opSpecDataMap" should be used instead.  NOTE 4: The attribute does not follow the related naming convention (i.e. "lowerCamel") defined in clause 5.1.4 of 3GPP TS 29.501 [7]. This attribute is however kept as currently defined in this specification for backward compatibility considerations.  NOTE 5: When the "ConditionalSubscriptionwithPartialNotification" feature is supported, the "notifId" and "reportedFragments" attributes shall be included in notification requests when a data change occurred in the resource fragments indicated in the "monResItems" attribute of the PolicyDataSubscription data type. When the feature "ImmediateReportPcc" is also supported, the "notifId" and "reportedFragments" attributes shall be included in subscription responses when the resource fragments existed when the immediate reporting was requested. | | | | | |

#### 5.4.2.12 Type TimePeriod

Table 5.4.2.12-1: Definition of type TimePeriod

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| period | Periodicity | M | 1 | Indicates whether the periodicity is "YEARLY", "MONTHLY", "WEEKLY", "DAILY" or "HOURLY". |  |
| maxNumPeriod | Uinteger | O | 0..1 | Indicates the maximum number of periods after which the usage monitoring instance does not apply. If omitted, there is no limit in the number of periods. |  |

#### 5.4.2.13 Type UsageMonDataScope

Table 5.4.2.13-1: Definition of type UsageMonDataScope

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| snssai | Snssai | M | 1 | Represents the SNSSAI. |  |
| dnn | array(Dnn) | O | 1..N | Represents the Dnn. If omitted, the usage monitoring scope applies to all the DNNs. |  |
| NOTE: In this Release of the specification the "dnn" attribute shall always be present with one and only one entry. | | | | | |

#### 5.4.2.14 Type SmPolicySnssaiData

Table 5.4.2.14-1: Definition of type SmPolicySnssaiData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| snssai | Snssai | M | 1 | S-NSSAI associated with the data. |  |
| smPolicyDnnData | map(SmPolicyDnnData) | O | 1..N | Session Management Policy data per DNN for all the DNNs of the indicated S-NSSAI. The key of the map is the DNN. |  |
| ueSliceMbr | SliceMbr | O | 0..1 | Subscribed UE-Slice-MBR for the indicated S-NSSAI. | NSAC |

#### 5.4.2.15 Type SmPolicyDnnData

Table 5.4.2.15-1: Definition of type SmPolicyDnnData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| dnn | Dnn | M | 1 | DNN associated with the data |  |
| allowedServices | array(string) | O | 1..N | List of subscriber's allowed service identifiers |  |
| subscCats | array(string) | O | 1..N | List of categories associated with the subscriber |  |
| gbrUI | BitRate | O | 0..1 | Maximum aggregate UL bitrate that can be provided across all GBR QoS Flows in the DNN |  |
| gbrDl | BitRate | O | 0..1 | Maximum aggregate DL bitrate that can be provided across all GBR QoS Flows in the DNN |  |
| adcSupport | boolean | O | 0..1 | Indicates whether application detection and control is enabled for the PDU session.  True: Application detection and control is enabled for the PDU session;  False: Application detection and control is not enabled for the PDU session.  The absence of this attribute means that ADC support is not provisioned for the UE and PDU session. |  |
| subscSpendingLimits | boolean | O | 0..1 | Indicates whether the PCF must enforce session management related policies based on subscriber spending limits.  True: Spending limit control is enabled;  False: Spending limit control is not enabled.  The absence of this attribute means that spending limit control is not provisioned for the UE and PDU session. |  |
| ipv4Index | IpIndex | O | 0..1 | Information that identifies which IP pool or external server is used to allocate the IPv4 address. |  |
| ipv6Index | IpIndex | O | 0..1 | Information that identifies which IP pool or external server is used to allocate the IPv6 address. |  |
| offline | boolean | O | 0..1 | Indicates whether the offline charging is applicable to the PDU session.  True: Offline charging is applicable to the PDU session;  False: Offline charging is not applicable to the PDU session.  The absence of this attribute means that the charging method is not provisioned for the UE and PDU session. |  |
| online | boolean | O | 0..1 | Indicates whether the online charging is applicable to the PDU session.  True: Online charging is applicable to the PDU session;  False: Online charging is not applicable to the PDU session.  The absence of this attribute means that the charging method is not provisioned for the UE and PDU session. |  |
| chfInfo | ChargingInformation | O | 0..1 | The address(es) and, if available, the CHF instance ID and the CHF set ID of the Charging Function. (NOTE) |  |
| refUmDataLimitIds | map(LimitIdToMonitoringKey) | O | 1..N | A reference to the "UsageMonDataLimit" or "UsageMonData" instances for this DNN and SNSSAI that may also include the related monitoring key(s). The key of the map is the limit identifier. |  |
| mpsPriority | boolean | O | 0..1 | True: Indicates subscription to the MPS priority service; priority applies to all traffic on the PDU Session.  False: MPS priority service is not subscribed.  The absence of this attribute means that MPS priority is not provisioned for the UE and PDU session. |  |
| mcsPriority | boolean | O | 0..1 | True: Indicates subscription to the MCS priority service; priority applies to all traffic on the PDU Session.  False: IMS signalling priority service is not subscribed.  The absence of this attribute means that IMS signalling priority is not provisioned for the UE and PDU session. |  |
| imsSignallingPrio | boolean | O | 0..1 | True: Indicates subscription to the IMS signalling priority service; priority only applies to IMS signalling traffic.  False: IMS signalling priority service is not subscribed.  The absence of this attribute means that IMS signalling priority is not provisioned for the UE and PDU session. |  |
| mpsPriorityLevel | integer | O | 0..1 | Relative priority level for the multimedia priority services |  |
| mcsPriorityLevel | integer | O | 0..1 | Relative priority level for the mission critical services |  |
| praInfos | map(PresenceInfo) | O | 1..N | Presence reporting area information. Each PresenceInfo element shall include the Presence Reporting Area Identifier within the "praId" attribute and, for a UE-dedicated presence reporting area, shall also include the list of elements composing the presence reporting area.  A "praId" may indicate a Presence Reporting Area Set.  The "praId" attribute within the PresenceInfo data type shall also be the key of the map.  The attribute "presenceState" shall not be present. |  |
| bdtRefIds | map(BdtReferenceIdRm) | O | 1..N | Identifies transfer policies of background data transfer.  Any string value can be used as a key of the map. | EnhancedBackgroundDataTransfer |
| locRoutNotAllowed | boolean | O | 0..1 | Identifies whether AF influence on traffic routing is allowed or not.  True: if no local routing is allowed;  False: local routing is allowed.  The absence of this attribute means that AF influence on traffic routing is not provisioned for the UE and PDU session. |  |
| sfcNotAllowed | boolean | O | 0..1 | Identifies whether AF influence on Service Function Chaining is allowed or not.  True: if no AF influence on Service Function Chaining is allowed;  False: AF influence on Service Function Chaining allowed.  The absence of this attribute means that AF influence on Service Function Chaining is not provisioned for the UE and PDU session. | SFC |
| tnaps | array(TnapId) | O | 1..N | Contains the TNAP ID(s) collocated with the 5G-RG(s) of a specific user. | AfGuideTNAPs |
| NOTE: When the feature "CHFsetSupport" is supported, the "secondaryChfAddress" may be omitted (see 3GPP TS 29.512 [12], clause 4.2.2.3.1). | | | | | |

#### 5.4.2.16 Type LimitIdToMonitoringKey

Table 5.4.2.16-1: Definition of type LimitIdToMonitoringKey

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| limitId | string | M | 1 | Limit Identifier. |  |
| monkey | array(string) | O | 1..N | Monitoring Keys. |  |
| NOTE: In this Release of the specification there is only one Monitoring Key per Limit Identifier | | | | | |

#### 5.4.2.17 Type UePolicySetPatch

Table 5.4.2.17-1: Definiton of type UePolicySetPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| uePolicySections | map(UePolicySection) | O | 1..N | Contains the UE Policy Sections.  The UPSI (UE Policy Section Identifier) is used as the key in the map. |  |
| upsis | array(string) | O | 1..N | List of identifiers for the "uePolicySections". The format of the UPSI is represented in 3GPP TS 24.501 [11] clause D.6.2. |  |
| andspInd | boolean | O | 0..1 | Indication of UE supporting ANDSP. |  |
| epsUrspInd | boolean | O | 0..1 | Indication of UE supporting URSP provisioning in EPS.  True: The UE supports URSP provisioning in EPS;  False: The UE does not support URSP provisioning in EPS. | EpsUrsp |
| vpsUrspInd | boolean | O | 0..1 | Indication of UE supporting VPLMN-specific URSP.  True: The UE supports VPLMN-specific URSP;  False: The UE does not support VPLMN-specific URSP. | VPLMNSpecificURSP |
| urspEnfInd | boolean | O | 0..1 | Indication of UE supporting URSP enforcement report.  True: The UE supports URSP enforcement report;  False: The UE does not support URSP enforcement report. | URSPEnforcement |
| pei | Pei | O | 0..1 | Personal Equipment Identifier. |  |
| osIds | array(OsId) | O | 1..N | Identification of the UE Operating System(s). |  |

#### 5.4.2.18 Type PlmnRouteSelectionDescriptor

Table 5.4.2.18-1: Definition of type PlmnRouteSelectionDescriptor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| servingPlmn | PlmnId | M | 1 | Identity of the serving PLMN. |
| snssaiRouteSelDescs | array(SnssaiRouteSelectionDescriptor) | O | 1..N | Contains the route selection descriptor parameters per SNSSAI. |

#### 5.4.2.19 Type SnssaiRouteSelectionDescriptor

Table 5.4.2.19-1: Definition of type SnssaiRouteSelectionDescriptor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| snssai | Snssai | M | 1 | SNSSAI. |
| dnnRouteSelDescs | array(DnnRouteSelectionDescriptor) | O | 1..N | Contains the route selection descriptor parameters per DNN. |

#### 5.4.2.20 Type DnnRouteSelectionDescriptor

Table 5.4.2.20-1: Definition of type DnnRouteSelectionDescriptor

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| dnn | Dnn | M | 1 | DNN. |  |
| sscModes | array(SscMode) | O | 1..N | Contains the allowed SSC modes for the traffic to this DNN. |  |
| pduSessTypes | array(PduSessionType) | O | 1..N | Contains the allowed PDU Session types for the traffic to this DNN. |  |
| atsssInfo | boolean | O | 0..1 | Indicates whether MA PDU session establishment is allowed for this DNN.  True: MA PDU session establishment is allowed for this DNN.  False: MA PDU session establishment is not allowed for this DNN.  The absence of this attribute means that the ATSSS information is not provisioned for the UE and PDU session. |  |
| lboRoamAllowed | boolean | O | 0..1 | Indicates whether local breakout for the DNN and S-NSSAI is allowed when roaming.  true: allowed  false: not allowed.  If the attribute is absent it means not allowed. | VPLMNSpecificURSP |

#### 5.4.2.21 Type SmPolicyDataPatch

Table 5.4.2.21-1: Definition of type SmPolicyDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| umData | map(UsageMonData) | O | 1..N | Contains the remaining allowed usage data associated with the subscriber.  The value of the limit identifier is used as the key in the map. |  |
| smPolicySnssaiData | map(SmPolicySnssaiDataPatch) | O | 1..N | Modifiable Session Management Policy data per S-NSSAI for all the SNSSAIs of the subscriber.  The key of the map is the S-NSSAI. (NOTE 2) |  |
| NOTE 1: In this Release of the specification the "limitId" corresponds to the Monitoring Key.  NOTE 2: The S-NSSAI value used as key of the map is encoded as a string as defined in 3GPP TS 29.571[7], clause 5.4.4.2. | | | | | |

#### 5.4.2.22 Type SmPolicySnssaiDataPatch

Table 5.4.2.22-1: Definition of type SmPolicySnssaiDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| snssai | Snssai | M | 1 | S-NSSAI associated with the data. |  |
| smPolicyDnnData | map(SmPolicyDnnDataPatch) | O | 1..N | Modifiable Session Management Policy data per DNN for all the DNNs of the indicated S-NSSAI. The key of the map is the DNN. |  |

#### 5.4.2.23 Type SmPolicyDnnDataPatch

Table 5.4.2.23-1: Definition of type SmPolicyDnnDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| dnn | Dnn | M | 1 | DNN associated with the data |  |
| bdtRefIds | map(BdtReferenceIdRm) | O | 1..N | Updated transfer policies of background data transfer.  Any string value can be used as a key of the map. | EnhancedBackgroundDataTransfer |

#### 5.4.2.24 Type ResourceItem

Table 5.4.2.24-1: Definition of type ResourceItem

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| monResourceUri | Uri | M | 1 | Represents the URI that identifies the monitored resource as defined in table 5.2.2-1.  (NOTE) |  |
| items | array(ItemPath) | M | 1..N | Represents fragments of the resource identified by the "monResourceUri" attribute, i.e. a subset of resource data, for which a modification triggers a notification. |  |
| NOTE: The resource URI included in the "monResourceUri" attribute shall be one of the resource URIs included in the "monitoredResourceUris" attribute of the PolicyDataSubscription data type. | | | | | |

#### 5.4.2.25 Type NotificationItem

Table 5.4.2.25-1: Definition of type NotificationItem

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| resourceId | Uri | M | 1 | This IE contains the URI of the resource which has been changed. |  |
| notifItems | array(UpdatedItem) | M | 1..N | This IE contains the fragments of the resource identified by the "resourceId" attribute which have been updated or requested to be notified. |  |

#### 5.4.2.26 Type UpdatedItem

Table 5.4.2.26-1: Definition of type UpdatedItem

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| item | ItemPath | M | 1 | This IE contains a JSON pointer value (as defined in IETF RFC 6901 [20]) that references a target location within the resource that identifies the resource fragment. |  |
| value | Any type | M | 1 | This IE indicates the value of the resource fragment located at the target location within the resource specified in the "item" attribute.  The data type of this attribute shall be the same as the type of the attribute or element located in the path.  The null value shall be allowed. |  |

#### 5.4.2.27 Type BdtDataPatch

Table 5.4.2.27-1: Definition of type BdtDataPatch

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| bdtpStatus | BdtPolicyStatus | O | 0..1 | Contains the validation status for a negotiated BDT policy. It shall be included when the BDT policy is re-negotiated. |
| transPolicy | TransferPolicy | O | 0..1 | This IE contains the transfer policy. |
| warnNotifEnabled | boolean | O | 0..1 | This IE indicates whether the BDT warning notification is enabled or disabled.  true: enabled;  false: disabled. |

#### 5.4.2.28 Type PolicyDataForIndividualUe

Table 5.4.2.28-1: Definition of type PolicyDataForIndividualUe

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| uePolicyDataSet | UePolicySet | O | 0..1 | The IE contains UE policies. |  |
| smPolicyDataSet | SmPolicyData | O | 0..1 | The IE contains SM policies. |  |
| amPolicyDataSet | AmPolicyData | O | 0..1 | The IE contains AM policies. |  |
| umData | map(UsageMonData) | C | 1..N | The IE contains UM policies.  The value of the limit identifier is used as the key of the map.  (NOTE) |  |
| operatorSpecificDataSet | map(OperatorSpecificDataContainer) | O | 1..N | The IE contains operator specific data.  The key of the map is operator specific data element name and the value is the operator specific data of the UE. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  This parameter shall be provided if the NF service consumer has provided a list of supported features in its request. |  |
| NOTE: The "umData" attribute shall be absent when the smPolicyDataSet attribute is present and includes the "umData" attribute. | | | | | |

#### 5.4.2.29 Type SlicePolicyData

Table 5.4.2.29-1: Definition of type SlicePolicyData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| mbrUl | BitRate | O | 0..1 | Maximum aggregate ULdata rate that can be provided across all GBR and Non-GBR QoS Flows in the S-NSSAI.  (NOTE 1) |  |
| mbrDl | BitRate | O | 0..1 | Maximum aggregate DL data rate that can be provided across all GBR and Non-GBR QoS Flows in the S-NSSAI.  (NOTE 1) |  |
| remainMbrUl | BitRate | O | 0..1 | The remaining maximum aggregate UL data rate that can be provided across all GBR and Non-GBR QoS Flows in the S-NSSAI. (NOTE 2)  It is set to the maximum allowed aggregate UL data rate across all GBR and Non-GBR QoS Flows in the S-NSSAI when the system is initially configured based on operator policies. |  |
| remainMbrDl | BitRate | O | 0..1 | The remaining maximum aggregate DL data rate that can be provided across all GBR and Non-GBR QoS Flows in the S-NSSAI. (NOTE 2)  It is set to the maximum allowed aggregate DL data rate across all GBR and Non-GBR QoS Flows in the S-NSSAI when the system is initially configured based on operator policies. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  It shall be provided in the HTTP GET response if the "supp-feat" attribute query parameter is included in the HTTP GET request. |  |
| NOTE 1: The "mbrUl" and "mbrDl" attributes are only used for limiting data rate per network slice with assistance of the NWDAF.  NOTE 2: The "remainMbrUl" and "remainMbrDl" attributes are only used for limiting data rate per network slice with PCF based monitoring. | | | | | |

5.4.2.30 Type SlicePolicyDataPatch

Table 5.4.2.30-1: Definition of type SlicePolicyDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| remainMbrUl | BitRate | O | 0..1 | The remaining maximum aggregate UL bitrate that can be provided across all GBR and Non-GBR QoS Flows in the S-NSSAI. |  |
| remainMbrDl | BitRate | O | 0..1 | The remaining maximum aggregate DL bitrate that can be provided across all GBR and Non-GBR QoS Flows in the S-NSSAI. |  |
| NOTE: At least one of the attributes shall be included. | | | | | |

#### 5.4.2.31 Type MbsSessPolCtrlData

Table 5.4.2.31-1: Definition of type MbsSessPolCtrlData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| 5qis | array(5Qi) | O | 1..N | Contains the list of allowed 5QI(s) for an MBS PCC rule of the MBS Session. |  |
| maxMbsArpLevel | ArpPriorityLevel | O | 0..1 | Contains the highest ARP level value allowed for any MBS PCC rule of the MBS Session. |  |
| maxMbsSessionAmbr | BitRate | O | 0..1 | Contains the maximum MBS Session-AMBR for all non-GBR QoS flows of an MBS session in the downlink. |  |
| maxGbr | BitRate | O | 0..1 | Contains the maximum aggregated bitrate that can be provided across all the GBR QoS Flows for an MBS session in the downlink. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  This parameter shall be provided if feature negotiation needs to take place. |  |

#### 5.4.2.32 Type MbsSessPolDataId

Table 5.4.2.32-1: Definition of type MbsSessPolDataId

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| mbsSessionId | MbsSessionId | C | 0..1 | Contains the source specific multicast address used as MBS session identifier.  (NOTE) |  |
| afAppId | string | C | 0..1 | Contains the AF application identifier.  (NOTE) |  |
| NOTE: Either the "mbsSessionId" attribute or the "afAppId" attribute shall be provided. | | | | | |

#### 5.4.2.33 Type PdtqData

Table 5.4.2.33-1: Definition of type PdtqData

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| aspId | string | M | 1 | This IE contains an identity of an application service provider. |
| pdtqPolicy | PdtqPolicy | M | 1 | This IE contains the PDTQ policy. |
| appId | ApplicationId | O | 0..1 | This IE contains an application identifier. |
| pdtqRefId | PdtqReferenceId | O | 0..1 | This IE indicates the PDTQ reference ID for the PDTQ policy. |
| nwAreaInfo | NetworkAreaInfo | O | 0..1 | This IE represents a network area information. |
| numOfUes | Uinteger | O | 0..1 | This IE contains the number of UEs using the indicated PDTQ policy. It shall be present when available. |
| desTimeInts | array(TimeWindow) | O | 1..N | This IE contains a list of desired time windows for PDTQ. |
| dnn | Dnn | O | 0..1 | This IE identifies a DNN. |
| snssai | Snssai | O | 0..1 | This IE identifies a slice. |
| qosParamSet | QosParameterSet | O | 0..1 | Contains the requested QoS requirements expressed as one or more individual QoS parameters.  (NOTE 3) |
| qosReference | string | O | 0..1 | Contains the requested QoS requirements expressed as the QoS Reference which represents a pre-defined QoS information.  (NOTE 2) |
| altQosParamSets | array(AltQosParamSet) | O | 1..N | Contains the alternative QoS requirements expressed as the list of individual QoS parameter sets in a prioritized order.  The lower the index of the array for a given entry, the higher the priority.  (NOTE 3) |
| altQosRefs | array(string) | O | 1..N | Contains the alternative QoS requirements expressed as the list of QoS References in a prioritized order.  The lower the index of the array for a given entry, the higher the priority.  (NOTE 2) |
| notifUri | Uri | O | 0..1 | This IE contains an URI of the recipient of the PDTQ warning notification. |
| warnNotifEnabled | boolean | O | 0..1 | This IE indicates whether the PDTQ warning notification is enabled or disabled.  true: enabled;  false: disabled (default). |
| suppFeat | SupportedFeatures | C | 0..1 | This IE represents a list of Supported features used as described in clause 5.6.  This attribute shall be provided in the PUT request and in the response of successful resource creation, and in the HTTP GET response if the "supp-feat" attribute query parameter is included in the HTTP GET request. (NOTE). |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |
| NOTE 1: In the HTTP request, it represents the set of features supported by the NF service consumer. In the HTTP response, it represents the set of features supported by both the NF service consumer and the UDR.  NOTE 2: The "altQosRefs" attribute may be included only if the "qosReference" attribute is included.  NOTE 3: The "altQosParamSets" attribute may be included only if the "qosParamSet" attribute is included. | | | | |

#### 5.4.2.34 Type PdtqDataPatch

Table 5.4.2.34-1: Definition of type PdtqDataPatch

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| pdtqPolicy | PdtqPolicy | O | 0..1 | This IE contains the PDTQ policy. |
| warnNotifEnabled | boolean | O | 0..1 | This IE indicates whether the PDTQ warning notification is enabled or disabled.  true: enabled;  false: disabled |
| notifUri | Uri | O | 0..1 | This IE contains an URI of the recipient of the PDTQ warning notification. |

#### 5.4.2.35 Type GroupPolicyData

Table 5.4.2.35-1: Definition of type GroupPolicyData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| remainGroupMbrUl | BitRate | O | 0..1 | The remaining maximum aggregate UL data rate that can be provided across all GBR and Non-GBR QoS Flows in the 5G VN group.  (NOTE) |  |
| remainGroupMbrDl | BitRate | O | 0..1 | The remaining maximum aggregate DL data rate that can be provided across all GBR and Non-GBR QoS Flows in the 5G VN group.  (NOTE) |  |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  It shall be provided only when feature negotiation needs to take place. |  |
| NOTE: The initial value of these attributes shall be set based on the Maximum Group Data Rate information and/or operator policies. | | | | | |

5.4.2.36 Type GroupPolicyDataPatch

Table 5.4.2.36-1: Definition of type GroupPolicyDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| remainGroupMbrUl | BitRate | O | 0..1 | The remaining maximum aggregate UL bitrate that can be provided across all GBR and Non-GBR QoS Flows of the 5G VN group.  (NOTE) |  |
| remainGroupMbrDl | BitRate | O | 0..1 | The remaining maximum aggregate DL bitrate that can be provided across all GBR and Non-GBR QoS Flows of the 5G VN group.  (NOTE) |  |
| NOTE: At least one of these attributes shall be included. | | | | | |

### 5.4.3 Simple data types and enumerations

#### 5.4.3.1 Introduction

This clause defines simple data types and enumerations that can be referenced from data structures defined in the previous clauses.

#### 5.4.3.2 Simple data types

The simple data types defined in table 5.4.3.2-1 shall be supported.

Table 5.4.3.2-1: Simple data types

|  |  |  |  |
| --- | --- | --- | --- |
| Type Name | Type Definition | Description | Applicability |
| BdtReferenceIdRm | string | This data type is defined in the same way as the "BdtReferenceId" data type defined in 3GPP TS 29.122 [9], but with the "nullable: true" property. | EnhancedBackgroundDataTransfer |
| IpIndex | integer | Information that identifies which IP pool or external server is used to allocate the IP address. |  |
| ItemPath | string | It contains one JSON pointer value (as defined in IETF RFC 6901 [20]) that references a target location within the resource.  E.g. "/smPolicySnssaiData/<snssai>" represents the subscription to data changes in the SmPolicyData data document, in particular to the element of the "smPolicySnssaiData" map whose key is identified by the <snssai> value.  E.g. 2 "/smPolicySnssaiData/<snssai>/smPolicyDnnData/<dnn>" represents the subscription to data changes in the SmPolicyData data document, in particular to the element of the "smPolicySnssaiData" map whose key is identified by the <snssai> value and, within this one, to the element of the "smPolicyDnnData" map whose key is identified by the <dnn> value.  (NOTE) | ConditionalSubscriptionwithPartialNotification |
| OsId | string | Operating System of the served UE. It contains a Universally Unique IDentifier (UUID) as specified in IETF RFC 4122 [17]. The format of the OS Id is represented in 3GPP TS 24.501 [11]. |  |
| NOTE: The S-NSSAI value used as key of the map is encoded as a string as defined in 3GPP TS 29.571[7], clause 5.4.4.2. | | | |

#### 5.4.3.3 Enumeration: UsageMonLevel

The enumeration represents the usage monitoring level. It shall comply with the provisions defined in table 5.4.3.3-1.

Table 5.4.3.3-1: Enumeration UsageMonLevel

|  |  |
| --- | --- |
| Enumeration value | Description |
| SESSION\_LEVEL | The usage monitoring is applicable for PDU session level. |
| SERVICE\_LEVEL | The usage monitoring is applicable for service level. |

#### 5.4.3.4 Enumeration: Periodicity

The enumeration represents the time period. It shall comply with the provisions defined in table 5.4.3.4-1.

Table 5.4.3.4-1: Enumeration Periodicity

|  |  |
| --- | --- |
| Enumeration value | Description |
| YEARLY | Time period is yearly |
| MONTHLY | Time period is monthly |
| WEEKLY | Time period is weekly |
| DAILY | Time period is daily |
| HOURLY | Time period is hourly |

#### 5.4.3.5 Enumeration: BdtPolicyStatus

The enumeration represents the validation status of the BDT policy. It shall comply with the provisions defined in table 5.4.3.5-1.

Table 5.4.3.5-1: Enumeration BdtPolicyStatus

|  |  |
| --- | --- |
| Enumeration value | Description |
| INVALID | This value is used to indicate that the BDT policy is invalid while the BDT policy re-negotiation is ongoing because the network performance has degraded. |
| VALID | This value is used to indicate that the BDT policy is valid. |

5.4.3.6 Enumeration: PolicyDataSubset

This enumeration indicates the policy data subsets (e.g. AM policy data, SM policy data, etc.). It shall comply with the provisions of table 5.4.3.6-1.

Table 5.4.3.6-1: Enumeration PolicyDataSubset

|  |  |
| --- | --- |
| Enumeration value | Description |
| AM\_POLICY\_DATA | AM policy data. |
| SM\_POLICY\_DATA | SM policy data. |
| UE\_POLICY\_DATA | UE policy data. |
| UM\_DATA | Usage Monitoring data. |
| OPERATOR\_SPECIFIC\_DATA | Operator specific data. |

#### 5.4.3.7 void

## 5.5 Error handling

### 5.5.1 General

For the Nudr\_DataRepository service API for Policy Data, HTTP error responses shall be supported as specified in clause 4.8 of 3GPP TS 29.501 [5]. Protocol errors and application errors specified in table 5.2.7.2-1 of 3GPP TS 29.500 [4] shall be supported for an HTTP method if the corresponding HTTP status codes are specified as mandatory for that HTTP method in table 5.2.7.1-1 of 3GPP TS 29.500 [4].

In addition, the requirements in the following clauses are applicable for the Nudr\_DataRepository service API for Policy Data.

### 5.5.2 Protocol Errors

No specific procedures for the Nudr\_DataRepository service API for Policy Data are specified.

### 5.5.3 Application Errors

The application errors defined for the Nudr\_DataRepository service API for Policy Data are listed in table 5.5.3-1.

Table 5.5.3-1: Application errors

|  |  |  |
| --- | --- | --- |
| Application Error | HTTP status code | Description |
|  |  |  |
| NOTE: Including a "ProblemDetails" data structure with the "cause" attribute in the HTTP response is optional unless explicitly mandated by other clauses in this document. | | |

The application error handling shall follow 3GPP TS 29.504 [6] clause 6.1.6 unless explicitly specified in this document.

## 5.6 Feature negotiation

The optional features in table 6.1.8-1 of 3GPP TS 29.504 [6] are defined for the Nudr\_DataRepository API. They shall be negotiated using the extensibility mechanism defined in clause 6.6 of 3GPP TS 29.500 [4].

# 6 Usage of Nudr\_DataRepository Service API for Application Data

## 6.1 Introduction

The following clauses specify the usage of Nudr\_DataRepository service for application data. The principles specified in 3GPP TS 29.504 [6] are followed unless explicitly specified otherwise in the following clauses.

## 6.2 Resources

### 6.2.1 Overview

This clause specifies the resources for the usage of the Unified Data Repository service for Application Data.

### 6.2.2 Resource Structure

This clause describes the structure for the Resource URIs and the resources and methods used for the service.

Figure 6.2.2-1 depicts the resource URIs structure for the Nudr\_DataRepository API for application data



Figure 6.2.2-1: Resource URI structure of the Nudr\_DataRepository API for application data

Table 6.2.2-1 provides an overview of the resources and applicable HTTP methods.

Table 6.2.2-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| PFD Data | /application-data/pfds | GET | Retrieve PFDs for application identifier(s) identified by query parameter(s).  Retrieve PFDs for all application identifier(s) if no query parameter is included in the Request URI. |
| Individual PFD Data | /application-data/pfds/{appId} | GET | Retrieve the corresponding PFDs of the specified application identifier. |
| DELETE | Delete the corresponding PFDs of the specified application identifier. |
| PUT | Create or update the corresponding PFDs for the specified application identifier. |
| Influence Data | /application-data/influenceData  (NOTE) | GET | Retrieve the Session Influence Data of given services, S-NSSAIs and DNNs or Internal Group Identifier(s) or Subscriber Category(ies) or SUPIs. |
| Individual Influence Data | /application-data/influenceData/ {influenceId}  (NOTE) | PUT | Create an individual Influence Data resource identified by {influenceId}, or modify all of the properties of an individual Influence Data resource identified by {influenceId}. |
| PATCH | Modify part of the properties of an individual Influence Data resource identified by {influenceId}. |
| DELETE | Delete an individual Influence Data resource identified by {influenceId}. |
| Influence Data Subscription | /application-data/influenceData/ subs-to-notify  (NOTE) | POST | Create a new Individual Influence Data Subscription resource. |
| GET | Read subscriptions for a given S-NSSAI and DNN or Internal Group Identifier(s) or Subscriber Category(ies) or SUPI. |
| Individual Influence Data Subscription | /application-data/influenceData/ subs-to-notify/{subscriptionId}  (NOTE) | GET | Get an existing individual Influence Data Subscription resource identified by {subscriptionId}. |
| PUT | Modify an existing individual Influence Data Subscription resource identified by {subscriptionId}. |
| DELETE | Delete an individual Influence Data Subscription resource identified by {subscriptionId}. |
| Applied BDT Policy Data | /application-data/bdtPolicyData  (NOTE) | GET | Retrieve the applied BDT policy data. |
| Individual Applied BDT Policy Data | /application-data/bdtPolicyData/{bdtPolicyId}  (NOTE) | PUT | Create an individual applied BDT Policy Data resource identified by {bdtPolicyId}. |
| PATCH | Modify BDT Reference Id of an individual applied BDT Policy Data resource identified by {bdtPolicyId}. |
| DELETE | Delete an individual applied BDT Policy Data resource identified by {bdtPolicyId}. |
| IPTV Configurations | /application-data/iptvConfigData  (NOTE) | GET | Retrieve IPTV configurations for configuration identifier(s), given S-NSSAI(s) and DNN(s), or SUPIs or Internal Group Identifiers |
| Individual IPTV Configuation | /application-data/iptvConfigData/ {configurationId}  (NOTE) | PUT | Create an Individual IPTV Configuration resource identified by {configurationId}, or modify all the properties of an Individual IPTV Configuration resource identified by {configurationId}. |
| PATCH | Modify some properties of an Individual IPTV Configuration resource identified by {configurationId}. |
| DELETE | Delete an Individual IPTV Configuration resource identified by {configurationId} |
| Service Parameter Data | /application-data/serviceParamData  (NOTE) | GET | Retrieve the Service Parameter Data of given services, S-NSSAIs and DNNs or Internal Group Identifiers or SUPIs. |
| Individual Service Parameter Data | /application-data/serviceParamData/ {serviceParamId}  (NOTE) | PUT | Create an individual Service Parameter Data resource identified by {serviceParamId}, or modify all of the properties of an individual Service Parameter Data resource identified by {serviceParamId}. |
| PATCH | Modify part of the properties of an individual Service Parameter Data resource identified by {serviceParamId}. |
| DELETE | Delete an individual Service Parameter Data resource identified by {serviceParamId}. |
| AM Influence Data | /application-data/am-influence-data | GET | Retrieve the AM Influence Data of given S-NSSAIs and DNNs and/or Internal Group Identifiers or SUPIs or for LBO roaming scenarios, any inbound roaming UEs identified by their home PLMN ID(s). |
| Individual AM Influence Data | /application-data/am-influence-data/{amInfluenceId} | PUT | Create an individual AM Influence Data resource identified by {amInfluenceId}, or modify all of the properties of an individual AM Influence Data resource identified by {amInfluenceId}. |
| PATCH | Modify part of the properties of an individual AM Influence Data resource identified by {amInfluenceId}. |
| DELETE | Delete an individual AM Influence Data resource identified by {amInfluenceId}. |
| ApplicationDataSubscriptions | /application-data/subs-to-notify | POST | Create a subscription to receive notification of application data changes. |
| GET | Read all the subscriptions, or subscriptions for given S-NSSAI and DNN or Internal Group Identifier or SUPI. |
| IndividualApplicationDataSubscription | /application-data/subs-to-notify/ {subsId} | PUT | Modify a subscription to receive notification of application data changes identified by {subsId}. |
| DELETE | Delete a subscription identified by {subsId}. |
| GET | Read an existing individual Subscription resource identified by {subsId}. |
| EAS Deployment Information Data | /application-data/eas-deploy-data | GET | Retrieve the EAS Deployment Information Data, given DNN(s), S-NSSAI(s), Application ID or Internal Group Identifiers. |
| Individual EAS Deployment Information Data | /application-data/eas-deploy-data/{easDeployInfoId} | GET | Read an existing individual EAS Deployment Data identified by {easDeployInfoId}. |
| PUT | Create an individual EAS deployment information Data resource identified by {easDeployInfold} or Update an individual EAS Deployment Data resource identified by {easDeployInfoId}. |
| DELETE | Delete an individual EAS Deployment Data resource identified by {easDeployInfoId}. |
| AF Requested QoS Data Sets | /application-data/af-qos-data-sets | GET | Retrieve one or several existing AF Requested QoS Data Set(s). |
| Individual AF Requested QoS Data Set | /application-data/af-qos-datasets/{afReqQosId} | PUT | Create an Individual AF Requested QoS Data Set or update an existing Individual AF Requested QoS Data Set. |
| PATCH | Modify an existing Individual AF Requested QoS Data Set. |
| DELETE | Delete an existing Individual AF Requested QoS Data Set. |
| Individual DNAI EAS Mapping | /application-data/dnai-eas-mappings/{dnai} | GET | Retrieve the EAS address information for a DNAI. |
| ECS Address Roaming Data | /application-data/ecs-address-roaming | GET | Retrieve all existing ECS Address Configuration Information for roaming UEs. |
| Individual ECS Address Roaming Data | /application-data/ecs-address-roaming/{ecsAddrInfoId} | GET | Retrieve an existing ECS Address Configuration Information entry for roaming UEs. |
| PUT | Create or Update an ECS Address Configuration Information entry for roaming UEs. |
| DELETE | Delete an existing ECS Address Configuration Information entry for roaming UEs. |
| NOTE: The path segment does not follow the related naming convention defined in 3GPP TS 29.501 [5]. The path segment is kept though as defined in the current specification for backward compatibility considerations. | | | |

### 6.2.3 Resource: PFD Data

#### 6.2.3.1 Description

The PFD Data resource represents all the PFD Datas to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.3.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/pfds**

Table 6.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.3.3 Resource Standard Methods

##### 6.2.3.3.1 GET

This method shall support the URI query parameters specified in table 6.2.3.3.1-1.

Table 6.2.3.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| appId  (NOTE) | array(ApplicationId) | O | 1..N | Contains the information of the application identifier(s) for the querying PFD Data resource.  If the appId query paremeter is not included in the URI, the query applies to all application identifier(s) for the querying PFD Data resource.  If the appId array contains one or more ApplicationId entries, the UDR returns an Individual PFD Data resource representation for each matched ApplicationId. |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |
| NOTE: The query parameter does not follow the related naming convention (i.e. "lower-with-hyphen") defined in clause 5.1.3.3 of 3GPP TS 29.501 [7]. This query parameter is however kept as currently defined in this specification for backward compatibility considerations. | | | | |

This method shall support the request data structures specified in table 6.2.3.3.1-2 and the response data structures and response codes specified in table 6.2.3.3.1-3.

Table 6.2.3.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.3.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(PfdDataForAppExt) | M | 0..N | 200 OK | A representation of PFDs for request applications is returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.4 Resource: Individual PFD Data

#### 6.2.4.1 Description

The Individual PFD Data resource represents Individual PFD Datas to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.4.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/pfds/{appId}**

This resource shall support the resource URI variables defined in table 6.2.4.2-1.

Table 6.2.4.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| appId | ApplicationId | Indicates the application identifier for the request pfd(s).  Data type ApplicationId is defined in 3GPP TS 29.571 [7]. |

#### 6.2.4.3 Resource Standard Methods

##### 6.2.4.3.1 GET

This method shall support the URI query parameters specified in table 6.2.4.3.1-1.

Table 6.2.4.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 6.2.4.3.1-2 and the response data structures and response codes specified in table 6.2.4.3.1-3.

Table 6.2.4.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |

Table 6.2.4.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PfdDataForAppExt | M | 1 | 200 OK | A representation of PFDs for the request application identified by the application identifier is returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.4.3.2 DELETE

This method shall support the URI query parameters specified in table 6.2.4.3.2-1.

Table 6.2.4.3.2-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.4.3.2-2 and the response data structures and response codes specified in table 6.2.4.3.2-3.

Table 6.2.4.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.4.3.2-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No content | Successful case.  The Individual PFD Data resource related to the application identifier was deleted. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.4.3.3 PUT

This method shall support the URI query parameters specified in table 6.2.4.3.3-1.

Table 6.2.4.3.3-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.4.3.3-2 and the response data structures and response codes specified in table 6.2.4.3.3-3.

Table 6.2.4.3.3-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| PfdDataForAppExt | M | 1 | Contains the information for the creation or modification of an individual PFD Data resource. |

Table 6.2.4.3.3-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PfdDataForAppExt | M | 1 | 201 Created | The resource has been successfully created and a response body is returned containing a representation of the resource. |
| PfdDataForAppExt | M | 1 | 200 OK | The resource has been successfully updated and a response body is returned containing a representation of the resource. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.4.3.3-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/pfds/{appId} |

### 6.2.5 Resource: Influence Data

#### 6.2.5.1 Description

The Influence Data resource represents a Traffic Influence Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.5.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/influenceData**

This resource shall support the resource URI variables defined in table 6.2.5.2-1.

Table 6.2.5.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.5.3 Resource Standard Methods

##### 6.2.5.3.1 GET

This method shall support the URI query parameters specified in table 6.2.5.3.1-1.

Table 6.2.5.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| influence-Ids  (NOTE 2) | array(string) | O | 1..N | Each element identifies a influenceId, i.e. an Individual Influence Data resource.  (NOTE 1) |
| dnns | array(Dnn) | O | 1..N | Each element identifies a DNN. The UDR shall return only Individual Influence Data resource(s) that match one of the provided DNNs.  (NOTE 1) |
| snssais | array(Snssai) | O | 1..N | Each element identifies a slice. The UDR shall return only Individual Influence Data resource(s) that match one of the provided S-NSSAIs.  (NOTE 1) |
| internal-Group-Ids  (NOTE 2) | array(GroupId) | O | 1..N | Each element identifies a group of users. The UDR shall return only Individual Influence Data resource(s) that match one of the provided internal group IDs within the "interGroupId" attribute.  (NOTE 1) |
| internal-group-ids-add | array(GroupId) | O | 1..N | Each element identifies an internal group id. The UDR shall return only Individual Influence Data resource(s) that match all the provided internal group IDs within the "interGroupIdList" attribute. |
| subscriber-categories | array(string) | O | 1..N | Each element identifies a subscriber category. The UDR shall return only Individual Influence Data resource(s) that match all the provided subscriber category(ies). |
| supis | array(Supi) | O | 1..N | Each element identifies a user. The UDR shall return only Individual Influence Data resource(s) that match one of the provided SUPIs.  (NOTE 1) |
| supp-feat | SupportedFeatures | O | 0..1 | Identifies the features supported by the NF service consumer. |
| NOTE 1: At least one of the "influence-Ids", "dnns", "snssais", "internal-Group-Ids", "internal-group-ids-add" (may be included when FinerGranUEs feature is supported) or "supis" query parameters shall be provided.  NOTE 2: The query parameter does not follow the related naming convention (i.e. "lower-with-hyphen") defined in clause 5.1.3.3 of 3GPP TS 29.501 [7]. This query parameter is however kept as currently defined in this specification for backward compatibility considerations. | | | | |

NOTE: The combination of a."internal-Goup-Ids" and the "supis", b."internal-group-ids-add" and the "supis", c."subscriber-categories" and the "supis" and d. "internal-Group-Ids" and the "internal-group-ids-add" query parameter represent mutually exclusive resource properties, i.e., if both query parameters are simultaneously present in the same request, the search will not match any resource.

When the request query contains more than one optional query parameters defined as an array, the UDR shall return the Individual Influence Data resources for each matching combination of the values of the elements of the array of the provided query parameters.

EXAMPLE: If "snssais" query parameter is included with two S-NSSAI entries (S-NSSAI\_1 and S-NSSAI\_2) and "dnns" is included with two DNN entries (e.g. DNN\_A and DNN\_B), and the other optional query parameters are not included, the UDR shall return the Individual Influence Data resources for each matching S-NSSAI and DNN combination (for all the possible values for supi and groupId), i.e., the resource(s) matching SNSSAI\_1 and DNN\_A, the resource(s) matching SNSSAI\_1 and DNN\_B, the resource(s) matching SNSSAI\_2 and DNN\_A, and the resource(s) matching SNSSAI\_2 and DNN\_B.

To query for the Individual Influence Data resource(s) that apply to any UE, an entry of the "internal-Group-Ids" shall be set to "AnyUE".

This method shall support the request data structures specified in table 6.2.5.3.1-2 and the response data structures and response codes specified in table 6.2.5.3.1-3.

Table 6.2.5.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.5.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(TrafficInfluData) | M | 0..N | 200 OK | The Traffic Influence Data stored in the UDR are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.6 Resource: Individual Influence Data

#### 6.2.6.1 Description

The Individual Influence Data resource represents an Individual Traffic Influence Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.6.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/influenceData/{influenceId}**

This resource shall support the resource URI variables defined in table 6.2.6.2-1.

Table 6.2.6.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| influenceId | string | The Identifier of an Individual Influence Data to be created or updated.  To enable the value to be used as part of a URI, the string shall only contain allowed characters according to the "lower-with-hyphen" naming convention defined in clause 5.1.3 of 3GPP TS 29.501 [5]. |

#### 6.2.6.3 Resource Standard Methods

##### 6.2.6.3.1 PUT

This method shall support the URI query parameters specified in table 6.2.6.3.1-1.

Table 6.2.6.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.6.3.1-2 and the response data structures and response codes specified in table 6.2.6.3.1-3.

Table 6.2.6.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TrafficInfluData | M | 1 | The Traffic Influence Data to be stored in the UDR. |

Table 6.2.6.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| TrafficInfluData | M | 1 | 201 Created | The resource has been successfully created and a response body is returned containing a representation of the resource. |
| TrafficInfluData | M | 1 | 200 OK | The resource has been successfully updated and a response body is returned containing a representation of the resource. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.6.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/influenceData/{influenceId} |

##### 6.2.6.3.2 PATCH

This method shall support the URI query parameters specified in table 6.2.6.3.2-1.

Table 6.2.6.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.6.3.2-2 and the response data structures and response codes specified in table 6.2.6.3.2-3.

Table 6.2.6.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TrafficInfluDataPatch | M | 1 | The Traffic Influence Data to be updated in the UDR. |

Table 6.2.6.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| TrafficInfluData | M | 1 | 200 OK | The update of an Individual Traffic Influence Data resource is confirmed and a response body containing Traffic Influence Data shall be returned. |
| n/a |  |  | 204 No Content | The Individual Traffic Influence Data resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.6.3.3 DELETE

This method shall support the URI query parameters specified in table 6.2.6.3.3-1.

Table 6.2.6.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.6.3.3-2 and the response data structures and response codes specified in table 6.2.6.3.3-3.

Table 6.2.6.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.6.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The Individual Influence Data was deleted successfully. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.7 Resource: Influence Data Subscription

#### 6.2.7.1 Description

The Influence Data Subscription resource represents all Influence Data subscriptions to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.7.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/influenceData/subs-to-notify**

This resource shall support the resource URI variables defined in table 6.2.7.2-1.

Table 6.2.7.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.7.3 Resource Standard Methods

##### 6.2.7.3.1 POST

This method shall support the URI query parameters specified in table 6.2.7.3.1-1.

Table 6.2.7.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.7.3.1-2 and the response data structures and response codes specified in table 6.2.7.3.1-3.

Table 6.2.7.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TrafficInfluSub | M | 1 | Parameters to register a subscription to Traffic Influence Data. |

Table 6.2.7.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| TrafficInfluSub | M | 1 | 201 Created | The subscription was created successfully. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.7.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/influenceData/subs-to-notify/{subscriptionId} |

##### 6.2.7.3.2 GET

This method shall support the URI query parameters specified in table 6.2.7.3.2-1.

Table 6.2.7.3.2-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| dnn | Dnn | O | 0..1 | Identifies a DNN. (NOTE 1) |
| snssai | Snssai | O | 0..1 | Identifies a slice. (NOTE 1) |
| internal-Group-Id  (NOTE 3) | GroupId | O | 0..1 | Identifies a group of users. (NOTE 1) (NOTE 2) (NOTE 4) |
| internal-group-ids | array(GroupId) | O | 1..N | Identifies a group of users that belong to all the listed internal groups. (NOTE 1) (NOTE 4) |
| subscriber-categories | array(string) | O | 1..N | Identifies a list of subscriber category. |
| supi | Supi | O | 0..1 | Identifies a user. |
| NOTE 1: At least one of "dnn", "snssai" or "internal-Group-Id" or "internal-group-ids"(may be included when FinerGranUEs feature is supported) shall be provided.  NOTE 2: For the Traffic Influence Data applies to any UE, the "internal-Group-Id" sets to "AnyUE".  NOTE 3: The query parameter does not follow the related naming convention (i.e. "lower-with-hyphen") defined in clause 5.1.3.3 of 3GPP TS 29.501 [7]. This query parameter is however kept as currently defined in this specification for backward compatibility considerations.  NOTE 3: Attributes "internal-Group-Id" and "internal-group-ids" are mutually exclusive attributes. | | | | |

This method shall support the request data structures specified in table 6.2.7.3.2-2 and the response data structures and response codes specified in table 6.2.7.3.2-3.

Table 6.2.7.3.2-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.7.3.2-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(TrafficInfluSub) | M | 0..N | 200 OK | The subscription information as request in the request URI query parameter(s) are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.8 Resource: Individual Influence Data Subscription

#### 6.2.8.1 Description

The Individual Influence Data Subscription resource represents a single Influence Data subscription to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.8.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/influenceData/subs-to-notify/{subscriptionId}**

This resource shall support the resource URI variables defined in table 6.2.8.2-1.

Table 6.2.8.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| subscriptionId | string | Identifies an Individual Influence Data Subscription resource. To enable the value to be used as part of a URI, the string shall only contain allowed characters according to the "lower-with-hyphen" naming convention defined in clause 5.1.3 of 3GPP TS 29.501 [5]. |

#### 6.2.8.3 Resource Standard Methods

##### 6.2.8.3.1 GET

This method shall support the URI query parameters specified in table 6.2.8.3.1-1.

Table 6.2.8.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.8.3.1-2 and the response data structures and response codes specified in table 6.2.8.3.1-3.

Table 6.2.8.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.8.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| TrafficInfluSub | M | 1 | 200 OK | The subscription information is returned. |

##### 6.2.8.3.2 PUT

This method shall support the URI query parameters specified in table 6.2.8.3.2-1.

Table 6.2.8.3.2-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.8.3.2-2 and the response data structures and response codes specified in table 6.2.8.3.2-3.

Table 6.2.8.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TrafficInfluSub | M | 1 | Modify an existing subscription to Traffic Influence Data. |

Table 6.2.8.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| TrafficInfluSub | M | 1 | 200 OK | The subscription was updated successfully. |
| n/a |  |  | 204 No Content | The subscription has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.8.3.3 DELETE

This method shall support the URI query parameters specified in table 6.2.8.3.3-1.

Table 6.2.8.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.8.3.3-2 and the response data structures and response codes specified in table 6.2.8.3.3-3.

Table 6.2.8.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.8.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The subscription was terminated successfully. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.9 Resource: Applied BDT Policy Data

#### 6.2.9.1 Description

The Applied BDT Policy Data resource represents an applied BDT Policy Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.9.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/bdtPolicyData**

This resource shall support the resource URI variables defined in table 6.2.9.2-1.

Table 6.2.9.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.9.3 Resource Standard Methods

##### 6.2.9.3.1 GET

This method shall support the URI query parameters specified in table 6.2.9.3.1-1.

Table 6.2.9.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| bdt-policy-ids | array(string) | O | 1..N | Each element identifies a bdtPolicyId, i.e., an identifier of an Individual BDT Policy Data resource. The UDR shall return an Individual Applied BDT Policy Data resource for each matched bdtPolicyId. |
| internal-group-ids | array(GroupId) | O | 1..N | Each element identifies a group of users. The UDR shall return only Individual Applied BDT Policy Data resource(s) that match one of the provided internal group ID(s). |
| supis | array(Supi) | O | 1..N | Each element identifies a user. The UDR shall return only Individual Applied BDT Policy Data resource(s) that match one of the provided SUPI(s). |

NOTE: The "internal-group-ids" and the "supis" query parameters represent mutually exclusive resource properties, i.e., if both query parameters are simultaneously present in the same request, the search will not match any resource.

When the request contains the "bdt-policy-ids" and the "internal-group-ids" or "supis" query parameters, the UDR shall return the resource(s) that match any combination of the values of the "bdt-policy-ids" and the "internal-group-ids" or "supis" arrays.

EXAMPLE: If "bdt-policy-ids" query parameter is included with two bdtPolicyId entries (bdtPolicyId\_1 and bdtPolicyId\_2) and "supis" is included with two SUPI entries (e.g. SUPI\_A and SUPI\_B), the UDR shall return the Individual BDT Policy Data resource(s) for each matching bdtPolicyId and SUPI combination i.e., the resource(s) matching bdtPolicyId\_1 and SUPI\_A or SUPI\_B, and the resource(s) matching bdtPolicyId\_2 and SUPI A or SUPI\_B (note that other combinations are not possible).

This method shall support the request data structures specified in table 6.2.9.3.1-2 and the response data structures and response codes specified in table 6.2.9.3.1-3.

Table 6.2.9.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.9.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(BdtPolicyData) | M | 0..N | 200 OK | The applied BDT Policy Data stored in the UDR are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.10 Resource: Individual Applied BDT Policy Data

#### 6.2.10.1 Description

The Individual Applied BDT Policy Data resource represents an Individual Applied BDT Policy Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.10.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/bdtPolicyData/{bdtPolicyId}**

This resource shall support the resource URI variables defined in table 6.2.10.2-1.

Table 6.2.10.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| bdtPolicyId | string | The Identifier of an Individual BDT Policy Data to be created or updated.  To enable the value to be used as part of a URI, the string shall only contain allowed characters according to the "lower-with-hyphen" naming convention defined in clause 5.1.3 of 3GPP TS 29.501 [5]. |

#### 6.2.10.3 Resource Standard Methods

##### 6.2.10.3.1 PUT

This method shall support the URI query parameters specified in table 6.2.10.3.1-1.

Table 6.2.10.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.10.3.1-2 and the response data structures and response codes specified in table 6.2.10.3.1-3.

Table 6.2.10.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| BdtPolicyData | M | 1 | The applied BDT Policy Data to be stored in the UDR. |

Table 6.2.10.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| BdtPolicyData | M | 1 | 201 Created | The resource has been successfully created and a response body is returned containing a representation of the resource. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.10.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/bdtPolicyData/{bdtPolicyId} |

##### 6.2.10.3.2 PATCH

This method shall support the URI query parameters specified in table 6.2.10.3.2-1.

Table 6.2.10.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.10.3.2-2 and the response data structures and response codes specified in table 6.2.10.3.2-3.

Table 6.2.10.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| BdtPolicyDataPatch | M | 1 | The applied BDT Policy Data to be updated in the UDR. |

Table 6.2.10.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| BdtPolicyData | M | 1 | 200 OK | The update of an applied BDT Policy Data resource is confirmed and a response body containing applied BDT Policy Data shall be returned. |
| n/a |  |  | 204 No Content | The update of an applied BDT Policy Data resource is confirmed. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.10.3.3 DELETE

This method shall support the URI query parameters specified in table 6.2.10.3.3-1.

Table 6.2.10.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.10.3.3-2 and the response data structures and response codes specified in table 6.2.10.3.3-3.

Table 6.2.10.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.10.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The Individual Applied BDT Policy Data was deleted successfully. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.11 Resource: IPTV Configurations

#### 6.2.11.1 Description

This resource allows the NF service consumer to read all active IPTV Configurations applicable for given configuration identifier(s), DNN(s) and/or S-NSSAI(s), SUPI(s) or Internal Group Identifier(s) stored at the UDR.

#### 6.2.11.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/iptvConfigData**

This resource shall support the resource URI variables defined in table 6.2.11.2-1.

Table 6.2.11.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.11.3 Resource Standard Methods

##### 6.2.11.3.1 GET

This method shall support the URI query parameters specified in table 6.2.11.3.1-1.

Table 6.2.11.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| config-ids | array(string) | O | 1..N | Each element identifies a configurationId, i.e. an Individual IPTV Configuration resource. The UDR shall return an Individual IPTV Configuration resource for each matched configurationId. |
| dnns | array(Dnn) | O | 1..N | Each element identifies a DNN. The UDR shall return only Individual IPTV Configuration resource(s) that match one of the provided DNN(s). |
| snssais | array(Snssai) | O | 1..N | Each element identifies a slice. The UDR shall return only Individual IPTV Configuration resource(s) that match one of the provided S-NSSAI(s). |
| supis | array(Supi) | O | 1..N | Each element identifies a SUPI. The UDR shall return only Individual IPTV Configuration resource(s) that match one of the provided SUPI(s). |
| inter-group-ids | array(GroupId) | O | 1..N | Each element identifies a group of users. The UDR shall return only Individual IPTV Configuration resource(s) that match one of the provided internal group ID(s). |
| NOTE: At least one of the above attributes shall be provided. | | | | |

NOTE: The "inter-group-ids" and the "supis" query parameters represent mutually exclusive resource properties, i.e., if both query parameters are simultaneously present in the same request, the search will not match any resource.

When the request query contains more than one optional query parameters defined as an array, the UDR shall return the Individual IPTV Configuration resources for each matching combination of the values of the provided query parameters.

EXAMPLE: If "snssais" query parameter is included with two S-NSSAI entries (S-NSSAI\_1 and S-NSSAI\_2) and "dnns" is included with two DNN entries (e.g. DNN\_A and DNN\_B), and the other optional query parameters are not included, the UDR shall return IPTV Configuration resources for each matching (for all the possible values for supi, and groupId), i.e. the resource(s) matching SNSSAI\_1 and DNN\_A, the resource(s) matching SNSSAI\_1 and DNN\_B, the resource(s) matching SNSSAI\_2 and DNN\_A, and the resources matching SNSSAI\_2 and DNN\_B.

This method shall support the request data structures specified in table 6.2.11.3.1-2 and the response data structures and response codes specified in table 6.2.11.3.1-3.

Table 6.2.11.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.11.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(IptvConfigData) | M | 0..N | 200 OK | The IPTV configuration data stored in the UDR are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.12 Resource: Individual IPTV Configuration

#### 6.2.12.1 Description

The resource allows the NF sevice consumer to create an Individual IPTV configuration Data, modify or delete an existing Individual IPTV configuration Data.

#### 6.2.12.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/iptvConfigData/{configurationId}**

This resource shall support the resource URI variables defined in table 6.2.12.2-1.

Table 6.2.12.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| configurationId | string | The Identifier of an Individual IPTV Configuration to be created or updated.  To enable the value to be used as part of a URI, the string shall only contain allowed characters according to the "lower-with-hyphen" naming convention defined in clause 5.1.3 of 3GPP TS 29.501 [5]. |

#### 6.2.12.3 Resource Standard Methods

##### 6.2.12.3.1 PUT

This method shall support the URI query parameters specified in table 6.2.12.3.1-1.

Table 6.2.12.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.12.3.1-2 and the response data structures and response codes specified in table 6.2.12.3.1-3.

Table 6.2.12.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| IptvConfigData | M | 1 | The IPTV configuration data to be stored in the UDR. |

Table 6.2.12.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| IptvConfigData | M | 1 | 201 Created | The resource has been successfully created and a response body is returned containing a representation of the resource. |
| IptvConfigData | M | 1 | 200 OK | The resource has been successfully updated and a response body is returned containing a representation of the resource. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.12.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/iptvConfigData/{configurationId} |

##### 6.2.12.3.2 DELETE

This method shall support the URI query parameters specified in table 6.2.12.3.2-1.

Table 6.2.12.3.2-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.12.3.2-2 and the response data structures and response codes specified in table 6.2.12.3.2-3.

Table 6.2.12.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.12.3.2-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The resource was deleted successfully. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.12.3.3 PATCH

This method shall support the URI query parameters specified in table 6.2.12.3.3-1.

Table 6.2.12.3.3-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.12.3.3-2 and the response data structures and response codes specified in table 6.2.12.3.3-3.

Table 6.2.12.3.3-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| IptvConfigDataPatch | M | 1 | The IPTV configuration related data to be updated in the UDR. |

Table 6.2.12.3.3-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| IptvConfigData | M | 1 | 200 OK | The resource has been successfully updated. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.13 Resource: ApplicationDataSubscriptions

#### 6.2.13.1 Description

This resource is used to represent subscriptions to notification of application data modification, e.g. PFD data change, IPTV configuration data change, BDT policy data change, but not for Traffic Influence Data.

#### 6.2.13.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/subs-to-notify**

This resource shall support the resource URI variables defined in table 6.2.13.2-1.

Table 6.2.13.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.13.3 Resource Standard Methods

##### 6.2.13.3.1 POST

This method shall support the URI query parameters specified in table 6.2.13.3.1-1.

Table 6.2.13.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.13.3.1-2 and the response data structures and response codes specified in table 6.2.13.3.1-3.

Table 6.2.13.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ApplicationDataSubs | M | 1 | Identifies the subscription to notification of application data modification. |

Table 6.2.13.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ApplicationDataSubs | M | 1 | 201 Created | Upon success, a response body containing a representation of each Individual subscription resource shall be returned.  The HTTP response shall include a "Location" HTTP header that contains the resource URI of the created resource. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.13.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/subs-to-notify/{subsId} |

##### 6.2.13.3.2 GET

This method shall support the URI query parameters specified in table 6.2.13.3.2-1.

Table 6.2.13.3.2-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| data-filter | DataFilter | O | 0..1 | Indicate the data filter (e.g. dnn) for the query.  When present, the UDR shall return the IndividualApplicationDataSubscription resource(s) for which the indicated information in the "data-filter" query parameter matches an entry of the "dataFilters" property of the resource (i.e. within the resource representation in the ApplicationDataSubs data structure). If the values of the "dataFilters" entry match the values provided in the "data-filter" query parameter, then the entry is considered to be a match even if it contains further attributes, for which no value was provided in the "data-filter" query parameter. |

This method shall support the request data structures specified in table 6.2.13.3.2-2 and the response data structures and response codes specified in table 6.2.13.3.2-3.

Table 6.2.13.3.2-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.13.3.2-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(ApplicationDataSubs) | M | 0..N | 200 OK | The subscription information as request in the request URI query parameter(s) are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.14 Resource: IndividualApplicationDataSubscription

#### 6.2.14.1 Description

This resource is used to represent an individual subscription to notification of application data modification.

#### 6.2.14.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/subs-to-notify/{subsId}**

This resource shall support the resource URI variables defined in table 6.2.14.2-1.

Table 6.2.14.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| subsId | string | The subsId identifies an individual application data subscription to notifications. The value is allocated by the UDR during creation of the ApplicationDataSubscriptions resource. |

#### 6.2.14.3 Resource Standard Methods

##### 6.2.14.3.1 PUT

This method shall support the URI query parameters specified in table 6.2.14.3.1-1.

Table 6.2.14.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.14.3.1-2 and the response data structures and response codes specified in table 6.2.14.3.1-3.

Table 6.2.14.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ApplicationDataSubs | M | 1 | Updates the subscription to notification of application data modification. |

Table 6.2.14.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ApplicationDataSubs | M | 1 | 200 OK | The individual subscription resource was updated successfully. |
| n/a |  |  | 204 No Content | The individual subscription resource was updated successfully and no additional content is to be sent in the response message. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.14.3.2 DELETE

This method shall support the URI query parameters specified in table 6.2.14.3.2-1.

Table 6.2.14.3.2-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.14.3.2-2 and the response data structures and response codes specified in table 6.2.14.3.2-3.

Table 6.2.14.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  | The request body shall be empty. |

Table 6.2.14.3.2-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon success, an empty response body shall be returned. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.14.3.3 GET

This method shall support the URI query parameters specified in table 6.2.14.3.3-1.

Table 6.2.14.3.3-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.14.3.3-2 and the response data structures and response codes specified in table 6.2.14.3.3-3.

Table 6.2.14.3.3-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.14.3.3-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ApplicationDataSubs | M | 1 | 200 OK | The subscription information is returned. |

### 6.2.15 Resource: Service Parameter Data

#### 6.2.15.1 Description

The Service Parameter Data resource represents a Service Parameter Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.15.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/serviceParamData**

This resource shall support the resource URI variables defined in table 6.2.15.2-1.

Table 6.2.15.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.15.3 Resource Standard Methods

##### 6.2.15.3.1 GET

This method shall support the URI query parameters specified in table 6.2.15.3.1-1.

Table 6.2.15.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description | Applicability |
| service-param-ids | array(string) | O | 1..N | Each element identifies a serviceParamId, i.e., an Individual Service Parameter Data. The UDR shall return an Individual Service Parameter Data resource for each matched serviceParamId. |  |
| dnns | array(Dnn) | O | 1..N | Each element identifies a DNN. The UDR shall return only Individual Service Parameter Data resource(s) that match one of the provided DNNs. |  |
| snssais | array(Snssai) | O | 1..N | Each element identifies a slice. The UDR shall return only Individual Service Parameter Data resource(s) that match one of the provided S-NSSAIs. |  |
| internal-group-ids | array(GroupId) | O | 1..N | Each element identifies a group of users. The UDR shall return only Individual Service Parameter Data resource(s) that match one of the provided internal group IDs. |  |
| supis | array(Supi) | O | 1..N | Each element identifies a user. The UDR shall return only Individual Service Parameter Data resource(s) that match one of the provided SUPIs. |  |
| ue-ipv4s | array(Ipv4Addr) | O | 1..N | Each element identifies a user. The UDR shall return only Individual Service Parameter Data resource(s) that match one of the provided IPv4 addresses. |  |
| ue-ipv6s | array(Ipv6Addr) | O | 1..N | Each element identifies a user. The UDR shall return only Individual Service Parameter Data resource(s) that match one of the provided IPv6 addresses. |  |
| ue-macs | array(MacAddr48) | O | 1..N | Each element identifies a user. The UDR shall return only Individual Service Parameter Data resource(s) that match one of the provided UE MAC addresses. |  |
| any-ue | boolean | O | 0..1 | Indicates whether the request is for any UE:  - "true": the request is for any UE;  - "false"(default): the request is not for any UE.  The UDR shall return only Individual Service Parameter Data resource(s) that match the any UE indication. | FilterAnyUE |
| roam-ue-net-descs | array(NetworkDescription) | O | 1..N | Each element identifies one or more PLMNs for the roaming UE.  The UDR shall return only Service Parameter Data resource(s) that match at least one of the provided PLMN as described in the NetworkDescription data type. | VPLMNSpecificURSP |
| supp-feat | SupportedFeatures | O | 0..1 | Identifies the features supported by the NF service consumer. |  |
| NOTE 1: At least one of the "service-param-ids", "dnns", "snssais", "internal-group-ids", "supis", "ue-ipv4s", "ue-ipv6s" or "ue-macs", and if the feature FilterAnyUE is supported, or "any-ue", and if the feature VPLMNSpecificURSP is supported, or "roam-ue-net-descs" query parameters shall be provided. | | | | | |

NOTE: The "any-ue" query parameter is commonly related to the search of the service parameter data resource(s) that relate to any UE using the service identified by a combination of DNN and S-NSSAI, and thus, it is commonly present together with the "dnns" and "snssais" query parameters. Note that, if the "any-ue" query parameter is present together with the "internal-group-ids", "supis", "ue-ipv4s", "ue-ipv6s" and/or "ue-macs" query parameters the search will not match any resource, since according to clause 6.4.2.15 only one of the the "supi", "anyUeInd", "interGroupId", "ueIpv4", "ueIpv6" or "ueMac" properties are simultaneously present in the resource.

When the request query contains more than one optional query parameters defined as an array, the UDR shall return the Service Parameter Data resources for each matching combination of the values of the elements of the array of the provided query parameters.

EXAMPLE: If "snssais" query parameter is included with two S-NSSAI entries (S-NSSAI\_1 and S-NSSAI\_2) and "dnns" is included with two DNN entries (e.g. DNN\_A and DNN\_B), and the other optional query parameters are not included, the UDR shall return the Individual Service Parameter Data resources for each matching S-NSSAI and DNN, i.e., the resource(s) matching SNSSAI\_1 and DNN\_A, the resource(s) matching SNSSAI\_1 and DNN\_B, the resource(s) matching SNSSAI\_2 and DNN\_A, and the resources matching SNSSAI\_2 and DNN\_B.

This method shall support the request data structures specified in table 6.2.15.3.1-2 and the response data structures and response codes specified in table 6.2.15.3.1-3.

Table 6.2.15.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.15.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(ServiceParameterData) | M | 0..N | 200 OK | The Service Parameter Data stored in the UDR are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.16 Resource: Individual Service Parameter Data

#### 6.2.16.1 Description

The Individual Service Parameter Data resource represents an Individual Service Parameter Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.16.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/serviceParamData/{serviceParamId}**

This resource shall support the resource URI variables defined in table 6.2.16.2-1.

Table 6.2.16.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| serviceParamId | string | The Identifier of an Individual Service Parameter Data to be created or updated.  To enable the value to be used as part of a URI, the string shall only contain allowed characters according to the "lower-with-hyphen" naming convention defined in clause 5.1.3 of 3GPP TS 29.501 [5]. |

#### 6.2.16.3 Resource Standard Methods

##### 6.2.16.3.1 PUT

This method shall support the URI query parameters specified in table 6.2.16.3.1-1.

Table 6.2.16.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.16.3.1-2 and the response data structures and response codes specified in table 6.2.16.3.1-3.

Table 6.2.16.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceParameterData | M | 1 | The Service Parameter Data to be stored in the UDR. |

Table 6.2.16.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ServiceParameterData | M | 1 | 201 Created | The resource has been successfully created and a response body is returned containing a representation of the resource. |
| ServiceParameterData | M | 1 | 200 OK | The resource has been successfully updated and a response body is returned containing a representation of the resource. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.16.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/serviceParamData/{serviceParamId} |

##### 6.2.16.3.2 PATCH

This method shall support the URI query parameters specified in table 6.2.16.3.2-1.

Table 6.2.16.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.6.3.2-2 and the response data structures and response codes specified in table 6.2.6.3.2-3.

Table 6.2.16.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceParameterDataPatch | M | 1 | The Service Parameter Data to be updated in the UDR. |

Table 6.2.16.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ServiceParameterData | M | 1 | 200 OK | The update of an Individual Service Parameter Data resource is confirmed and a response body containing Service Parameter Data shall be returned. |
| n/a |  |  | 204 No Content | The Individual Service Parameter Data resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.16.3.3 DELETE

This method shall support the URI query parameters specified in table 6.2.16.3.3-1.

Table 6.2.16.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.16.3.3-2 and the response data structures and response codes specified in table 6.2.16.3.3-3.

Table 6.2.16.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.16.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The Individual Service Parameter Data was deleted successfully. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.17 Resource: AM Influence Data

#### 6.2.17.1 Description

The AM Influence Data resource represents an AM Influence Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.17.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/am-influence-data**

This resource shall support the resource URI variables defined in table 6.2.17.2-1.

Table 6.2.17.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.17.3 Resource Standard Methods

##### 6.2.17.3.1 GET

This method shall support the URI query parameters specified in table 6.2.17.3.1-1.

Table 6.2.17.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description | Applicability |
| am-influence-ids | array(string) | O | 1..N | Each element identifies a amInfluenceId, i.e., an identifier of an Individual AM Influence Data resource. The UDR shall return an Individual AM Influence Data resource that matches one of provided amInfluenceId(s). |  |
| dnns | array(Dnn) | O | 1..N | Each element identifies a DNN. The UDR shall return only AM Influence Data resource(s) that match at least one of the DNN(s) of the array.  (NOTE 2) |  |
| snssais | array(Snssai) | O | 1..N | Each element identifies a slice. The UDR shall return only AM Influence Data resource(s) that match at least one of the S-NSSAI(s) of the array.  (NOTE 2) |  |
| dnn-snssai-infos | array(DnnSnssaiInformation) | O | 1..N | Each element identifies a combination of (DNN, S-NSSAI). The UDR shall return only AM Influence Data resource(s) that match at least one of the SNSSAI and DNN combination(s) of the array.  (NOTE 2) |  |
| internal-group-ids | array(GroupId) | O | 1..N | Each element identifies a group of users. The UDR shall return only AM Influence Data resource(s) that match one of the provided GroupId(s). |  |
| supis | array(Supi) | O | 1..N | Each element identifies a user. The UDR shall return only AM Influence Data resource(s) that match one of the provided SUPI(s). |  |
| any-ue | boolean | O | 0..1 | Indicates whether the request is for any non-roaming UE:  - "true": the request is for any non-roaming UE;  - "false"(default): the request is not for any non-roaming UE.  The UDR shall return only AM Influence Data resource(s) that contain the Any UE indication. |  |
| roam-ue-plmn-ids | array(PlmnId) | O | 1..N | Each element identifies a PLMN ID for the roaming UE in LBO roaming scenario. The UDR shall return only AM Influence Data resource(s) that match at least one of the provided PLMN ID. | DCAMP\_Roaming\_LBO |
| supp-feat | SupportedFeatures | O | 0..1 | Identifies the features supported by the NF service consumer. |  |
| NOTE 1: At least one of the query parameters other than the "supp-feat" query parameter shall be provided.  NOTE 2: Only one of the "dnns", "snssais" or "dnn-snssai-infos" attributes may be simultaneously provided. | | | | |  |

NOTE: The "any-ue" query parameter is commonly related to the search of the AM influence data resource(s) that relate to any non-roaming UE using the service(s) identified by a combination of DNN and S-NSSAI, and thus, it is commonly present together with the "dnn-snssai-infos" query parameters. Note also that, if the "any-ue" query parameter is present together with the "internal-group-ids", and/or "supis" query parameters the search will not match any resource, since according to clause 6.4.2.16 only one of the the "supi", "anyUeInd" and "interGroupId" properties are simultaneously present in the resource.

When the request query contains more than one optional query parameters defined as an array, the UDR shall return the Individual AM Influence Data resources for each matching combination of the values of the elements of the array of the provided query parameters.

EXAMPLE 1: If the "dnn-snssai-infos" query parameter is included with two DNN and S-NSSAI combinations (comb\_1 and comb\_2) and the "supis" query parameter is included with two SUPI entries (e.g. SUPI\_A and SUPI\_B), and all of them are matching entries, the UDR shall return the Individual AM Influence Data resources for each matching S-NSSAI and DNN and SUPI combination, i.e. the resource(s) matching comb\_1 and SUPI\_A, comb\_2 and SUPI\_A, comb\_1 and SUPI\_B, and comb2 and SUPI\_B.

EXAMPLE 2: If the "dnn-snssai-infos" query parameter is included with two DNN and S-NSSAI combination (comb\_1 and comb\_2) and the "supis" query parameter is included with two SUPI entries (e.g. SUPI\_A and SUPI\_B), and there are no matching entries for comb\_1, the UDR shall return the Individual AM Influence Data resources for the matching S-NSSAI and DNN and SUPI combination, i.e., the resource(s) matching comb\_2 and SUPI\_A, and comb2 and SUPI\_B.

This method shall support the request data structures specified in table 6.2.17.3.1-2 and the response data structures and response codes specified in table 6.2.17.3.1-3.

Table 6.2.17.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.17.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(AmInfluData) | M | 0..N | 200 OK | The AM Influence Data stored in the UDR are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.18 Resource: Individual AM Influence Data

#### 6.2.18.1 Description

The Individual AM Influence Data resource represents an Individual AM Influence Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.18.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/am-influence-data/{amInfluenceId}**

This resource shall support the resource URI variables defined in table 6.2.18.2-1.

Table 6.2.18.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| amInfluenceId | string | The identifier of an Individual AM Influence Data to be created or updated.  To enable the value to be used as part of a URI, the string shall only contain allowed characters according to the "lower-with-hyphen" naming convention defined in clause 5.1.3 of 3GPP TS 29.501 [5]. |

#### 6.2.18.3 Resource Standard Methods

##### 6.2.18.3.1 PUT

This method shall support the URI query parameters specified in table 6.2.18.3.1-1.

Table 6.2.18.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.18.3.1-2 and the response data structures and response codes specified in table 6.2.18.3.1-3.

Table 6.2.18.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| AmInfluData | M | 1 | The AM Influence Data to be stored in the UDR. |

Table 6.2.18.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| AmInfluData | M | 1 | 201 Created | The resource has been successfully created and a response body is returned containing a representation of the resource. |
| AmInfluData | M | 1 | 200 OK | The resource has been successfully updated and a response body is returned containing a representation of the resource. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.18.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/am-influence-data/{amInfluenceId} |

##### 6.2.18.3.2 PATCH

This method shall support the URI query parameters specified in table 6.2.18.3.2-1.

Table 6.2.18.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.18.3.2-2 and the response data structures and response codes specified in table 6.2.18.3.2-3.

Table 6.2.18.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| AmInfluDataPatch | M | 1 | The AM Influence Data to be updated in the UDR. |

Table 6.2.18.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| AmInfluData | M | 1 | 200 OK | The update of an Individual AM Influence Data resource is confirmed and a response body containing the AM Influence Data shall be returned. |
| n/a |  |  | 204 No Content | The Individual AM Influence Data resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.18.3.3 DELETE

This method shall support the URI query parameters specified in table 6.2.18.3.3-1.

Table 6.2.18.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.18.3.3-2 and the response data structures and response codes specified in table 6.2.18.3.3-3.

Table 6.2.18.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.18.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The Individual AM Influence Data was deleted successfully. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.19 Resource: EAS Deployment Information Data

#### 6.2.19.1 Description

The EAS Deployment Information Data resource represents all EAS Deployment Information Data to the Nudr\_DataRepository Service at a given UDR.

#### 6.2.19.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/eas-deploy-data**

This resource shall support the resource URI variables defined in table 6.2.19.2-1.

Table 6.2.19.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.19.3 Resource Standard Methods

##### 6.2.19.3.1 GET

This method shall support the URI query parameters specified in table 6.2.19.3.1-1.

Table 6.2.19.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| dnn | Dnn | O | 0..1 | Identifies a DNN. |
| snssai | Snssai | O | 0..1 | Identifies a slice. |
| internal-group-id | GroupId | O | 0..1 | Identifies a group of users. |
| appId  (NOTE 2) | string | O | 0..1 | Identifies an application. |
| NOTE 1: At least one of the above attributes shall be provided.  NOTE 2: The query parameter does not follow the related naming convention (i.e. "lower-with-hyphen") defined in clause 5.1.3.3 of 3GPP TS 29.501 [7]. This query parameter is however kept as currently defined in this specification for backward compatibility considerations. | | | | |

This method shall support the request data structures specified in table 6.2.19.3.1-2 and the response data structures and response codes specified in table 6.2.19.3.1-3.

Table 6.2.19.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.19.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(EasDeployInfoData) | M | 1..N | 200 OK | The subscribed EAS Deployment information as request in the request URI query parameter(s) are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.20 Resource: Individual EAS Deployment Information Data

#### 6.2.20.1 Description

The Individual EAS Deployment Information Data resource represents a single EAS Deployment Information data resourcein the Nudr\_DataRepository Service at a given UDR.

#### 6.2.20.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/eas-deploy-data/{easDeployInfoId}**

This resource shall support the resource URI variables defined in table 6.2.20.2-1.

Table 6.2.20.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| easDeployInfoId | string | Identifies an Individual EAS Deployment Information Data resource. |

#### 6.2.20.3 Resource Standard Methods

##### 6.2.20.3.1 GET

This method shall support the URI query parameters specified in table 6.2.20.3.1-1.

Table 6.2.20.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.20.3.1-2 and the response data structures and response codes specified in table 6.2.20.3.1-3.

Table 6.2.20.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.20.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| EasDeployInfoData | M | 1 | 200 OK | The EAS Deployment Data is returned. |

##### 6.2.20.3.2 PUT

This method shall support the URI query parameters specified in table 6.2.20.3.1-1.

Table 6.2.20.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.20.3.1-2 and the response data structures and response codes specified in table 6.2.20.3.1-3.

Table 6.2.20.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| EasDeployInfoData | M | 1 | The EAS Deployment Information Data to be stored in the UDR. |

Table 6.2.20.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| EasDeployInfoData | M | 1 | 201 Created | The resource has been successfully created and a response body is returned containing a representation of the resource. |
| EasDeployInfoData | M | 1 | 200 OK | The resource has been successfully updated and a response body is returned containing a representation of the resource. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.20.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/eas-deploy-data/{easDeployInfoId} |

##### 6.2.20.3.3 DELETE

This method shall support the URI query parameters specified in table 6.2.20.3.3-1.

Table 6.2.20.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.20.3.3-2 and the response data structures and response codes specified in table 6.2.20.3.3-3.

Table 6.2.20.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.20.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The EAS Deployment Data was successfully deleted. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.21 Resource: AF Requested QoS Data Sets

#### 6.2.21.1 Description

The AF Requested QoS Data Sets collection resource represents all AF Requested QoS Data Set(s) managed by the UDR.

#### 6.2.21.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/af-qos-data-sets**

This resource shall support the resource URI variables defined in table 6.2.21.2-1.

Table 6.2.21.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 6.1.1 of 3GPP TS 29.504 [6]. |

#### 6.2.21.3 Resource Standard Methods

##### 6.2.21.3.1 GET

This method shall support the URI query parameters specified in table 6.2.21.3.1-1.

Table 6.2.21.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| dnns | array(Dnn) | O | 1..N | Identifies the targeted DNN(s).  When this query parameter is provided, the UDR shall return only the resource(s) that match at least one of the provided DNN(s).  (NOTE 3) |
| snssais | array(Snssai) | O | 1..N | Identifies the targeted network slice(s).  When this query parameter is provided, the UDR shall return only the resource(s) that match at least one of the provided network slice(s).  (NOTE 3) |
| internal-group-ids | array(GroupId) | O | 1..N | Contains the targeted group(s) of UE(s).  When this query parameter is provided, the UDR shall return only the resource(s) that match at least one of the provided internal group ID(s).  (NOTE 2) |
| supis | array(Supi) | O | 1..N | Contains the identifier(s) of the targeted UE(s).  When this query parameter is provided, the UDR shall return only the resource(s) that match at least one of the provided SUPI(s).  (NOTE 2) |
| data-set-ids | array(string) | O | 1..N | Contains the identifier(s) of the requested Individual AF Requested QoS Data Set resource(s).  (NOTE 4) |
| supp-feat | SupportedFeatures | O | 0..1 | Identifies the features supported by the NF service consumer. |
| NOTE 1: At least one of the above query parameters, other than the "supp-feat" query parameter, shall be provided.  NOTE 2: These query parameters are mutually exclusive. Either one of them may be present.  NOTE 3: These query parameters are mutually exclusive. Either one of them may be present.  NOTE 4: When this query parameter is present, all the other query parameters shall not be present, except the "supp-feat" query parameter when needed. | | | | |

This method shall support the request data structures specified in table 6.2.21.3.1-2 and the response data structures and response codes specified in table 6.2.21.3.1-3.

Table 6.2.21.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.21.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(AfRequestedQosData) | M | 0..N | 200 OK | Successful case. The requested Individual AF Requested QoS Data Set resource(s) are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.22 Resource: Individual AF Requested QoS Data Set

#### 6.2.22.1 Description

The Individual AF Requested QoS Data Set resource represents a single AF Requested QoS data Set managed by the UDR.

#### 6.2.22.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/af-qos-data-sets/{afReqQoSId}**

This resource shall support the resource URI variables defined in table 6.2.22.2-1.

Table 6.2.22.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| afReqQosId | string | Identifies an "Individual AF Requested QoS Data Set" resource. |

#### 6.2.22.3 Resource Standard Methods

##### 6.2.22.3.1 PUT

This method shall support the URI query parameters specified in table 6.2.22.3.1-1.

Table 6.2.22.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.22.3.1-2 and the response data structures and response codes specified in table 6.2.22.3.1-3.

Table 6.2.22.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| AfRequestedQoSData | M | 1 | Represents the AF Requested QoS Data to be created or updated. |

Table 6.2.22.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| AfRequestedQoSData | M | 1 | 201 Created | Successful case. The resource is successfully created and a response body is returned containing a representation of the created "Individual AF Requested QoS Data Set" resource. |
| AfRequestedQoSData | M | 1 | 200 OK | Successful case. The resource is successfully updated and a response body is returned containing a representation of the updated "Individual AF Requested QoS Data Set" resource. |
| n/a |  |  | 204 No Content | Successful case. The resource has been successfully updated and no content is returned in the response body. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.22.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure:  {apiRoot}/nudr-dr/<apiVersion>/application-data/af-qos-data-sets/{afReqQoSId} |

##### 6.2.22.3.2 PATCH

This method shall support the URI query parameters specified in table 6.2.22.3.2-1.

Table 6.2.22.3.1-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.22.3.2-2 and the response data structures and response codes specified in table 6.2.22.3.2-3.

Table 6.2.22.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| AfRequestedQoSDataPatch | M | 1 | Represents the requested modification to the targeted existing AF Requested QoS Data Set. |

Table 6.2.22.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data type** | **P** | **Cardinality** | **Response**  **codes** | **Description** |
| AfRequestedQoSData | M | 1 | 200 OK | Successful case. The "Individual AF Requested QoS Data Set" resource is successfully modified and a representation of the updated resource is returned in the response body. |
| n/a |  |  | 204 No Content | Successful case. The "Individual AF Requested QoS Data" resource is successfully modified and no content is returned in the response body. |
| NOTE: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 6.2.22.3.3 DELETE

This method shall support the URI query parameters specified in table 6.2.22.3.3-1.

Table 6.2.22.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.22.3.3-2 and the response data structures and response codes specified in table 6.2.22.3.3-3.

Table 6.2.22.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.22.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  Codes | Description |
| n/a |  |  | 204 No Content | Successful case. The targeted "Individual AF Requested QoS Data Set" resource is successfully deleted. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.23 Resource: Individual DNAI EAS Mapping

#### 6.2.23.1 Description

The resource represents the EAS address information for a DNAI.

NOTE: This information is configured by the OAM.

#### 6.2.23.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/dnai-eas-mappings/{dnai}**

This resource shall support the resource URI variables defined in table 6.2.23.2-1.

Table 6.2.23.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1 |
| dnai | Dnai | The DNAI. |

#### 6.2.23.3 Resource Standard Methods

##### 6.2.23.3.1 GET

This method shall support the URI query parameters specified in table 6.2.23.3.1-1.

Table 6.2.23.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer. |

This method shall support the request data structures specified in table 6.2.23.3.1-2 and the response data structures and response codes specified in table 6.2.23.3.1-3.

Table 6.2.23.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **P** | **Cardinality** | **Description** |
| n/a |  |  |  |

Table 6.2.23.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| DnaiEasMapping | M | 1 | 200 OK | Upon success, a response body containing the EAS information for the DNAI shall be returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.24 Resource: ECS Address Roaming Data

#### 6.2.24.1 Description

The ECS Address Roaming Data resource represents all ECS Address Roaming Data in the Nudr\_DataRepository Service at a given UDR.

#### 6.2.24.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/ecs-address-roaming**

This resource shall support the resource URI variables defined in table 6.2.24.2-1.

Table 6.2.24.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 6.2.24.3 Resource Standard Methods

##### 6.2.24.3.1 GET

This method shall support the URI query parameters specified in table 6.2.24.3.1-1.

Table 6.2.24.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| internal-group-id | GroupId | O | 0..1 | Identifies a group of users. |
| any-ue | boolean | O | 0..1 | Indicates that all UEs are targeted when included and set to "true", otherwise set to "false". Default value is "false" if omitted. |
| NOTE: At least one of the above attributes shall be provided. | | | | |

This method shall support the request data structures specified in table 6.2.24.3.1-2 and the response data structures and response codes specified in table 6.2.24.3.1-3.

Table 6.2.24.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.24.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(EcsAddrData) | M | 1..N | 200 OK | The ECS Address Data requested in the request URI query parameter(s) are returned. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.2.25 Resource: Individual ECS Address Roaming Data

#### 6.2.25.1 Description

The Individual ECS Address Roaming Data resource represents a single ECS Address Roaming Data entry at the Nudr\_DataRepository Service at a given UDR.

#### 6.2.25.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/application-data/ecs-address-roaming/{ecsAddrInfoId}**

This resource shall support the resource URI variables defined in table 6.2.25.2-1.

Table 6.2.25.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| ecsAddrInfoId | string | Identifies an Individual ECS Address Roaming Data resource. |

#### 6.2.25.3 Resource Standard Methods

##### 6.2.25.3.1 GET

This method shall support the URI query parameters specified in table 6.2.25.3.1-1.

Table 6.2.25.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.25.3.1-2 and the response data structures and response codes specified in table 6.2.25.3.1-3.

Table 6.2.25.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.25.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| EcsAddrData | M | 1 | 200 OK | The requested information is returned. |

##### 6.2.25.3.2 PUT

This method shall support the URI query parameters specified in table 6.2.25.3.1-1.

Table 6.2.25.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  | n/a |

This method shall support the request data structures specified in table 6.2.25.3.1-2 and the response data structures and response codes specified in table 6.2.25.3.1-3.

Table 6.2.25.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| EcsAddrData | M | 1 | The ECS Address Roaming Data to be stored in the UDR. |

Table 6.2.25.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| EcsAddrData | M | 1 | 201 Created | The resource has been successfully created and a response body is returned containing a representation of the resource. |
| EcsAddrData | M | 1 | 200 OK | The resource has been successfully updated and a response body is returned containing a representation of the resource. |
| n/a |  |  | 204 No Content | The resource has been successfully updated. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.25.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/application-data/ecs-address-roaming/{ecsAddrInfoId} |

##### 6.2.25.3.3 DELETE

This method shall support the URI query parameters specified in table 6.2.25.3.3-1.

Table 6.2.25.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.2.25.3.3-2 and the response data structures and response codes specified in table 6.2.25.3.3-3.

Table 6.2.25.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.2.25.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The data was successfully deleted. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

## 6.3 Notifications

### 6.3.1 General

Notifications shall comply with clause 6.2 of 3GPP TS 29.500 [4] and clause 4.6.2.3 of 3GPP TS 29.501 [5].

Table 6.3.1-1: Notifications overview

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | Callback URI | HTTP method or custom operation | Description  (service operation) |
| Influence Data Update Notification | {notificationUri} | POST | One of notification reference provided by the service consumer during the subscription of the AF Influence Data. |
| Application Data Change Notification | {notificationUri} | POST | Application Data Change Notification |

### 6.3.2 Void

### 6.3.3 Influence Data Update Notification

#### 6.3.3.1 Description

The Influence Update Notification is used by the UDR to report one or several observed Influence Data(s) to a NF service consumer that has subscribed to such Notifications.

#### 6.3.3.2 Operation Definition

The POST method shall be used for traffic influence data change notification and the URI shall be provided during the subscription procedure.

Callback URI: **{notificationUri}**

This method shall support the URI query parameters specified in table 6.3.3.2-1.

Table 6.3.3.2-1: URI query parameters supported by the POST method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.3.3.2-2 and the response data structures and response codes specified in table 6.3.3.2-3.

Table 6.3.3.2-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| array(TrafficInfluData or TrafficInfluDataNotif) | M | 1..N | Provides Information about observed Influence Data. If the EnhancedInfluDataNotification feature is supported, the TrafficInfluDataNotif data type shall be sent. |

Table 6.3.3.2-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The receipt of the Notification is acknowledged. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 6.3.4 Application Data Change Notification

The POST method shall be used for application data change notification and the URI shall be provided during the subscription procedure.

Callback URI: **{notificationUri}**

This method shall support the URI query parameters specified in table 6.3.4-1.

Table 6.3.4-1: URI query parameters supported by the POST method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 6.3.4-2 and the response data structures and response codes specified in table 6.3.4-3.

Table 6.3.4-2: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| array(ApplicationDataChangeNotif) | M | 1..N | Notification of application data changes. |

Table 6.3.4-3: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The reception of the notification is acknowledged. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

## 6.4 Data Model

### 6.4.1 General

This clause specifies the application data model supported by the API.

Table 6.4.1-1 specifies the data types defined for the Nudr\_DataRepository Service API for Application Data service based interface protocol.

Table 6.4.1-1: Nudr\_DataRepository specific Data Types for Application Data

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| AfRequestedQosData | 6.4.2.18 | Represents an AF Requested QoS Data Set. | GMEC |
| AfRequestedQosDataPatch | 6.4.2.19 | Represents the requested modifications to an AF Requested QoS Data Set. | GMEC |
| AmInfluData | 6.4.2.16 | Contains AM influence data. | DCAMP |
| AmInfluDataPatch | 6.4.2.17 | Contains AM influence data that can be updated. | DCAMP |
| ApplicationDataSubs | 6.4.2.10 | Contains application data subscription data. |  |
| ApplicationDataChangeNotif | 6.4.2.11 | Contains the new or updated application data or removed indication. |  |
| BdtPolicyData | 6.4.2.7 | Contains applied BDT policy data. | EnhancedBackgroundDataTransfer |
| BdtPolicyDataPatch | 6.4.2.8 | Contains modification instructions to be performed on the applied BDT policy data. | EnhancedBackgroundDataTransfer |
| CorrelationType | 6.4.3.4 | Indicates that the EAS(es) corresponding to a common DNAI or common EAS should be selected | CommonEASDNAI |
| DataInd | 6.4.3.3 | Indicates the type of data. |  |
| DataFilter | 6.4.2.12 | Indicates an application data filter. |  |
| DnaiEasInfo | 6.4.2.22 | Contains EAS information for a DNAI. | DnaiEasMappings |
| DnaiEasMapping | 6.4.2.21 | Contains DNAI(s) to EAS mapping. | DnaiEasMappings |
| EcsAddrData | 6.4.2.23 | Represents ECS Address Configuration Data. |  |
| IptvConfigData | 6.4.2.9 | Represents IPTV configuration data information. |  |
| PfdDataForAppExt | 6.4.2.6 | The PFDs and related data for the application |  |
| ServiceParameterData | 6.4.2.15 | Contains the service parameter data. |  |
| TrafficCorrelationInfo | 6.4.2.18 | Contains the information for traffic correlation. | CommonEASDNAI |
| ServiceParameterDataPatch | 6.4.2.15A | Contains the service parameter data that can be updated. |  |
| TrafficInfluData | 6.4.2.2 | Contains traffic influence data. |  |
| TrafficInfluDataPatch | 6.4.2.3 | Contains modification instructions to be performed on the traffic influence data. |  |
| TrafficInfluDataNotif | 6.4.2.14 | Contains traffic influence data for notification. | EnhancedInfluDataNotification |
| TrafficInfluSub | 6.4.2.4 | Contains traffic influence subscription data. |  |

Editor's Note: The feature to be used for EcsAddrData is FFS.

Table 6.4.1-2 specifies data types re-used by the Nudr\_DataRepository Service API for Application Data service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Nudr\_DataRepository Service API for Application Data service based interface.

Table 6.4.1-2: Nudr\_DataRepository re-used Data Types for Application Data

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| A2xParamsPc5 | 3GPP TS 29.522 [19] | Contains the A2X service parameters data provisioned over PC5. | A2X |
| A2xParamsPc5Rm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the A2xParamsPc5 data type, but with the OpenAPI nullable property set to true. | A2X |
| AmInfluEvent | 3GPP TS 29.522 [19] | Identifies the type of AM related events of which the AF requests to be notified. |  |
| AlternativeServiceRequirementsData | 3GPP TS 29.514 [52] | Contains alternative QoS related parameters and a reference to them. | GMEC |
| ApplicationId | 3GPP TS 29.571 [7] | Indicates an application identifier. |  |
| BdtReferenceId | 3GPP TS 29.122 [9] | Identifies a selected policy of background data transfer. | EnhancedBackgroundDataTransfer |
| DateTime | 3GPP TS 29.571 [7] | Indicates a date and time. |  |
| DateTimeRm | 3GPP TS 29.571 [7] | Indicates a date and time that can be updated. |  |
| Dnai | 3GPP TS 29.571 [7] | Represents a DNAI. | DnaiEasMappings |
| DnaiChangeType | 3GPP TS 29.571 [7] | Describes the types of DNAI change. |  |
| Dnn | 3GPP TS 29.571 [7] | Identifies a Data Network Name. (NOTE 2) |  |
| DnnSnssaiInformation | 3GPP TS 29.522 [19] | Represents a DNN, S-NSSAI combination. | DCAMP |
| DurationSec | 3GPP TS 29.571 [7] | Represents a duration in seconds. | DCAMP |
| DurationSecRm | 3GPP TS 29.571 [7] | Represents a removable duration in seconds. | DCAMP |
| EasDeployInfoData | 3GPP TS 29.591 [23] | Represnts the EAS Deployment Information. | EasDeployment |
| EcsServerAddr | 3GPP TS 29.571 [7] | Represents the Edge Configuration Server (ECS) address configuration information. |  |
| EthFlowDescription | 3GPP TS 29.514 [16] | Contains the Ethernet data flow information.(NOTE) |  |
| Event | 3GPP TS 29.522 [19] | Contains the outcome of the UE Policy Delivery related to the invocation of AF provisioned service parameters. | DeliveryOutcome |
| EventsSubscReqData | 3GPP TS 29.514 [16] | Identifies the events the application subscribes to. | GMEC |
| EventsSubscReqDataRm | 3GPP TS 29.514 [16] | This data type is defined in the same way as the EventsSubsReqData data type, but with the OpenAPI nullable property set to true. | GMEC |
| FlowInfo | 3GPP TS 29.122 [9] | Contains the flow information. |  |
| FqdnPatternMatchingRule | 3GPP TS 29.571 [7] | Identifies an FQDN pattern matching rule. | DnaiEasMappings |
| GroupId | 3GPP TS 29.571 [7] | Identifies a group of users. | EasDeployment |
| IpAddr | 3GPP TS 29.571 [7] | IP address and/or prefix. | DnaiEasMappings |
| IptvConfigDataPatch | 3GPP TS 29.522 [19] | Contains the IPTV configuration data used for PATCH. |  |
| Ipv4Addr | 3GPP TS 29.571 [7] | Identifies an IPv4 address. |  |
| Ipv6Addr | 3GPP TS 29.571 [7] | Identifies an IPv6 address. |  |
| Link | 3GPP TS 29.122 [9] | Identifies a referenced resource. |  |
| MacAddr48 | 3GPP TS 29.571 [7] | MAC Address. |  |
| MulticastAccessControl | 3GPP TS 29.522 [19] | Represents the multicast access control information. |  |
| NetworkAreaInfo | 3GPP TS 29.554 [13] | Describes a network area information. |  |
| NetworkDescription | 3GPP TS 29.522 [19] | Represents the description of a PLMN in terms of the PLMN ID, the MCC (and optionally, applicable MNCs) or the indication of any PLMN | VPLMNSpecificURSP |
| ParameterOverPc5 | 3GPP TS 29.522 [19] | Contains the V2X service parameters data provisioned over PC5. |  |
| ParameterOverPc5Rm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the ParameterOverPc5 data type, but with the OpenAPI nullable property set to true. |  |
| ParameterOverUu | 3GPP TS 29.522 [19] | Contains the V2X service parameters data provisioned over Uu. |  |
| ParameterOverUuRm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the ParameterOverUu data type, but with the OpenAPI nullable property set to true. |  |
| ParamForProSeDc | 3GPP TS 29.522 [19] | Contains the service parameters for 5G ProSe direct communications. | ProSe |
| ParamForProSeDcRm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the ParamForProSeDc data type, but with the OpenAPI nullable property set to true. |  |
| ParamForProSeDd | 3GPP TS 29.522 [19] | Contains the service parameters for 5G ProSe direct discovery. | ProSe |
| ParamForProSeDdRm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the ParamForProSeDd data type, but with the OpenAPI nullable property set to true. |  |
| ParamForProSeEndUe | 3GPP TS 29.522 [19] | Contains the service parameters for 5G ProSe End UE. | ProSe\_Ph2 |
| ParamForProSeEndUeRm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the ParamForProSeEndUe data type, but with the OpenAPI nullable property set to true. | ProSe\_Ph2 |
| ParamForProSeRemUe | 3GPP TS 29.522 [19] | Contains the service parameters for 5G ProSe remote UE. | ProSe |
| ParamForProSeRemUeRm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the ParamForProSeRemUe data type, but with the OpenAPI nullable property set to true. |  |
| ParamForProSeU2NRelUe | 3GPP TS 29.522 [19] | Contains the service parameters for 5G ProSe UE-to-network relay UE. | ProSe |
| ParamForProSeU2NRelUeRm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the ParamForProSeU2NRelUe data type, but with the OpenAPI nullable property set to true. |  |
| ParamForProSeU2URelUe | 3GPP TS 29.522 [19] | Contains the service parameters for 5G ProSe UE-to-UE Relay UE. | ProSe\_Ph2 |
| ParamForProSeU2URelUeRm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the ParamForProSeU2URelUe data type, but with the OpenAPI nullable property set to true. | ProSe\_Ph2 |
| PfdChangeNotification | 3GPP TS 29.551 [8] | Describes the PFD change. |  |
| PfdContent | 3GPP TS 29.551 [8] | Represents the content of a PFD for an application identifier. |  |
| PlmnId | 3GPP TS 29.571 [7] | Identifies a PLMN. | DCAMP\_Roaming\_LBO |
| RouteToLocation | 3GPP TS 29.571 [7] | Identifies the N6 traffic routing requirement. |  |
| ServiceAreaCoverageInfo | 3GPP TS 29.534 [22] | Contains service area coverage information. | DCAMP |
| Snssai | 3GPP TS 29.571 [7] | Identifies a Single Network Slice Selection Assistance Information. |  |
| SpatialValidityCond | 3GPP TS 29.571 [7] | Indicates the spatial validity condition. |  |
| SubscribedEvent | 3GPP TS 29.522 [19] | Identified the type of UP path management events of which the AF requests to be notified. |  |
| Supi | 3GPP TS 29.571 [7] | Identifies a SUPI that shall contain either an IMSI or an NAI. |  |
| SupportedFeatures | 3GPP TS 29.571 [7] | Used to negotiate the applicability of the optional features. |  |
| TemporalInValidity | 3GPP TS 29.565 [27] | Indicates the time interval during which the NF service consumer request shall not to be applied | GMEC |
| TemporalValidity | 3GPP TS 29.514 [16] | Indicates the time interval during which the AF request is to be applied. | MultiTemporalCondition |
| TnapId | 3GPP TS 29.571 [7] | Trusted Network Access Point identifier. | AfGuideTNAPs |
| Uinteger | 3GPP TS 29.571 [7] | Unsigned Integer, i.e. only value 0 and integers greater than 0 are allowed. |  |
| UintegerRm | 3GPP TS 29.571 [7] | This data type is defined in the same way as the "Uinteger" data type, but with the OpenAPI "nullable: true" property. |  |
| Uri | 3GPP TS 29.571 [7] | Identifies a URI. |  |
| UriRm | 3GPP TS 29.571 [7] | Identifies a removable URI. | DCAMP |
| UrspRuleRequest | 3GPP TS 29.522 [19] | Contains service parameter data used to guide the URSP. | AfGuideURSP |
| ParamForRangingSlPos | 3GPP TS 29.522 [19] | Contains the service parameters for ranging and sidelink positioning. | Ranging\_SL |
| ParamForRangingSlPosRm | 3GPP TS 29.522 [19] | This data type is defined in the same way as the "ParamForRangingSlPos" data type, but with the OpenAPI "nullable: true" property. | Ranging\_SL |
| NOTE 1: In order to support a set of MAC addresses with a specific range in the traffic filter, feature MacAddressRange as specified in clause 6.1.8 of TS 29.504 [6] shall be supported.  NOTE 2: The UDR uses the DNN as received from the NF service consumer without applying any transformation. To successfully perform DNN matching, in a specific deployment a DNN shall always be encoded either with the full DNN (e.g., because there are multiple Operator Identifiers for a Network Identifier) or the DNN Network Identifier only. | | | |

Editor's Note: The feature to be used for EcsServerAddr, Link, and SpatialValidityCondition is FFS.

### 6.4.2 Structured data types

#### 6.4.2.1 Introduction

This clause defines the structures to be used in resource representations.

#### 6.4.2.2 Type TrafficInfluData

Table 6.4.2.2-1: Definition of type TrafficInfluData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| upPathChgNotifCorreId | string | C | 0..1 | Contains the Notification Correlation Id allocated by the NEF for the UP path change notification. It shall be included when the NEF requests the UP path change notification. |  |
| appReloInd | boolean | O | 0..1 | Identifies whether an application can be relocated once a location of the application has been selected.  True: the application cannot be relocated;  False (default): the application can be relocated. |  |
| afAppId | string | O | 0..1 | Identifies an application.  (NOTE 1) (NOTE 3) |  |
| dnn | Dnn | O | 0..1 | Identifies a DNN |  |
| ethTrafficFilters | array(EthFlowDescription) | O | 1..N | Identifies Ethernet packet filters.  (NOTE 1) (NOTE 3) |  |
| snssai | Snssai | O | 0..1 | The identification of slice. |  |
| interGroupId | GroupId | O | 0..1 | Identifies a group of users. (NOTE 2) (NOTE 3)(NOTE 5) |  |
| interGroupIdList | array(GroupId) | O | 2..N | Identifies the list of Internal Groups. (NOTE 2) (NOTE 9) (NOTE 10) (NOTE 11) | FinerGranUEs |
| subscriberCatList | array(string) | O | 1..N | Identifies the list of subscriber category(ies). (NOTE 10) | FinerGranUEs |
| supi | Supi | O | 0..1 | Identifies a user. (NOTE 2) (NOTE 3) |  |
| trafficFilters | array(FlowInfo) | O | 1..N | Identifies IP packet filters.  (NOTE 1) (NOTE 3) |  |
| trafficRoutes | array(RouteToLocation) | O | 1..N | Identifies the N6 traffic routing requirement. |  |
| sfcIdDl  (NOTE 11) | string | O | 0..1 | Reference to a pre-configured service function chain for downlink traffic. | SFC |
| sfcIdUl  (NOTE 11) | string | O | 0..1 | Reference to a pre-configured service function chain for uplink traffic. | SFC |
| metadata | Metadata | O | 0..1 | Contains opaque information for the service functions in the N6-LAN that is provided by AF and transparently sent to UPF. It may only be provided when sfcIdDl and/or sfcIdUl are provided. | SFC |
| traffCorreInd | boolean | O | 0..1 | Indication of traffic correlation.  May only be included when "interGroupId" attribute is included and not set to "AnyUE".  It is used to indicate that for the group of UEs, the targeted PDU sessions should be correlated by a common DNAI.  Set to "true" if it should be correlated; otherwise set to "false". Default value is "false" if omitted. (NOTE 7) |  |
| tfcCorreInfo | TrafficCorrelationInfo | O | 0..1 | Contains the information for traffic correlation. | CommonEASDNAI |
| validStartTime | DateTime | O | 0..1 | Identifies when the traffic routings start to be applicable. (NOTE 4) |  |
| validEndTime | DateTime | O | 0..1 | Identifies when the traffic routings are not applicable. (NOTE 4) |  |
| tempValidities | array(TemporalValidity) | O | 1..N | Indicates the time interval(s) during which the AF request is to be applied. (NOTE 4) | MultiTemporalCondition |
| nwAreaInfo | NetworkAreaInfo | O | 0..1 | Identifies a network area information that the request applies only to the traffic of UE(s) located in this specific zone. |  |
| upPathChgNotifUri | Uri | C | 0..1 | Contains the URI where the NEF receives the UP path change notification. It shall be included when the NEF requests the UP path change notification. |  |
| headers | array(string) | O | 1..N | Headers provisioned by the NEF to be used by other NFs to interact with the NEF. E.g. 3gpp-Sbi-Binding header with the binding indication for the URI where the NEF receives UP path change notification and whose information is used by the SMF.  The encoding of the header shall comply with clause 6.3 of IETF RFC 9110 [21].  (NOTE 6) |  |
| subscribedEvents | array(SubscribedEvent) | O | 1..N | Identifies the requirement to be notified of the event(s). |  |
| dnaiChgType | DnaiChangeType | O | 0..1 | Identifies a type of notification regarding UP path management event. |  |
| afAckInd | boolean | O | 0..1 | Identifies whether the AF acknowledgement of UP path event notification is expected.  Set to "true" if the AF acknowledgement is expected; otherwise set to "false".  Default value is "false" if omitted. | URLLC |
| addrPreserInd | boolean | O | 0..1 | Indicates whether UE IP address should be preserved.  This attribute shall set to "true" if preserved, otherwise, set to "false".  Default value is false if omitted. | URLLC |
| maxAllowedUpLat | Uinteger | O | 0..1 | Indicates the target user plane latency in units of milliseconds. The SMF may use this value to decide whether edge relocation is needed to ensure that the user plane latency does not exceed the value. | AF\_latency |
| simConnInd | boolean | O | 0..1 | Indication of simultaneous connectivity temporarily maintained for the source and target PSA.  It is used to indicate whether the simultaneous connectivity should be temporarily mantained for the source and target PSA.  It is set to "true" if the temporary simultaneous connectivity should be temporarily maintained; otherwise, it is set to "false". Default value is "false" if omitted. | SimultConnectivity |
| simConnTerm | DurationSec | C | 0..1 | Indication of the minimum time interval to be considered for inactivity of the traffic routed via the source PSA during the edge re-location procedure before removing the source PSA.  It may be included when the "simConnInd" attribute is set to true. | SimultConnectivity |
| supportedFeatures | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  This attribute shall be supplied by the UDR in the response to the PUT request when it was present in the PUT request and the UDR supports feature negotiation for Influence Data.  This attribute shall be supplied by the UDR in the response to the GET request when the GET request includes the "supp-feat" query parameter and the UDR supports feature negotiation for Influence Data. |  |
| resUri | Uri | C | 0..1 | Represents the URI of Individual Influence Data. It shall only be included in the HTTP GET response. | EnhancedInfluDataNotification |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| nscSuppFeats | map(SupportedFeatures) | O | 1..N | A map of Network Function Service Consumer features supported per service. The key used in this map for each entry is the ServiceName value as defined in 3GPP TS 29.510[24] (e.g. for Nsmf\_EventExposure API, the key shall be set to nsmf-event-exposure). | NscSupportedFeatures |
| NOTE 1: One of "afAppId", "trafficFilters" or "ethTrafficFilters" shall be included.  NOTE 2: One of the "supi" or "interGroupId" or "interGroupIdList" (may be included when FinerGranUEs feature is supported) shall be included.  NOTE 3: If the EnhancedInfluDataNotification feature is not supported, to indicate the deletion of a Traffic Individual Influence Data resource, only the appropriate combination of "supi" or "interGroupId", and "afAppId", "trafficFilters" or "ethTrafficFilters" that identify the resource shall be included. The rest of attributes shall be omitted.  NOTE 4: Properties "validStartTime" and "validEndTime" shall only be included for single temporal validity condition. Property "tempValidities" shall only be included for multiple temporal validity conditions when the feature MultiTemporalCondition is supported.  NOTE 5: If the Traffic Influence Data applies to any UE, then the "interGroupId" sets to "AnyUE".  NOTE 6: In this release of the specification, the property "headers" only includes the 3gpp-Sbi-Binding header with the binding indication for the URI included in the property "upPathChgNotifUri".  NOTE 7: The indication of traffic correlation shall be provided only when the AF indicated that all the PDU sessions related to the 5G VN group member UEs should be correlated by a common DNAI in the user plane for the traffic as described in 3GPP TS 29.522 [19].  NOTE 8: When FinerGranUEs feature is supported, the Traffic Influence Data applies to the UE(s) that belong to all the Internal Group Identifiers included within the attribute "interGroupIdList", if present.  NOTE 9: When FinerGranUEs feature is supported, the Traffic Influence Data applies to the UE(s) that belong to all the subscriber categories included within the attribute "subscriberCatList", which is included only if either "interGroupIdList" is included or "interGroupId" is included.  NOTE 10: Attributes "interGroupId" and "interGroupIdList" are mutually exclusive attributes.  NOTE 11: When the SFC feature is supported, for the purpose of influencing Service Function Chaining, at least one of the “sfcIdDl” and “sfcIdUl” attribute shall be present. | | | | | |

6.4.2.3 Type TrafficInfluDataPatch

Table 6.4.2.3-1: Definition of type TrafficInfluDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| upPathChgNotifCorreId | string | O | 0..1 | Contains the Notification Correlation Id allocated by the NEF for the UP path change notification. |  |
| appReloInd | boolean | O | 0..1 | Identifies whether an application can be relocated once a location of the application has been selected. |  |
| ethTrafficFilters | array(EthFlowDescription) | O | 1..N | Identifies Ethernet packet filters. |  |
| trafficFilters | array(FlowInfo) | O | 1..N | Identifies IP packet filters |  |
| trafficRoutes | array(RouteToLocation) | O | 1..N | Identifies the N6 traffic routing requirement. |  |
| sfcIdDl | string | O | 0..1 | Reference to a pre-configured service function chain for downlink traffic. | SFC |
| sfcIdUl | string | O | 0..1 | Reference to a pre-configured service function chain for uplink traffic. | SFC |
| metadata | Metadata | O | 0..1 | Contains opaque information for the service functions in the N6-LAN that is provided by AF and transparently sent to UPF. | SFC |
| traffCorreInd | boolean | O | 0..1 | Indication of traffic correlation.  May only be included when "interGroupId" attribute was previously included in the "TrafficInfluData" data type and not set to "AnyUE".  It is used to indicate that for the group of UEs, the targeted PDU sessions should be correlated by a common DNAI. |  |
| tfcCorreInfo | TrafficCorrelationInfo | O | 0..1 | Contains the information for traffic correlation. | CommonEASDNAI |
| validStartTime | DateTime | O | 0..1 | Identifies when the traffic routings start to be applicable. |  |
| validEndTime | DateTime | O | 0..1 | Identifies when the traffic routings are not applicable. |  |
| tempValidities | array(TemporalValidity) | O | 1..N | Indicates the time interval(s) during which the AF request is to be applied. | MultiTemporalCondition |
| nwAreaInfo | NetworkAreaInfo | O | 0..1 | Identifies a network area information that the request applies only to the traffic of UE(s) located in this specific zone. |  |
| upPathChgNotifUri | Uri | O | 0..1 | Contains the URI where the NEF receives the UP path change notification. |  |
| headers | array(string) | O | 1..N | Headers provisioned by the NEF. E.g. 3gpp-Sbi-Binding header with the binding indication for the URI where the NEF receives UP path change notification.  The encoding of the header shall comply with clause 6.3 of IETF RFC 9110 [21]. |  |
| afAckInd | boolean | O | 0..1 | Identifies whether the AF acknowledgement of UP path event notification is expected. | URLLC |
| addrPreserInd | boolean | O | 0..1 | Indicates UE IP address should be preserved. | URLLC |
| maxAllowedUpLat | Uinteger | O | 0..1 | Indicates the target user plane latency in units of milliseconds. The SMF may use this value to decide whether edge relocation is needed to ensure that the user plane latency does not exceed the value. | AF\_latency |
| simConnInd | boolean | O | 0..1 | Indication of simultaneous connectivity temporarily maintained for the source and target PSA.  It is set to "true" if the temporary connectivity should be temporarily maintained; otherwise, it is set to "false". | SimultConnectivity |
| simConnTerm | DurationSecRm | C | 0..1 | Indication of the minimum time interval to be considered for inactivity of the traffic routed via the source PSA during the edge re-location procedure before removing the source PSA. | SimultConnectivity |

6.4.2.4 Type TrafficInfluSub

Table 6.4.2.4-1: Definition of type TrafficInfluSub

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| dnns | array(Dnn) | O | 1..N | Each element identifies a DNN.  (NOTE 1) |  |
| snssais | array(Snssai) | O | 1..N | Each element identifies an interna slice. |  |
| internalGroupIds | array(GroupId) | O | 1..N | Each element identifies a group of users. (NOTE 1) (NOTE 2) (NOTE 3) (NOTE 5) |  |
| internalGroupIdsAdd | array(GroupId) | O | 1..N | Each element identifies an internal group of users. (NOTE 1) (NOTE 2) (NOTE 4) (NOTE 5) |  |
| subscriberCatList | array(string) | O | 1..N | Each element identifies a subscriber category. (NOTE 6) |  |
| supis | array(Supi) | O | 1..N | Each element identifies the user.  (NOTE 5) |  |
| notificationUri | Uri | M | 1 | URI provided by the NF service consumer indicating where to receive the subscribed notifications from the UDR. |  |
| expiry | DateTime | C | 0..1 | This IE shall be included in a subscription response if, based on operator policy and taking into account the expiry time included in the request, the UDR needs to include an expiry time.  This IE may be included in a subscription request. When present, this IE shall represent the time after which the subscription becomes invalid.  The absence of this attribute in the subscription response means the subscription to be valid without an expiry time. |  |
| supportedFeatures | SupportedFeatures | C | 0..1 | Used to negotiate the applicability of the optional features. This attribute shall be provided in the POST request and in the response of successful resource creation. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| immRep | boolean | O | 0..1 | If provided and set to "true", it indicates that existing entries that match this subscription shall be immediately reported within the "immReports" attribute in the response. The default value is false. | ImmediateReportPcc |
| immReports | array(TrafficInfluDataNotif) | O | 1..N | Contains entries stored in the UDR that match this subscription.  It may be included only in the POST (or PUT) response body of a subscription creation (or modification), and only if the request included the "immRep" attribute set to true. | ImmediateReportPcc |
| NOTE 1: At least one of "dnns", "snssais", "internalGroupIds", "internalGroupIdsAdd" (may be included when FinerGranUEs feature is supported) or "supis" shall be provided.  NOTE 2: For the Traffic Influence Data applies to any UE, the "internalGroupIds" needs to have an entry set to "AnyUE".  NOTE 3: The "internalGroupIds" attribute shall be compared only with the "interGroupId" of the TrafficInfluData data type and there is a match only if they both exist and "interGroupId" is contained in "internalGroupIds".  NOTE 4: The "internalGroupIdsAdd" attribute shall be compared only with the "interGroupIdList" of the TrafficInfluData data type and there is a match only if they both exist and are identical.  NOTE 5: Attributes "internalGroupIds" and "internalGroupIdsAdd" are mutually exclusive attributes.  NOTE 6: The "subscriberCatList" attribute of the TrafficInfluSub data type shall be compared with the "subscriberCatList" of the TrafficInfluData data type and there is a match only if they both exist and are identical. | | | | | |

#### 6.4.2.5 Void

#### 6.4.2.6 Type: PfdDataForAppExt

Table 6.4.2.6-1: Definition of type PfdDataForAppExt

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| suppFeat | SupportedFeatures | O | 0..1 | Used to negotiate the applicability of the optional features.  This attribute shall be provided in the PUT request and in the response of successful resource creation.  This attribute shall be provided in the HTTP GET response if the "supp-feat" attribute query parameter is included in the HTTP GET request. |  |
| applicationId | ApplicationId | M | 1 | Identifier of an application. |  |
| pfds | array(PfdContent) | M | 1..N | PFDs for the application identifier. |  |
| cachingTime | DateTime | O | 0..1 | Caching time for an application identifier. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| allowedDelay | DurationSec | O | 0..1 | Indicates that the list of PFDs in this request should be deployed within the time interval indicated by the Allowed Delay. |  |

#### 6.4.2.7 Type BdtPolicyData

Table 6.4.2.7-1: Definition of type BdtPolicyData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| interGroupId | GroupId | O | 0..1 | Identifies a group of users. (NOTE) |  |
| supi | Supi | O | 0..1 | Identifies a user. (NOTE) |  |
| bdtRefId | BdtReferenceId | M | 1 | Identifies a selected policy of background data transfer. |  |
| dnn | Dnn | O | 0..1 | Identifies a DNN |  |
| snssai | Snssai | O | 0..1 | The identification of slice. |  |
| resUri | Uri | C | 0..1 | Represents the URI of Individual Applied BDT Policy Data. It shall only be included in the HTTP GET response. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| NOTE: Either "supi" or "interGroupId" shall be included. | | | | | |

6.4.2.8 Type BdtPolicyDataPatch

Table 6.4.2.8-1: Definition of type BdtPolicyDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| bdtRefId | BdtReferenceId | M | 1 | Identifies a selected policy of background data transfer. |  |

#### 6.4.2.9 Type IptvConfigData

Table 6.4.2.9-1: Definition of type IptvConfigData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| supi | Supi | C | 0..1 | Identifies a user. (NOTE) |  |
| interGroupId | GroupId | C | 0..1 | Identifies a group of users. (NOTE) |  |
| dnn | Dnn | O | 0..1 | Identifies a DNN |  |
| snssai | Snssai | O | 0..1 | The identification of slice. |  |
| afAppId | string | M | 1 | Identifies an application. |  |
| multiAccCtrls | map(MulticastAccessControl) | M | 1..N | Identifies a list of multicast address access control information.  Any string value can be used as a key of the map. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the negotiated supported features. This attribute shall be provided in the PUT request and in the response of successful resource creation. |  |
| resUri | Uri | C | 0..1 | Represents the URI of Individual IPTV Configuration. It shall only be included in the HTTP GET response. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| NOTE: Either "supi" or "interGroupId" shall be included. | | | | | |

#### 6.4.2.10 Type ApplicationDataSubs

Table 6.4.2.10-1: Definition of type ApplicationDataSubs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |  |
| notificationUri | Uri | M | 1 | URI provided by the NF service consumer indicating where to receive the subscribed notifications from the UDR. | Applicability |
| dataFilters | array(DataFilter) | O | 1..N | Each element identifies a data filter for subscription to data change.notification.  If absent, the subscription applies to all data change notification except traffic influence data. |  |
| expiry | DateTime | C | 0..1 | This IE shall be included in a subscription response if, based on operator policy and taking into account the expiry time included in the request, the UDR needs to include an expiry time.  This IE may be included in a subscription request. When present, this IE shall represent the time after which the subscription becomes invalid.  The absence of this attribute in the subscription response means the subscription to be valid without an expiry time. |  |
| immRep | boolean | O | 0..1 | If the feature "ImmediateReportPcc" is not supported, this attribute is applicable only if the "dataFilters" attribute of the request includes an element with the "dataInd" attribute set to "AM". If provided and set to "true", it indicates that existing matching entries shall be immediately reported within the "amInfluEntries" attribute, or, if the feature "ImmediateReportPcc" is supported, within the "immReports" attribute in the response.  The default value is "false" | DCAMP  ImmediateReportPcc |
| amInfluEntries | array(AmInfluData) | O | 1..N | The AM Influence Data stored in the UDR that match this subscription.  It may be included only in the POST response body of a subscription creation or modification, and only if the request included the "immRep" attribute set to true and a "dataFilters" attribute that contained an element with the "dataInd" attribute set to "AM". | DCAMP |
| supportedFeatures | SupportedFeatures | C | 0..1 | Used to negotiate the applicability of the optional features.  This attribute shall be provided in the POST request and in the response of successful resource creation. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| immReports | array(ApplicationDataChangeNotif) | O | 1..N | Contains entries stored in the UDR that match this subscription.  It may be included only in the POST (or PUT) response body of a subscription creation (or modification), and only if the request included the "immRep" attribute set to true. | ImmediateReportPcc |

When multiple attributes defined as an array are included within an entry of the "dataFilters" attribute, the UDR shall determine that the subscription is for all application data of type "dataInd" that contain a matching combination of the values of the elements of the array of the provided attributes.

EXAMPLE: For a subscription to notification on changes of Service Parameter Data resources ("dataInd" is set to "SVC\_PARAM"), if "snssais" attribute is included with two S-NSSAI entries (S-NSSAI\_1 and S-NSSAI\_2) and "dnns" is included with two DNN entries (e.g. DNN\_A and DNN\_B), and the other optional attributes are not included, the UDR shall notify about changes of Service Parameter Data resources that contain a matching S-NSSAI and DNN combination, i.e. the resource(s) matching SNSSAI\_1 and DNN\_A, the resource(s) matching SNSSAI\_1 and DNN\_B, the resource(s) matching SNSSAI\_2 and DNN\_A, and the resources matching SNSSAI\_2 and DNN\_B.

#### 6.4.2.11 Type ApplicationDataChangeNotif

Table 6.4.2.11-1: Definition of type ApplicationDataChangeNotif

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| iptvConfigData | IptvConfigData | O | 0..1 | IPTV Configuration Data. (NOTE) |  |
| pfdData | PfdChangeNotification | O | 0..1 | PFD Data. (NOTE) |  |
| bdtPolicyData | BdtPolicyData | O | 0..1 | BDT Policy Data. (NOTE) |  |
| serParamData | ServiceParameterData | O | 0..1 | Service Parameter Data, if changed and notification was requested. (NOTE) |  |
| amInfluData | AmInfluData | O | 0..1 | AM Influence Data (NOTE) | DCAMP |
| dnaiEasData | DnaiEasMapping | O | 0..1 | DNAI EAS Mapping (NOTE) | DnaiEasMappings |
| afReqQosData | AfRequestedQosData | O | 0..1 | AF requested QoS data for a UE or Group of UE(s) not identified by UE address(es).  (NOTE) | GMEC |
| ecsAddrData | EcsAddrData | O | 0..1 | ECS Address Roaming Data (NOTE) |  |
| resUri | Uri | M | 1 | Identifies the resource in the corresponding data change. For notifying deletion, only resUri shall be provided in the ApplicationDataChangeNotif data type. |  |
| NOTE: Only one among those attributes shall be provided in notifying data creation or update and in immediate reports. | | | | | |

Editor's Note: The feature to be used for EcsAddrData is FFS.

#### 6.4.2.12 Type DataFilter

Table 6.4.2.12-1: Definition of type DataFilter

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| dataInd | DataInd | M | 1 | Indicate the type of application data.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd", and match also the filters indicated in the rest of the attributes of DataFilter (if any). |  |
| dnns | array(Dnn) | O | 1..N | Each element identifies a DNN.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain at least one of the DNNs included in the array, and match also the filters indicated in the rest of the attributes of DataFilter (if any). (NOTE 3) |  |
| snssais | array(Snssai) | O | 1..N | Each element identifies a slice.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain at least one of the S-NSSAIs included in the array, and match also the filters indicated in the rest of the attributes of DataFilter (if any). (NOTE 3) |  |
| internalGroupIds | array(GroupId) | O | 1..N | Each element identifies a group of users. When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain at least one of the Group IDs included in the array, and match also the filters indicated in the rest of the attributes of DataFilter (if any). |  |
| supis | array(Supi) | O | 1..N | Each element identifies the user.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain at least one of the SUPIs included in the array, and match also the filters indicated in the rest of the attributes of DataFilter (if any). |  |
| appIds | array(ApplicationId) | O | 1..N | Each element identifies an application.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain at least one of the ApplicationIds included in the array, and match also the filters indicated in the rest of the attributes of DataFilter (if any). |  |
| ueIpv4s | array(Ipv4Addr) | O | 1..N | Each element identifies the user.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain at least one of the IPv4 address(es) included in the array, and match also the filters indicated in the rest of the attributes of DataFilter (if any). |  |
| ueIpv6s | array(Ipv6Addr) | O | 1..N | Each element identifies the user.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain at least one of the IPv6 addresses included in the array, and match also the filters indicated in the rest of the attributes of DataFilter (if any). |  |
| ueMacs | array(MacAddr48) | O | 1..N | Each element identifies the user.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain at least one of the UE MAC address(es) included in the array, and match also the filters indicated in the rest of the attributes of DataFilter (if any). |  |
| anyUeInd | boolean | O |  | Indicates whether the request is for any UE:  - "true": the request is for any UE;  - "false"(default): the request is not for any UE.  When used in subscription procedures, the UDR shall notify only about changes of application data of type "dataInd" that contain an any UE indication, and match also the filters indicated in the rest of the attributes of DataFilter (if any). | FilterAnyUE |
| dnnSnssaiInfos | array(DnnSnssaiInformation) | O | 1..N | Each element identifies a combination of (DNN, S-NSSAI). When used in subscription procedures, the UDR shall only notify about changes in resource(s) with "dataInd" value AM that contain at least one DNN and S-NSSAI combination indicated in the array, and match also the rest of the filters (if any).  (NOTE 3) | DCAMP |
| dnais | array(Dnai) | O | 1..N | Each element identifies a DNAI. When used in subscription procedures, the UDR shall only notify about changes of application data of type "dataInd" that contain at least one of the DNAIs included in the array, and match also the rest of the filters (if any). | DnaiEasMappings |
| NOTE 1: The "dnns" and "snssais" attributes are applicable to the BDT Policy Data, IPTV Configuration Data, Service Parameter Data, AM Influence Data, and DNAI EAS Mappings, the "internalGroupIds" and "supis" attributes are applicable to the BDT Policy Data, IPTV Configuration Data, Service Parameter Data, and AM Influence Data, the "ueIpv4s" "ueIpv6s" and "ueMacs" attributes are applicable to the Service Parameter Data, the "appIds" attribute is applicable to the PFD Data, Service Parameter Data and IPTV Configuration Data, the "anyUeInd" attribute is applicable to Service Parameter Data and AM Influence Data, the "dnnSnssaiInfos" is applicable to AM Influence Data, and the "dnais" attribute is applicable to DNAI EAS Mappings. The "internalGroupIds" and "anyUeInd" attributes are also applicable to ECS Address Roaming Data.  NOTE 2: At application datat changes, subscriptions to changes based on attributes of this table are considered to be matched, and the corresponding notifications are sent, no matter if the matching application data matches the provided values before the change, after the change, or both before and after the change.  NOTE 3: For AM Influence Data, only one of the "dnns", "snssais", or "dnn-snssai-infos" attributes may be simultaneously provided. | | | | | |

NOTE: When the "anyUeInd" attribute is related to the subscription to notification of changes of the service parameter data resource(s), and it refers to any UE using the service identified by a combination of DNN and S-NSSAI, the "anyUeInd" attribute is present together with the "dnns" and "snssais" properties. Note also that, if the "anyUeInd" attribute is present together with the "internalGroupIds", "supis", "ueIpv4s", "ueIpv6s" and/or "ueMacs" attributes the subscription will not match any resource, since according to clause 6.4.2.15 only one of the the "supi", "anyUeInd", "interGroupId", "ueIpv4", "ueIpv6" or "ueMac" properties are simultaneously present in the resource.  
When the "anyUeInd" attribute is related to the subscription to notification of changes of the AM Influence data resource(s), and it refers to any UE using the service(s) identified by the corresponding DNN and S-NSSAI, the "anyUeInd" attribute is present together with the "dnnSnssaiInfos" property. Note also that, if the "anyUeInd" attribute is present together with the "internalGroupIds" and/or "supis" attributes the subscription will not match any resource, since according to clause 6.4.2.16 only one of the the "supi", "anyUeInd", or "interGroupId" properties are simultaneously present in the resource.

#### 6.4.2.13 Void

#### 6.4.2.14 Type TrafficInfluDataNotif

Table 6.4.2.14-1: Definition of type TrafficInfluDataNotif

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| resUri | Uri | M | 1 | Represents the URI of Individual Influence Data. For notifying deletion, only resUri shall be provided in the TrafficInfluDataNotif data type. |  |
| trafficInfluData | TrafficInfluData | C | 0..1 | Traffic Influence Data. It shall be present for notifying Individual Influence Data creation or update and, if the feature "ImmediateReportPcc" is supported, also for providing immediate reports. |  |

#### 6.4.2.15 Type ServiceParameterData

Table 6.4.2.15-1: Definition of type ServiceParameterData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| dnn | Dnn | O | 0..1 | Identifies a DNN. (NOTE 2) |  |
| snssai | Snssai | O | 0..1 | Identifies an S-NSSAI. (NOTE 2) |  |
| appId | string | O | 0..1 | Identifies an application identifier. (NOTE 2) |  |
| supi | Supi | O | 0..1 | Identifies a user. (NOTE1) |  |
| ueIpv4 | Ipv4Addr | O | 0..1 | The IPv4 address of the served UE. (NOTE1) |  |
| ueIpv6 | Ipv6Addr | O | 0..1 | The IPv6 address of the served UE. (NOTE1) |  |
| ueMac | MacAddr48 | O | 0..1 | The MAC address of the served UE. (NOTE1) |  |
| interGroupId | GroupId | O | 0..1 | Identifies a group of users. (NOTE1) |  |
| anyUeInd | boolean | O | 0..1 | Identifies whether the service parameters applies to any non-roaming UE. This attribute shall set to "true" if applicable for any UE, otherwise, set to "false". (NOTE1) |  |
| roamUeNetDescs | array(NetworkDescription) | O | 1..N | Each element identifies one (e.g., combination of MCC and MNC) or more (e.g. a MCC only) PLMN ID(s).  It indicates the PLMN(s) of inbound roamers to which the provided AF guidance on VPLMN-specific URSP rules apply. (NOTE 1) | VPLMNSpecificURSP |
| paramOverPc5 | ParameterOverPc5 | O | 0..1 | Contains the V2X service parameters used over PC5 |  |
| paramOverUu | ParameterOverUu | O | 0..1 | Contains the V2X service parameters used over Uu |  |
| a2xParamsPc5 | A2xParamsPc5 | O | 0..1 | Contains the A2X service parameters used over PC5 | A2X |
| urspGuidance | array(UrspRuleRequest) | O | 1..N | Contains the service parameter used to guide the URSP and/or, when the VPLMNSpecificURSP feature is supported, to guide the VPLMN-specific URSP. | AfGuideURSP |
| paramForProSeDd | ParamForProSeDd | O | 0..1 | Contains the service parameters for 5G ProSe direct discovery. | ProSe |
| paramForProSeDc | ParamForProSeDc | O | 0..1 | Contains the service parameters for 5G ProSe direct communications. | ProSe |
| paramForProSeU2NRelUe | ParamForProSeU2NRelUe | O | 0..1 | Contains the service parameters for 5G ProSe UE-to-network relay UE. | ProSe |
| paramForProSeRemUe | ParamForProSeRemUe | O | 0..1 | Contains the service parameters for 5G ProSe remote UE. | ProSe |
| paramForProSeU2URelUe | ParamForProSeU2URelUe | O | 0..1 | Contains the service parameters for 5G ProSe UE-to-UE Relay UE. | ProSe\_Ph2 |
| paramForProSeEndUe | ParamForProSeEndUe | O | 0..1 | Contains the service parameters for 5G ProSe End UE. | ProSe\_Ph2 |
| tnaps | array(TnapId) | O | 1..N | Contains the TNAP ID(s) collocated with the 5G-RG(s) of a specific user. | AfGuideTNAPs |
| deliveryEvents | array(Event) | O | 1..N | Contains the events related to the outcome of UE policy delivery. | DeliveryOutcome |
| policDelivNotifCorreId | string | C | 0..1 | Contains the Notification Correlation Id allocated by the NEF for the notification of UE Policy delivery outcome. It shall be included when the NEF requests the notification of UE Policy delivery outcome. | DeliveryOutcome |
| policDelivNotifUri | Uri | C | 0..1 | Contains the URI where the NEF receives the notification of UE Policy delivery outcome. It shall be included when the NEF requests the notification of UE policy delivery outcome. | DeliveryOutcome |
| headers | array(string) | O | 1..N | Headers provisioned by the NEF.  E.g. 3gpp-Sbi-Binding header (as specified in 3GPP TS 29.500 [4]) with the binding indication for the URI included in the policDelivNotifUri attribute.  The encoding of the header shall comply with clause 6.3 of IETF RFC 9110 [21]. | DeliveryOutcome |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of Supported features used as described in clause 5.8.  This parameter shall be supplied in the PUT request that requested the creation of an individual Service parameter resource, and in the PUT response. |  |
| resUri | Uri | C | 0..1 | Represents the URI of Individual Service Parameter Data. It shall only be included in the HTTP GET response. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| paramForRangingSlPos | ParamForRangingSlPos | O | 0..1 | Contains the service parameters for ranging and sidelink positioning. | Ranging\_SL |
| NOTE 1: Only one of the "supi", "anyUeInd", "interGroupId", "ueIpv4", "ueIpv6" or "ueMac" attribute, and when the feature "VPLMNSpecificURSP" is supported, or "roamUeNetDescs attribute", shall be provided. When the "AfGuidance" feature is supported, and the attribute "tnaps" is included, only the "supi" attribute shall be provided. When the "VPLMNSpecificURSP" feature is supported, the "roamUeNetDescs" attribute only applies to URSP service parameter provisioning and shall be included when the "urspGuidance" attribute contains VPLMN(s) description.  NOTE 2: Only the combination of "dnn" and "snssai" or "appId" attribute shall be provided. | | | | | |

#### 6.4.2.15A Type ServiceParameterDataPatch

Table 6.4.2.15A-1: Definition of type ServiceParameterDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| paramOverPc5 | ParameterOverPc5Rm | O | 0..1 | Contains the V2X service parameters used over PC5. When the"NullableSupport" feature is supported, this attribute is nullable. When the"NullableSupport" feature is not supported, this attribute is not nullable. |  |
| paramOverUu | ParameterOverUuRm | O | 0..1 | Contains the V2X service parameters used over Uu. When the "NullableSupport" feature is supported, this attribute is nullable. When the "NullableSupport" feature is not supported, this attribute is not nullable. |  |
| a2xParamsPc5 | A2xParamsPc5Rm | O | 0..1 | Contains the A2X service parameters used over PC5. | A2X |
| urspInfluence | array(UrspRuleRequest) | O | 1..N | Contains the service parameter used to influence the URSP.  This attribute is deprecated by the "urspGuidance" attribute that should be used instead. | AfGuideURSP |
| urspGuidance | array(UrspRuleRequest) | O | 1..N | Contains the service parameter used to guide the URSP and/or, when the VPLMNSpecificURSP feature is supported, to guide the VPLMN-specific URSP. | AfGuideURSP  PatchCorrection |
| paramForProSeDd | ParamForProSeDdRm | O | 0..1 | Contains the service parameters for 5G ProSe direct discovery.  When the "NullableSupport" feature is supported, this attribute is nullable. When the "NullableSupport" feature is not supported, this attribute is not nullable. | ProSe |
| paramForProSeDc | ParamForProSeDcRm | O | 0..1 | Contains the service parameters for 5G ProSe direct communications.  When the "NullableSupport" feature is supported, this attribute is nullable. When the "NullableSupport" feature is not supported, this attribute is not nullable. | ProSe |
| paramForProSeU2NRelUe | ParamForProSeU2NRelUeRm | O | 0..1 | Contains the service parameters for 5G ProSe UE-to-network relay UE.  When the "NullableSupport" feature is supported, this attribute is nullable. When the "NullableSupport" feature is not supported, this attribute is not nullable. | ProSe |
| paramForProSeRemUe | ParamForProSeRemUeRm | O | 0..1 | Contains the service parameters for 5G ProSe remote UE.  When the "NullableSupport" feature is supported, this attribute is nullable. When the "NullableSupport" feature is not supported, this attribute is not nullable. | ProSe |
| paramForProSeU2URelUE | ParamForProSeU2URelUeRm | O | 0..1 | Contains the service parameters for 5G ProSe UE-to-UE Relay UE. | ProSe\_Ph2 |
| paramForProSeEndUe | ParamForProSeEndUeRm | O | 0..1 | Contains the service parameters for 5G ProSe End UE. | ProSe\_Ph2 |
| tnaps | array(TnapId) | O | 1..N | Contains the TNAP ID(s) collocated with the 5G-RG(s) of a specific user. | AfGuideTNAPs |
| deliveryEvents | array(Event) | O | 1..N | Contains the events related to the outcome of UE policy delivery.  When the "NullableSupport" feature is supported, this attribute is nullable. When the "NullableSupport" feature is not supported, this attribute is not nullable. | DeliveryOutcome |
| policDelivNotifUri | Uri | C | 0..1 | Contains the URI where the NEF receives the notification of UE Policy delivery outcome. It shall be included when the NEF requests the notification of UE policy delivery outcome. | DeliveryOutcome |
| headers | array(string) | O | 1..N | Headers provisioned by the NEF.  E.g. 3gpp-Sbi-Binding header (as specified in 3GPP TS 29.500 [4]) with the binding indication for the URI included in the policDelivNotifUri IE.  The encoding of the header shall comply with clause 6.3 of IETF RFC 9110 [21]. | DeliveryOutcome |
| paramForRangingSlPos | ParamForRangingSlPosRm | O | 0..1 | Contains the service parameters for ranging and sidelink positioning. | Ranging\_SL |

#### 6.4.2.16 Type AmInfluData

Table 6.4.2.16-1: Definition of type AmInfluData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| appIds | array(string) | O | 1..N | Identifies one or more applications. |  |
| dnnSnssaiInfos | array(DnnSnssaiInformation) | O | 1..N | Each element identifies a combination of (DNN, S-NSSAI). |  |
| interGroupId | GroupId | O | 0..1 | Identifies a group of users. (NOTE 1) |  |
| supi | Supi | O | 0..1 | Identifies a user. (NOTE 1) |  |
| anyUeInd | boolean | O | 0..1 | Indicates whether the data applies to any non-roaming UE. If present and set to "true" the data is applicable for any non-roaming UE. Otherwise set to "false". Default value is "false" if omitted. (NOTE 1) |  |
| roamUePlmnIds | array(PlmnId) | O | 1..N | Each element identifies a home PLMN Id for the inbound roaming UEs in LBO roaming scenario. (NOTE 1) (NOTE 3) | DCAMP\_Roaming\_LBO |
| policyDuration | DurationSec | O | 0..1 | Indicates the time duration that the policy shall last. |  |
| evSubs | array(AmInfluEvent) | O | 1..N | List of AM related events for which a subscription is required. |  |
| headers | array(string) | O | 1..N | Headers provisioned by the NEF.  E.g. 3gpp-Sbi-Binding header (as specified in 3GPP TS 29.500 [4]) with the binding indication for the URI included in the notifUri IE.  The encoding of the header shall comply with clause 6.3 of IETF RFC 9110 [21]. |  |
| notifUri | Uri | C | 0..1 | Contains the Callback URI to receive notifications.  It shall be present if the "evSubs" attribute is present. |  |
| notifCorrId | string | O | 0..1 | Notification correlation identifier. |  |
| thruReq | boolean | O | 0..1 | If present and set to "true", it indicates that high throughput is desired for the indicated UE traffic. Otherwise set to "false". Default value is "false" if omitted. (NOTE 2) |  |
| covReq | array(ServiceAreaCoverageInfo) | O | 1..N | Identifies service area coverage requirements. (NOTE 2) |  |
| supportedFeatures | SupportedFeatures | C | 0..1 | Indicates the list of negotiated supported features.  This attribute shall be supplied by the UDR in the response to the PUT request when it was present in the PUT request and the UDR supports feature negotiation for AM Influence Data.  This attribute shall be supplied by the UDR in the response to the GET request when the GET request includes the "supp-feat" query parameter and the UDR supports feature negotiation for AM Influence Data. |  |
| resUri | Uri | C | 0..1 | Represents the URI of Individual AM Influence Data. It shall only be included in the HTTP GET response. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| NOTE 1: One of "supi", "interGroupId", "anyUeInd" and "roamUePlmnIds" shall be included.  NOTE 2: At least one of these attributes shall be included.  NOTE 3: "roamUePlmnIds" attribute applies only to LBO roaming scenarios and is associated with the inbound roaming UEs and applicable when "appIds" attribute or "dnnSnssaiInfos" attribute is provided. | | | | | |

#### 6.4.2.17 Type AmInfluDataPatch

Table 6.4.2.17-1: Definition of type AmInfluDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| appIds | array(string) | O | 1..N | Identifies one or more applications. |  |
| dnnSnssaiInfos | array(DnnSnssaiInformation) | O | 1..N | Each element identifies a combination of (DNN, S-NSSAI). |  |
| policyDuration | DurationSecRm | O | 0..1 | Indicates the time duration that the policy shall last. |  |
| evSubs | array(AmInfluEvent) | O | 1..N | List of AM related events for which a subscription is required. |  |
| headers | array(string) | O | 1..N | Headers provisioned by the NEF.  E.g. 3gpp-Sbi-Binding header (as specified in 3GPP TS 29.500 [4]) with the binding indication for the URI included in the notifUri IE.  The encoding of the header shall comply with clause 6.3 of IETF RFC 9110 [21]. |  |
| notifUri | UriRm | C | 0..1 | Contains the Callback URL to receive notifications. |  |
| notifCorrId | string | O | 0..1 | Notification correlation identifier. |  |
| thruReq | boolean | O | 0..1 | Indicates whether high throughput is desired for the indicated UE traffic:  - "true": high throughput is desired for the indicated UE traffic;  - "false": high throughput is not desired for the indicated UE traffic. |  |
| covReq | string | O | 0..1 | Identifies service area coverage requirements. |  |

#### 6.4.2.18 Type AfRequestedQosData

Table 6.4.2.18-1: Definition of type AfRequestedQosData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| supi | Supi | C | 0..1 | Identifies a UE.  (NOTE 1) |  |
| interGroupId | GroupId | C | 0..1 | Identifies a group of UE(s).  (NOTE 1) |  |
| afAppId | string | O | 0..1 | Identifies an AF Application. |  |
| dnn | Dnn | O | 0..1 | Represents a DNN.  (NOTE 2) |  |
| sliceInfo | Snssai | O | 0..1 | Represents the identifier of a network slice. |  |
| flowInfos | array(FlowInfo) | O | 1..N | Describe the IP data flow(s) which requires QoS. |  |
| evSubsc | EventsSubscReqData | O | 0..1 | Contains the requested event(s) subscription related information. |  |
| qosReference | string | O | 0..1 | Identifies a pre-defined QoS information. |  |
| altSerReqs | array(string) | O | 1..N | Ordered list of alternative service requirements that include a set of QoS references.. The lower the index of the array for a given entry, the higher the priority. |  |
| altSerReqsData | array(AlternativeServiceRequirementsData) | O | 1..N | Identifies an ordered list of alternative service requirements that include individual QoS parameter sets. The lower the index of the array for a given entry, the higher the priority. |  |
| disUeNotif | boolean | O | 0..1 | Indicates to disable QoS flow parameters signalling to the UE when it is included and set to "true".  The default value "false" shall apply, if the attribute is not present and has not been supplied previously. |  |
| marBwUl | BitRate | O | 0..1 | Maximum requested bandwidth for the Uplink. |  |
| marBwDl | BitRate | O | 0..1 | Maximum requested bandwidth for the Downlink. |  |
| mirBwUl | BitRate | O | 0..1 | Minimum requested bandwidth for the Uplink. |  |
| mirBwDl | BitRate | O | 0..1 | Minimum requested bandwidth for the Downlink. |  |
| tempInValidity | TemporalInValidity | O | 0..1 | Indicates the time interval during which the AF request is not to be applied. |  |
| suppFeat | SupportedFeatures | M | 1 | This IE represents a list of Supported features used as described in clause 6.1.8 of 3GPP TS 29.504. |  |
| NOTE 1: Either "supi" or "interGroupId" shall be included.  NOTE 2: Data Network Name, a full DNN with both the Network Identifier and Operator Identifier, or a DNN with the Network Identifier only. The PCF uses the DNN as obtained from UDR without applying any transformation (e.g. during SM Policy Association matching). To successfully perform DNN matching, in a specific deployment a DNN shall always be encoded either with the full DNN (e.g., because there are multiple Operator Identifiers for a Network Identifier) or the DNN Network Identifier only. | | | | | |

Editor’s Note: Whether all the parameters of the AF Request for QoS are covered is FFS (e.g., missing the representation of other individual QoS parameters and/or the indication of the applicable events).

#### 6.4.2.19 Type AfRequestedQosDataPatch

Table 6.4.2.19-1: Definition of type AfRequestedQosDataPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| afAppId | string | O | 0..1 | Identifies the application Identifier. |  |
| evSubsc | EventsSubscReqDataRm | O | 0..1 | Contains the requested event(s) subscription related information. |  |
| flowInfos | array(FlowInfo) | O | 1..N | Describe the data flow(s) which requires QoS. |  |
| qosReference | string | O | 0..1 | Pre-defined QoS reference. |  |
| altSerReqs | array(string) | O | 0..N | Ordered list of alternative service requirements that include a set of QoS references.. The lower the index of the array for a given entry, the higher the priority. |  |
| altSerReqsData | array(AlternativeServiceRequirementsData) | O | 1..N | Identifies an ordered list of alternative service requirements that include individual QoS parameter sets. The lower the index of the array for a given entry, the higher the priority. |  |
| disUeNotif | boolean | O | 0..1 | Indicates to disable QoS flow parameters signalling to the UE when it is included and set to "true".  The default value "false" shall apply, if the attribute is not present and has not been supplied previously. |  |
| marBwUl | BitRateRm | O | 0..1 | Maximum requested bandwidth for the Uplink. |  |
| marBwDl | BitRateRm | O | 0..1 | Maximum requested bandwidth for the Downlink. |  |
| mirBwUl | BitRateRm | O | 0..1 | Minimum requested bandwidth for the Uplink. |  |
| mirBwDl | BitRateRm | O | 0..1 | Minimum requested bandwidth for the Downlink. |  |
| tempInValidity | TemporalInValidity | O | 0..1 | Indicates the time interval during which the AF request is not to be applied. |  |

#### 6.4.2.20 Type TrafficCorrelationInfo

Table 6.4.2.20-1: Definition of type TrafficCorrelationInfo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| corrType | CorrelationType | C | 0..1 | Indicates selecting a common DNAI or EAS for the application identified by the Application Identifier or traffic filtering information. It shall be provided when the traffic correlation information is provisioned for the first time. |  |
| tfcCorrId | string | C | 0..1 | Identification of a set of UEs accessing the application identified by the Application Identifier or traffic filtering information. It shall be provided when the traffic correlation information is provisioned for the first time. |  |
| comEasIpv4Addr | Ipv4AddrRm | C | 0..1 | IPv4 address of common EAS for the application identified by the Application Identifier or traffic filtering information for the UEs the AF request aims at.  It may be provided when the "corrType" attribute includes "COMMON\_EAS". |  |
| comEasIpv6Addr | Ipv6AddrRm | C | 0..1 | IPv6 address of common EAS for the application identified by the Application Identifier or traffic filtering information for the UEs the AF request aims at. It may be provided when the "corrType" attribute includes "COMMON\_EAS". |  |
| fqdnRange | array(FqdnPatternMatchingRule) | C | 1..N | FQDN(s) used for influencing EASDF-based DNS query procedure. It may be provided when the "corrType" attribute includes "COMMON\_EAS". |  |
| notifUri | UriRm | O | 0..1 | Contains the Callback URL to receive notifications. |  |
| notifCorrId | string | O | 0..1 | Notification correlation identifier. |  |

#### 6.4.2.21 Type DnaiEasMapping

Table 6.4.2.21-1: Definition of type DnaiEasMapping

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| dnaiEasInfos | array(DnaiEasInfo) | M | 1..N | Each element contains EAS information for the DNAI of a DNN/S-NSSAI. |  |

#### 6.4.2.22 Type DnaiEasInfo

Table 6.4.2.22-1: Definition of type DnaiEasInfo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| dnn | Dnn | C | 0..1 | DNN. (NOTE 1) |  |
| snssai | Snssai | C | 0..1 | S-NSSAI. (NOTE 1) |  |
| easIpAddrs | array(IpAddr) | C | 1..N | IP address(es) or IP address ranges (IPv4 subnetwork(s) and/or IPv6 prefix(es)) of the EAS of the DNAI. (NOTE 2) |  |
| fqdns | array(FqdnPatternMatchingRule) | C | 1..N | FQDN(s) where the EAS is/are deployed. (NOTE 2) |  |
| NOTE 1: At least one of "dnn" and "snssai" shall be provided.  NOTE 2: Exactly one of "easIpAddrs" and "fqdns" shall be provided. | | | | | |

#### 6.4.2.23 Type EcsAddrData

Table 6.4.2.23-1: Definition of type EcsAddrData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| self | Link | C | 0..1 | Identifies the individual resource.  It shall be present in the HTTP GET response when reading multiples entries. |  |
| ecsServerAddr | EcsServerAddr | M | 1 | Represents the ECS address(es). |  |
| spatialValidityCond | SpatialValidityCond | O | 0..1 | Indicates the spatial validity condition. |  |
| anyUeInd | boolean | C | 0..1 | If provided and set to "true" it indicates that any UE is targetted, while "false" indicates that not all UEs are targetted. The default value is "false" if omitted. (NOTE) |  |
| internalGroupId | GroupId | C | 0..1 | Indicates the internal group identifier. (NOTE) |  |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the negotiated supported features. It shall be provided in an HTTP POST response if it was provided in the HTTP POST request. |  |
| NOTE: One of the "internalGroupId" attribute or the "anyUeInd" attribute set to "true" shall be provided. | | | | | |

### 6.4.3 Simple data types and enumerations

#### 6.4.3.1 Introduction

This clause defines simple data types and enumerations that can be referenced from data structures defined in the previous clauses.

#### 6.4.3.2 Simple data types

The simple data types defined in table 6.4.3.2-1 shall be supported.

Table 6.4.3.2-1: Simple data types

|  |  |  |  |
| --- | --- | --- | --- |
| Type Name | Type Definition | Description | Applicability |
|  |  |  |  |

#### 6.4.3.3 Enumeration: DataInd

Table 6.4.3.3-1: Enumeration DataInd

|  |  |  |
| --- | --- | --- |
| Enumeration value | Description | Applicability |
| PFD | PFD data |  |
| IPTV | IPTV configuration data |  |
| BDT | BDT data |  |
| SVC\_PARAM | Service parameter data |  |
| AM | AM influence data | DCAMP |
| DNAI\_EAS | DNAI EAS mapping data | DnaiEasMappings |
| REQ\_QOS | AF Requested QoS data for a UE or group of UE(s) not identified by UE address(es). | GMEC |
| ECS | ECS Address Roaming Data |  |

Editor's Note: The feature to be used for ECS is FFS.

#### 6.4.3.4 Enumeration: CorrelationType

Table 6.4.3.4-1: Enumeration CorrelationType

|  |  |  |
| --- | --- | --- |
| Enumeration value | Description | Applicability |
| COMMON\_DNAI | Indicates that the EAS(es) corresponding to a common DNAI should be selected. |  |
| COMMON\_EAS | Indicates that the common EAS should be selected |  |

## 6.5 Error handling

### 6.5.1 General

HTTP error handling shall be supported as specified in clause 5.2.4 of 3GPP TS 29.500 [4].

For the Nudr\_DataRepository Service API for Application Data, HTTP error responses shall be supported as specified in clause 4.8 of 3GPP TS 29.501 [5]. Protocol errors and application errors specified in table 5.2.7.2-1 of 3GPP TS 29.500 [4] shall be supported for an HTTP method if the corresponding HTTP status codes are specified as mandatory for that HTTP method in table 5.2.7.1-1 of 3GPP TS 29.500 [4]. In addition, the requirements in the following clauses shall apply.

### 6.5.2 Protocol Errors

In this Release of the specification, there are no additional protocol errors applicable for the Nudr\_DataRepository Service API for Application Data.

### 6.5.3 Application Errors

The application errors defined for the Nudr\_DataRepository Service API for Application Data are listed in table 6.5.3-1.

Table 6.5.3-1: Application errors

|  |  |  |
| --- | --- | --- |
| Application Error | HTTP status code | Description |
|  |  |  |
| NOTE: Including a "ProblemDetails" data structure with the "cause" attribute in the HTTP response is optional unless explicitly mandated by other clauses in this document. | | |

The application error handling shall follow 3GPP TS 29.504 [6] clause 6.1.6 unless explicitly specified in this document.

## 6.6 Feature negotiation

The optional features in table 6.1.8-1 of 3GPP TS 29.504 [6] are defined for the Nudr\_DataRepository API. They shall be negotiated using the extensibility mechanism defined in clause 6.6 of 3GPP TS 29.500 [4].

# 7 Usage of Nudr\_DataRepository Service API for Structured Data for Exposure

## 7.1 Introduction

The following clauses specify the usage of Nudr\_DataRepository service for exposure data. The principles specified in 3GPP TS 29.504 [6] are followed unless explicitly specified otherwise in the following clauses.

## 7.2 Resources

### 7.2.1 Overview

This clause specifies the resources for the usage of the Unified Data Repository service for Structured Data for Exposure.

### 7.2.2 Resource Structure

This clause describes the structure for the Resource URIs and the resources and methods used for the service.

Figure 7.2.2-1 depicts the resource URIs structure for the Nudr\_DataRepository API for exposure data data.



Figure 7.2.2-1: Resource URI structure of the Nudr\_DataRepository API for exposure data

Table 7.2.2-1 provides an overview of the resources and applicable HTTP methods.

Table 7.2.2-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method | Description |
| AccessAndMobilityData | /exposure-data/{ueId}/ access-and-mobility-data | PUT | Create and update the access and mobility exposure data for a UE |
| PATCH | Update the access and mobility exposure data for a UE. |
| GET | Retrieve the access and mobility exposure data for a UE |
| DELETE | Delete the access and mobility exposure data for a UE |
| PduSessionManagementData | /exposure-data/{ueId}/ session-management-data/ {pduSessionId} | PUT | Create and update the session management data for a UE and for an individual PDU session |
| GET | Retrieve the session management data for a UE and for an individual PDU session |
| DELETE | Delete the session management data for a UE and for an individual PDU session |
| ExposureDataSubscriptions | /exposure-data/subs-to-notify | POST | Create a subscription to receive notifications on exposure data changes. |
| IndividuaExposureDataSubscription | /exposure-data/subs-to-notify/ {subId} | PUT | Modify a subscription to receive notifications on exposure data changes. |
| DELETE | Delete a subscription identified by {subId}. |

### 7.2.3 Resource: AccessAndMobilityData

#### 7.2.3.1 Description

This resource represents the exposure data related to access and mobility.

#### 7.2.3.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/exposure-data/{ueId}/access-and-mobility-data**

This resource shall support the resource URI variables defined in table 7.2.3.2-1.

Table 7.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| ueId | VarUeId | Represents the SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7]. |

#### 7.2.3.3 Resource Standard Methods

##### 7.2.3.3.1 PUT

This method shall support the URI query parameters specified in table 7.2.3.3.1-1.

Table 7.2.3.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 7.2.3.3.1-2 and the response data structures and response codes specified in table 7.2.3.3.1-3.

Table 7.2.3.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| AccessAndMobilityData | M | 1 | Access and mobility data for the UE is created or updated. |

Table 7.2.3.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| AccessAndMobilityData | M | 1 | 201 Created | Successful case.  The resource has been successfully created and a response body containing a representation of the access and mobility data shall be returned. |
| AccessAndMobilityData | M | 1 | 200 OK | Successful case.  The resource has been successfully updated and a response body containing a representation of the access and mobility data shall be returned. |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully updated and no additional content is to be sent in the response message. |
| NOTE: The HTTP status code for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 7.2.3.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/exposure-data/{ueId}/access-and-mobility-data |

##### 7.2.3.3.2 GET

This method shall support the URI query parameters specified in table 7.2.3.3.2-1.

Table 7.2.3.3.2-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer.  See 3GPP TS 29.500 [4] clause 6.6.2 and 3GPP TS 29.571 [7]. |

This method shall support the request data structures specified in table 7.2.3.3.2-2 and the response data structures and response codes specified in table 7.2.3.3.2-3.

Table 7.2.3.3.2-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 7.2.3.3.2-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| AccessAndMobilityData | M | 1 | 200 OK | The response body contains the access and mobility data. |
| NOTE: The HTTP status code for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 7.2.3.3.3 DELETE

This method shall support the URI query parameters specified in table 7.2.3.3.3-1.

Table 7.2.3.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 7.2.3.3.3-2 and the response data structures and response codes specified in table 7.2.3.3.3-3.

Table 7.2.3.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 7.2.3.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon success, an empty response body shall be returned. |
| NOTE: The HTTP status code for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 7.2.3.3.4 PATCH

This method shall support the URI query parameters specified in table 7.2.3.3.4-1.

Table 7.2.3.3.4-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 7.2.3.3.4-2 and the response data structures and response codes specified in table 7.2.3.3.4-3.

Table 7.2.3.3.4-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| AccessAndMobilityData | M | 1 | Access and mobility data for the UE. |

Table 7.2.3.3.4-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon successful modification there is no body in the response message. |
| NOTE: The HTTP status code for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 7.2.4 Resource: PduSessionManagementData

#### 7.2.4.1 Description

This resource represents the exposure data related to session and management data for a given subscriber and a given PDU session.

#### 7.2.4.2 Resource definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/exposure-data/{ueId}/session-management-data/{pduSessionId}**

This resource shall support the resource URI variables defined in table 7.2.4.2-1.

Table 7.2.4.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| ueId | VarUeId | Represents the SUPI or GPSI. Data type VarUeId is defined in 3GPP TS 29.571 [7]. |
| pduSessionId | PduSessionId | Identifies an individual PDU session. Data type PduSessionId is defined in 3GPP TS 29.571 [7]. |

#### 7.2.4.3 Resource Standard Methods

##### 7.2.4.3.1 PUT

This method shall support the URI query parameters specified in table 7.2.4.3.1-1.

Table 7.2.4.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 7.2.4.3.1-2 and the response data structures and response codes specified in table 7.2.4.3.1-3.

Table 7.2.4.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| PduSessionManagementData | M | 1 | Session management data for a UE and a PDU session is created or updated. |

Table 7.2.4.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  Codes | Description |
| PduSessionManagementData | M | 1 | 201 Created | Successful case.  The resource has been successfully created and a response body containing a representation of the session management data shall be returned. |
| PduSessionManagementData | M | 1 | 200 OK | Successful case.  The resource has been successfully updated and a response body containing a representation of the session management data shall be returned. |
| n/a |  |  | 204 No Content | Successful case.  The resource has been successfully updated and no additional content is to be sent in the response message. |
| NOTE: The HTTP status code for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 7.2.4.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/exposure-data/{ueId}/session-management-data/{pduSessionId} |

##### 7.2.4.3.2 GET

This method shall support the URI query parameters specified in table 7.2.4.3.2-1.

Table 7.2.4.3.2-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| ipv4-addr | Ipv4Addr | O | 0..1 | UE IPv4 address. |
| ipv6-prefix | Ipv6Prefix | O | 0..1 | UE IPv6 prefix. |
| dnn | Dnn | O | 0..1 | Identifies a DNN. |
| fields | array(string) | C | 1..N | When the NF consumer only retrieves a subset of the resource, the "fields" query parameter shall be included. The "fields" query parameter contains the pointers of the attribute(s) to be retrieved. |
| supp-feat | SupportedFeatures | O | 0..1 | The features supported by the NF service consumer.  See 3GPP TS 29.500 [4] clause 6.6.2 and 3GPP TS 29.571 [7]. |

This method shall support the request data structures specified in table 7.2.4.3.2-2 and the response data structures and response codes specified in table 7.2.4.3.2-3.

Table 7.2.4.3.2-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 7.2.4.3.2-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  Codes | Description |
| PduSessionManagementData | M | 1 | 200 OK | The response body contains the session management data. |
| NOTE: The HTTP status code for the GET method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 7.2.4.3.3 DELETE

This method shall support the URI query parameters specified in table 7.2.4.3.3-1.

Table 7.2.4.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 7.2.4.3.3-2 and the response data structures and response codes specified in table 7.2.4.3.3-3.

Table 7.2.4.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 7.2.4.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon success, an empty response body shall be returned. |
| NOTE: The HTTP status code for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

### 7.2.5 Resource: ExposureDataSubscriptions

#### 7.2.5.1 Description

This resource is used to represent subscriptions to notifications of exposure data modifications.

#### 7.2.5.2 Resource Definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/exposure-data/subs-to-notify**

This resource shall support the resource URI variables defined in table 7.2.5.2-1.

Table 7.2.5.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |

#### 7.2.5.3 Resource Standard Methods

##### 7.2.5.3.1 POST

This method shall support the URI query parameters specified in table 7.2.5.3.1-1.

Table 7.2.5.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 7.2.5.3.1-2 and the response data structures and response codes specified in table 7.2.5.3.1-3.

Table 7.2.5.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ExposureDataSubscription | M | 1 | Identifies an individual subscription to notifications of exposure data modifications. |

Table 7.2.5.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ExposureDataSubscription | M | 1 | 201 Created | Upon success, a response body containing a representation of the Individual subscription resource shall be returned.  The HTTP response shall include a "Location" HTTP header that contains the resource URI of the created resource. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 7.2.5.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nudr-dr/<apiVersion>/exposure-data/subs-to-notify/{subId} |

### 7.2.6 Resource: IndividualExposureDataSubscription

#### 7.2.6.1 Description

This resource represents an individual subscription to notifications of exposure data modifications.

#### 7.2.6.2 Resource Definition

Resource URI: **{apiRoot}/nudr-dr/<apiVersion>/exposure-data/subs-to-notify/{subId}**

This resource shall support the resource URI variables defined in table 7.2.6.2-1.

Table 7.2.6.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See 3GPP TS 29.504 [6] clause 6.1.1. |
| subId | string | Identifies an individual subscription to notifications. The value is allocated by the UDR during creation of the IndividualExposureDataSubscription resource. |

#### 7.2.6.3 Resource Standard Methods

##### 7.2.6.3.1 PUT

This method shall support the URI query parameters specified in table 7.2.6.3.1-1.

Table 7.2.6.3.1-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 7.2.6.3.1-2 and the response data structures and response codes specified in table 7.2.6.3.1-3.

Table 7.2.6.3.1-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ExposureDataSubscription | M | 1 | Identifies an individual subscription to notifications of exposure data modifications. |

Table 7.2.6.3.1-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ExposureDataSubscription | M | 1 | 200 OK | The individual subscription resource was updated successfully and a body with the modified subscription to notifications about exposure data is returned. |
| n/a |  |  | 204 No Content | The individual subscription resource was successfully modified. |
| NOTE: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

##### 7.2.6.3.2 DELETE

This method shall support the URI query parameters specified in table 7.2.6.3.2-1.

Table 7.2.6.3.1-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 7.2.6.3.2-2 and the response data structures and response codes specified in table 7.2.6.3.2-3.

Table 7.2.6.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  | The request body shall be empty. |

Table 7.2.6.3.2-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon success, an empty response body shall be returned. |
| NOTE: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

## 7.3 Data Model

### 7.3.1 General

This clause specifies the application data model supported by the API.

Table 7.3.1-1 specifies the data types defined for the Nudr\_DataRepository for Exposure Data service based interface protocol.

Table 7.3.1-1: Nudr\_DataRepository specific Data Types for Exposure Data

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| AccessAndMobilityData | 7.3.2.2 |  |  |
| ExposureDataChangeNotification | 7.3.2.5 | Contains changed exposure data for one UE for which Notification was requested. |  |
| ExposureDataSubscription | 7.3.2.4 | Subscription to Notifications about Exposure Data. |  |
| PduSessionManagementData | 7.3.2.3 |  |  |
| PduSessionStatus | 7.3.3.3 | Represents the state of the PDU session, i.e. active or released. |  |

Table 7.3.1-2 specifies data types re-used by the Nudr\_DataRepository for Exposure Data service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Nudr\_DataRepository for Exposure Data service based interface.

Table 7.3.1-2: Nudr\_DataRepository re-used Data Types for Exposure Data

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| AccessType | 3GPP TS 29.571 [7] | Identifies the access type, i.e. 3GPP access or Non-3GPP access. |  |
| CmInfo | 3GPP TS 29.518 [10] | Describes the connectivity management state of a UE. |  |
| DateTime | 3GPP TS 29.571 [7] |  |  |
| Dnai | 3GPP TS 29.571 [7] | Identifies a Data network access identifier. |  |
| Dnn | 3GPP TS 29.571 [7] | Identifies a Data Network Name. (NOTE) |  |
| Ipv4Addr | 3GPP TS 29.571 [7] | The IPv4 Address. |  |
| Ipv6Addr | 3GPP TS 29.571 [7] | The Ipv6 Address. |  |
| Ipv6Prefix | 3GPP TS 29.571 [7] | The Ipv6 Address Prefix. |  |
| PduSessionId | 3GPP TS 29.571 [7] | PDU Session Identifier |  |
| PduSessionType | 3GPP TS 29.571 [7] | PDU Session type. |  |
| PlmnId | 3GPP TS 29.571 [7] | Identifies a PLMN. |  |
| RatType | 3GPP TS 29.571 [7] | Identifies a RAT type. |  |
| RmInfo | 3GPP TS 29.518 [10] | Describes the registration management state of a UE. |  |
| RouteToLocation | 3GPP TS 29.571 [7] | A traffic route to/from a DNAI. |  |
| TimeZone | 3GPP TS 29.571 [7] | Identifies a time zone. |  |
| SmsSupport | 3GPP TS 29.518 [10] | Indicates the supported SMS delivery of a UE. |  |
| SupportedFeatures | 3GPP TS 29.571 [7] | Used to negotiate the applicability of the optional features. |  |
| UeReachability | 3GPP TS 29.518 [10] | Describes the reachability of the UE. |  |
| Uri | 3GPP TS 29.571 [7] |  |  |
| UserLocation | 3GPP TS 29.571 [7] | Identifies the user location. |  |
| VarUeId | 3GPP TS 29.571 [7] | String represents the SUPI or GPSI. |  |
| NOTE: The UDR uses the DNN as received from the NF service consumer without applying any transformation. To successfully perform DNN matching, a DNN shall always be encoded either with the full DNN (e.g., because there are multiple Operator Identifiers for a Network Identifier) or the DNN Network Identifier only. | | | |

### 7.3.2 Structured data types

#### 7.3.2.1 Introduction

This clause defines the structures to be used in resource representations.

#### 7.3.2.2 Type AccessAndMobilityData

Table 7.3.2.2-1: Definition of type AccessAndMobilityData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| location | UserLocation | O | 0..1 | Current location for the UE, which can be a combination of E-UTRA, NR and non-3GPP access location. |  |
| locationTs | DateTime | O | 0..1 | Indicates when the location was last updated. |  |
| timeZone | TimeZone | O | 0..1 | Current time zone for the UE. |  |
| timeZoneTs | DateTime | O | 0..1 | Indicates when the timeZone was last updated. |  |
| accessType | AccessType | O | 0..1 | Current access type for the UE (3GPP access or non-3GPP access). |  |
| accessTypeTs | DateTime | O | 0..1 | Indicates when the accessType was last updated. |  |
| regStates | array(RmInfo) | O | 1..N | Describes the registration management state of the UE. |  |
| regStatesTs | DateTime | O | 0..1 | Indicates when the regStates were last updated. |  |
| connStates | array(CmInfo) | O | 1..N | Describes the connectivity management state of the UE. |  |
| connStatesTs | DateTime | O | 0..1 | Indicates when the connStates were last updated. |  |
| reachabilityStatus | UeReachability | O | 0..1 | Describes the reachability of the UE. |  |
| reachabilityStatusTs | DateTime | O | 0..1 | Indicates when the reachabilityStatus was last updated. |  |
| smsOverNasStatus | SmsSupport | O | 0..1 | Indicates the supported SMS delivery of the UE. |  |
| smsOverNasStatusTs | DateTime | O | 0..1 | Indicates when thesmsOverNasStatus was last updated. |  |
| roamingStatus | boolean | O | 0..1 | True: The serving PLMN of the UE is different from the HPLMN of the UE;  False: The serving PLMN of the UE is the HPLMN of the UE. |  |
| roamingStatusTs | DateTime | O | 0..1 | Indicates when the roamingStatus was last updated. |  |
| currentPlmn | PlmnId | O | 0..1 | The identity of the PLMN serving the UE. |  |
| currentPlmnTs | DateTime | O | 0..1 | Indicates when the currentPlmn was last updated. |  |
| ratTypes | array(RatType) | O | 1..N | RAT type(s) |  |
| ratTypesTs | DateTime | O | 0..1 | Indicates when the ratTypes was last updated. |  |
| suppFeat | SupportedFeatures | C | 0..1 | This IE represents a list of Supported features used as described in clause 7.5.  Shall be present in the HTTP PUT request/response; or in the HTTP GET response if the "supp-feat" attribute query parameter is included in the HTTP GET request. (NOTE) |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| NOTE: In the HTTP request, it represents the set of features supported by the NF service consumer. In the HTTP response, it represents the set of features supported by both the NF service consumer and the UDR. | | | | | |

#### 7.3.2.3 Type PduSessionManagementData

Table 7.3.2.3-1: Definition of type PduSessionManagementData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| pduSessionStatus | PduSessionStatus | O | 0..1 | Status of the PDU session. |  |
| pduSessionStatusTs | DateTime | O | 0..1 | Indicates when the pduSessionStatus was last updated. |  |
| dnai | Dnai | O | 0..1 | DNAI |  |
| dnaiTs | DateTime | O | 0..1 | Indicates when the dnai was last updated. |  |
| n6TrafficRoutingInfo | array(RouteToLocation) | O | 1..N | N6 traffic routing information. |  |
| n6TrafficRoutingInfoTs | DateTime | O | 0..1 | Indicates when the n6TrafficRoutingInfo was last updated. |  |
| ipv4Addr | Ipv4Addr | O | 0..1 | UE IPv4 address. |  |
| ipv6Prefix | array(Ipv6Prefix) | O | 1..N | UE IPv6 prefix. |  |
| ipv6Addrs | array(Ipv6Addr) | O | 1..N | IPv6 addresses. |  |
| pduSessType | PduSessionType | O | 0..1 | PDU session type. |  |
| ipAddrTs | DateTime | O | 0..1 | Indicates when the ipv4Addr and Ipv6Prefix were last updated. |  |
| dnn | Dnn | O | 0..1 | DNN |  |
| pduSessionId | PduSessionId | O | 0..1 | The identifier of a PduSessionManagement resource.  (NOTE 1). | ResourceNotificationExposureDataFix |
| suppFeat | SupportedFeatures | C | 0..1 | This IE represents a list of Supported features used as described in clause 7.5.  Shall be present in the HTTP PUT request/response; or in the HTTP GET response if the "supp-feat" attribute query parameter is included in the HTTP GET request. (NOTE 2) |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| NOTE 1: The "pduSessionId" attribute shall be present when the ResourceNotificationExposureDataFix is supported.  NOTE 2: In the HTTP request, it represents the set of features supported by the NF service consumer. In the HTTP response, it represents the set of features supported by both the NF service consumer and the UDR. | | | | | |

#### 7.3.2.4 Type ExposureDataSubscription

Table 7.3.2.4-1: Definition of type ExposureDataSubscription

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| notificationUri | Uri | M | 1 | URI provided by the NF service consumer indicating where to receive to subscribed notifications from the UDR. |  |
| monitoredResourceUris | array(Uri) | M | 1..N | A set of URIs that identify the resources for which a modification triggers a notification. |  |
| expiry | DateTime | C | 0..1 | This IE shall be included in a subscription response if, based on operator policy and taking into account the expiry time included in the request, the UDR needs to include an expiry time.  This IE may be included in a subscription request. When present, this IE shall represent the time after which the subscription becomes invalid.  The absence of this attribute in the subscription response means the subscription to be valid without an expiry time. |  |
| supportedFeatures | SupportedFeatures | C | 0..1 | Used to negotiate the applicability of the optional features.  This attribute shall be provided in the POST request and in the response of successful resource creation. |  |
| resetIds | array(string) | O | 1..N | This IE uniquely identifies a part of temporary data in UDR that contains the created resource.  This attribute may be provided in the response of successful resource creation. |  |
| immRep | boolean | O | 0..1 | If provided and set to "true", it indicates that existing entries that match this subscription shall be immediately reported within the "immReports" attribute in the response. The default value is false. | ImmediateReportPcc |
| immReports | array(ExposureDataChangeNotification) | O | 1..N | Contains entries stored in the UDR that match this subscription.  It may be included only in the POST (or PUT) response body of a subscription creation (or modification), and only if the request included the "immRep" attribute set to true. | ImmediateReportPcc |

#### 7.3.2.5 Type ExposureDataChangeNotification

Table 7.3.2.5-1: Definition of type ExposureDataChangeNotification

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| ueId | VarUeId | O | 0..1 | User identity of modified data. |  |
| accessAndMobilityData | AccessAndMobilityData | O | 0..1 | Access and Mobility Data for the UE. |  |
| pduSessionManagementData | array(PduSessionManagementData) | O | 1..N | PDU Session Management Data for one or several PDU sessions of the UE. |  |
| delResources | array(Uri) | O | 1..N | The resources, as defined in table 7.2.2-1, if removed from UDR and notification on resource data change was requested. It may be present when the ResourceNotificationExposureDataFix is supported (NOTE). |  |
| NOTE: When the "delResources" attribute is present, the attributes that correspond with the values included in the "delResources" attribute shall be omitted. I.e., when the "delResources" attribute includes the value "../{ueId}/access-and-mobility-data" the attribute "accessAndMobilityData" shall be omitted, and when the "delResources" attribute includes all the existing "../{ueId}/session-management-data/{pduSessionId}" resource URIs, the attribute "pduSessionManagementData" shall be omitted. | | | | | |

### 7.3.3 Simple data types and enumerations

#### 7.3.3.1 Introduction

This clause defines simple data types and enumerations that can be referenced from data structures defined in the previous clauses.

#### 7.3.3.2 Simple data types

The simple data types defined in table 7.3.3.2-1 shall be supported.

Table 7.3.3.2-1: Simple data types

|  |  |  |  |
| --- | --- | --- | --- |
| Type Name | Type Definition | Description | Applicability |
|  |  |  |  |

#### 7.3.3.3 Enumeration: PduSessionStatus

Table 7.3.3.3-1: Enumeration PduSessionStatus

|  |  |  |
| --- | --- | --- |
| Enumeration value | Description | Applicability |
| "ACTIVE" | The PDU session is active. |  |
| "RELEASED" | The PDU session is released. |  |

## 7.4 Error handling

### 7.4.1 General

For the Nudr\_DataRepository service API for Exposure Data, HTTP error responses shall be supported as specified in clause 4.8 of 3GPP TS 29.501 [5]. Protocol errors and application errors specified in table 5.2.7.2-1 of 3GPP TS 29.500 [4] shall be supported for an HTTP method if the corresponding HTTP status codes are specified as mandatory for that HTTP method in table 5.2.7.1-1 of 3GPP TS 29.500 [4].

In addition, the requirements in the following clauses are applicable for the Nudr\_DataRepository service API for Exposure Data.

### 7.4.2 Protocol Errors

No specific procedures for the Nudr\_DataRepository service API for Exposure Data are specified.

### 7.4.3 Application Errors

The application errors defined for the Nudr\_DataRepository service API for Exposure Data are listed in table 7.4.3-1.

Table 7.4.3-1: Application errors

|  |  |  |
| --- | --- | --- |
| Application Error | HTTP status code | Description |
|  |  |  |

The application error handling shall follow 3GPP TS 29.504 [6] clause 6.1.6 unless explicitly specified in this document.

## 7.5 Feature negotiation

The optional features in table 6.1.8-1 of 3GPP TS 29.504 [6] are defined for the Nudr\_DataRepository API. They shall be negotiated using the extensibility mechanism defined in clause 6.6 of 3GPP TS 29.500 [4].

## 7.6 Notifications

### 7.6.1 General

Notifications shall comply with clause 6.2 of 3GPP TS 29.500 [4] and clause 4.6.2.3 of 3GPP TS 29.501 [5].

This clause describes the resources to provide Notification to NF service consumers which have subscribed to be notified when exposure data is changed.

Table 7.6.1-1: Notifications overview

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | Callback URI | HTTP method or custom operation | Description  (service operation) |
| Exposure Data Change Notification | {notificationUri} | POST | Exposure Data Change Notification |

### 7.6.2 Exposure Data Change Notification

The POST method shall be used for Data Change Notifications and the URI shall be as provided during the subscription procedure.

Callback URI: {**notificationUri**}

Support of URI query parameters is specified in table 7.6.2-1.

Table 7.6.2-1: URI query parameters supported by the POST method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Support of request data structures is specified in table 7.6.2-2 and of response data structures and response codes is specified in table 7.6.2-3.

Table 7.6.2-2: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| array(ExposureDataChangeNotification) | M | 1..N | Each element in the array provides the changed exposure data for one user. |

Table 7.6.2-3: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon success, an empty response body shall be returned. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Annex A (normative):  
OpenAPI specification

# A.1 General

The present Annex contains an OpenAPI [3] specification of HTTP messages and content bodies used by the Nudr\_DataRepository service for Policy Data, Application Data and Exposure Data.

This Annex shall take precedence when being discrepant to other parts of the specification with respect to the encoding of information elements and methods.

NOTE: The semantics and procedures, as well as conditions, e.g. for the applicability and allowed combinations of attributes or values, not expressed in the OpenAPI definitions but defined in other parts of the specification also apply.

Informative copies of the OpenAPI specification files contained in this 3GPP Technical Specification are available on a Git-based repository that uses the GitLab software version control system (see clause 5B of the 3GPP TR 21.900 [18] and clause 5.3.1 of the 3GPP TS 29.501 [5] for further information).

# A.2 Nudr\_DataRepository API for Policy Data

For the purpose of referencing entities in the Open API file defined in this Annex, it shall be assumed that this Open API file is contained in a physical file named "TS29519\_Policy\_Data.yaml".

openapi: 3.0.0

info:

version: '-'

title: Unified Data Repository Service API file for policy data

description: |

The API version is defined in 3GPP TS 29.504

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externalDocs:

description: >

3GPP TS 29.519 V18.4.0; 5G System; Usage of the Unified Data Repository Service for Policy Data,

Application Data and Structured Data for Exposure.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.519/'

paths:

/policy-data/ues/{ueId}:

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

get:

summary: Retrieve the policy data for a subscriber

operationId: ReadPolicyData

tags:

- PolicyDataForIndividualUe (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

- name: data-subset-names

in: query

style: form

explode: false

description: List of policy data subset names

required: false

schema:

type: array

items:

$ref: '#/components/schemas/PolicyDataSubset'

minItems: 2

responses:

'200':

description: Upon success, a response body containing policy data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PolicyDataForIndividualUe'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/ues/{ueId}/am-data:

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

get:

summary: Retrieves the access and mobility policy data for a subscriber

operationId: ReadAccessAndMobilityPolicyData

tags:

- AccessAndMobilityPolicyData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:am-data:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: >

Upon success, a response body containing access and mobility policies shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/AmPolicyData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/ues/{ueId}/ue-policy-set:

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

get:

summary: Retrieves the UE policy set data for a subscriber

operationId: ReadUEPolicySet

tags:

- UEPolicySet (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:ue-policy-set:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Upon success, a response body containing UE policies shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/UePolicySet'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Create or modify the UE policy set data for a subscriber

operationId: CreateOrReplaceUEPolicySet

tags:

- UEPolicySet (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:ue-policy-set:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/UePolicySet'

responses:

'201':

description: >

Successful case. The resource has been successfully created and a response body

containing a representation of the created UEPolicySet resource shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/UePolicySet'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'200':

description: >

Successful case. The resource has been successfully created and a response body

containing UE policies shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/UePolicySet'

'204':

description: >

Successful case. The resource has been successfully updated and no additional content

is to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify the UE policy set data for a subscriber

operationId: UpdateUEPolicySet

tags:

- UEPolicySet (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:ue-policy-set:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/UePolicySetPatch'

responses:

'204':

description: >

Successful case. The resource has been successfully updated and no additional content is

to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/ues/{ueId}/sm-data:

get:

summary: Retrieves the session management policy data for a subscriber

operationId: ReadSessionManagementPolicyData

tags:

- SessionManagementPolicyData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:sm-data:read

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: snssai

in: query

required: false

content:

application/json:

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

- name: dnn

in: query

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

- name: fields

in: query

description: attributes to be retrieved

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Upon success, a response body containing SmPolicyData shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/SmPolicyData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify the session management policy data for a subscriber

operationId: UpdateSessionManagementPolicyData

tags:

- SessionManagementPolicyData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:sm-data:modify

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/SmPolicyDataPatch'

responses:

'204':

description: >

Successful case. The resource has been successfully updated and no

additional content is to be sent in the response message.

'200':

description: Expected response to a valid request

content:

application/json:

schema:

$ref: '#/components/schemas/SmPolicyData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/ues/{ueId}/sm-data/{usageMonId}:

get:

summary: Retrieve a usage monitoring resource

operationId: ReadUsageMonitoringInformation

tags:

- UsageMonitoringInformation (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:sm-data:read

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: usageMonId

in: path

required: true

schema:

type: string

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Successful case. The usage monitoring data is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/UsageMonData'

'204':

description: The resource was found but no usage monitoring data is available.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Create a usage monitoring resource

operationId: CreateUsageMonitoringResource

tags:

- UsageMonitoringInformation (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:sm-data:create

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: usageMonId

in: path

required: true

schema:

type: string

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/UsageMonData'

responses:

'201':

description: >

Successful case. The resource has been successfully created and a response body is

returned containing a representation of the resource.

content:

application/json:

schema:

$ref: '#/components/schemas/UsageMonData'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete a usage monitoring resource

operationId: DeleteUsageMonitoringInformation

tags:

- UsageMonitoringInformation (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:sm-data:modify

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: usageMonId

in: path

required: true

schema:

type: string

responses:

'204':

description: Successful case. The resource has been successfully deleted.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/sponsor-connectivity-data/{sponsorId}:

parameters:

- name: sponsorId

in: path

required: true

schema:

type: string

get:

summary: Retrieves the sponsored connectivity information for a given sponsorId

operationId: ReadSponsorConnectivityData

tags:

- SponsorConnectivityData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:sponsor-connectivity-data:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: >

Upon success, a response body containing Sponsor Connectivity Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/SponsorConnectivityData'

'204':

description: The resource was found but no Sponsor Connectivity Data is available.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/bdt-data:

get:

summary: Retrieves the BDT data collection

operationId: ReadBdtData

tags:

- BdtData (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:bdt-data:read

parameters:

- name: bdt-ref-ids

in: query

description: List of the BDT reference identifiers.

required: false

schema:

type: array

items:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/BdtReferenceId'

minItems: 1

style: form

explode: false

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Upon success, a response body containing the BDT data shall be returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/BdtData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/bdt-data/{bdtReferenceId}:

parameters:

- name: bdtReferenceId

in: path

required: true

schema:

type: string

get:

summary: Retrieves the BDT data information associated with a BDT reference Id

operationId: ReadIndividualBdtData

tags:

- IndividualBdtData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:bdt-data:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Upon success, a response body containing the BDT data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/BdtData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Creates an BDT data resource associated with an BDT reference Id

operationId: CreateIndividualBdtData

tags:

- IndividualBdtData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:bdt-data:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/BdtData'

responses:

'201':

description: Successful case. The resource has been successfully created.

content:

application/json:

schema:

$ref: '#/components/schemas/BdtData'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modifies an BDT data resource associated with an BDT reference Id

operationId: UpdateIndividualBdtData

tags:

- IndividualBdtData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:bdt-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/BdtDataPatch'

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

$ref: '#/components/schemas/BdtData'

'204':

description: >

Successful case. The resource has been successfully updated and no additional content

is to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Deletes an BDT data resource associated with an BDT reference Id

operationId: DeleteIndividualBdtData

tags:

- IndividualBdtData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:bdt-data:modify

responses:

'204':

description: Successful case. The resource has been successfully deleted.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/subs-to-notify:

get:

summary: Retrieves the list of Individual Policy Data Subscription resources

operationId: ReadPolicyDataSubscriptions

tags:

- PolicyDataSubscriptions (Collection)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:subs-to-notify:read

parameters:

- name: mon-resources

in: query

style: form

explode: false

description: List of monitored resources whose subscriptions are requested.

required: false

schema:

type: array

items:

type: string

description: Contains the apiSpecificResourceUriPart of the resource URI.

minItems: 1

- name: ue-id

in: query

description: Represents the Subscription Identifier SUPI or GPSI.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: >

Upon success, a response body containing a list of Individual Policy Data

Subscription resources shall be returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/PolicyDataSubscription'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

post:

summary: Create a subscription to receive notification of policy data changes

operationId: CreateIndividualPolicyDataSubscription

tags:

- PolicyDataSubscriptions (Collection)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data:subs-to-notify

- nudr-dr:policy-data:subs-to-notify:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/PolicyDataSubscription'

responses:

'201':

description: >

Upon success, a response body containing a representation of each Individual

subscription resource shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PolicyDataSubscription'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

callbacks:

policyDataChangeNotification:

'{$request.body#/notificationUri}':

post:

requestBody:

required: true

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/PolicyDataChangeNotification'

minItems: 1

responses:

'204':

description: No Content, Notification was successful

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/subs-to-notify/{subsId}:

parameters:

- name: subsId

in: path

required: true

schema:

type: string

get:

summary: Retrieves Individual Policy Subscription data

operationId: ReadIndividualPolicySubscriptionData

tags:

- IndividualPolicySubscriptionData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:subs-to-notify:read

responses:

'200':

description: >

Upon success, a response body containing Policy Data Subscription shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PolicyDataSubscription'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Modify a subscription to receive notification of policy data changes

operationId: ReplaceIndividualPolicyDataSubscription

tags:

- IndividualPolicyDataSubscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:subs-to-notify:modify

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/PolicyDataSubscription'

responses:

'200':

description: The individual subscription resource was updated successfully.

content:

application/json:

schema:

$ref: '#/components/schemas/PolicyDataSubscription'

'204':

description: >

The individual subscription resource was updated successfully and no

additional content is to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete the individual Policy Data subscription

operationId: DeleteIndividualPolicyDataSubscription

tags:

- IndividualPolicyDataSubscription (Document)

responses:

'204':

description: Upon success, an empty response body shall be returned.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/ues/{ueId}/operator-specific-data:

get:

summary: Retrieve the operator specific policy data of an UE

operationId: ReadOperatorSpecificData

tags:

- OperatorSpecificData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:operator-specific-data:read

parameters:

- name: ueId

in: path

description: UE Id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: fields

in: query

description: attributes to be retrieved

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

type: object

additionalProperties:

$ref: 'TS29505\_Subscription\_Data.yaml#/components/schemas/OperatorSpecificDataContainer'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify the operator specific policy data of a UE

operationId: UpdateOperatorSpecificData

tags:

- OperatorSpecificData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:operator-specific-data:modify

parameters:

- name: ueId

in: path

description: UE Id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

requestBody:

content:

application/json-patch+json:

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PatchItem'

required: true

responses:

'204':

description: No content. Response to successful modification.

'200':

description: Expected response to a valid request

content:

application/json:

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PatchResult'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Create or modify the operator specific policy data of a UE

operationId: ReplaceOperatorSpecificData

tags:

- OperatorSpecificData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:operator-specific-data:create

parameters:

- name: ueId

in: path

description: UE Id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

requestBody:

required: true

content:

application/json:

schema:

type: object

additionalProperties:

$ref: 'TS29505\_Subscription\_Data.yaml#/components/schemas/OperatorSpecificDataContainer'

responses:

'200':

description: OK

content:

application/json:

schema:

type: object

additionalProperties:

$ref: 'TS29505\_Subscription\_Data.yaml#/components/schemas/OperatorSpecificDataContainer'

'201':

description: >

Successful case. When the feature OSDResource\_Create\_Delete is supported

and the resource has been successfully created, a response body containing a

representation of the created OperatorSpecificData resource shall be returned.

content:

application/json:

schema:

type: object

additionalProperties:

$ref: 'TS29505\_Subscription\_Data.yaml#/components/schemas/OperatorSpecificDataContainer'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'204':

description: The resource has been successfully updated.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: When the feature OSDResource\_Create\_Delete is supported, delete OperatorSpecificData resource

operationId: DeleteOperatorSpecificData

tags:

- OperatorSpecificData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:ues:operator-specific-data:modify

parameters:

- name: ueId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

responses:

'204':

description: Successful case. The resource has been successfully deleted.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/plmns/{plmnId}/ue-policy-set:

parameters:

- name: plmnId

in: path

required: true

schema:

$ref: 'TS29505\_Subscription\_Data.yaml#/components/schemas/VarPlmnId'

get:

summary: Retrieve the UE policy set data for an H-PLMN

operationId: ReadPlmnUePolicySet

tags:

- PlmnUePolicySet (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:plmns:ue-policy-set:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Upon success, a response body containing UE policies shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/UePolicySet'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'412':

$ref: 'TS29571\_CommonData.yaml#/components/responses/412'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/slice-control-data/{snssai}:

parameters:

- name: snssai

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

get:

summary: Retrieves a network Slice specific policy control data resource

operationId: ReadSlicePolicyControlData

tags:

- SlicePolicyControlData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:slice-control-data:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: >

Successful case. The network slice specific policy control data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/SlicePolicyData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify a network Slice specific policy control data resource

operationId: UpdateSlicePolicyControlData

tags:

- SlicePolicyControlData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:slice-control-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/SlicePolicyDataPatch'

responses:

'200':

description: >

The resource has been successfully updated and a response body containing network

slice specific policy control data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/SlicePolicyData'

'204':

description: >

The resource has been successfully updated and no additional content is

to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/mbs-session-pol-data/{polSessionId}:

parameters:

- name: polSessionId

description: >

Represents the identifier of the MBS Session Policy Control Data.

in: path

required: true

schema:

$ref: '#/components/schemas/MbsSessPolDataId'

get:

summary: Retrieve MBS Session Policy Control Data for an MBS Session.

operationId: GetMBSSessPolCtrlData

tags:

- MBSSessionPolicyControlData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:mbs-session-pol-data:read

responses:

'200':

description: >

OK. The requested MBS Session Policy Control Data is successfully returned.

content:

application/json:

schema:

$ref: '#/components/schemas/MbsSessPolCtrlData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/pdtq-data:

get:

summary: Retrieves the PDTQ data collection

operationId: ReadPdtqData

tags:

- PdtqData (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:pdtq-data:read

parameters:

- name: pdtq-ref-ids

in: query

description: List of the PDTQ reference identifiers.

required: false

schema:

type: array

items:

$ref: 'TS29543\_Npcf\_PDTQPolicyControl.yaml#/components/schemas/PdtqReferenceId'

minItems: 1

style: form

explode: false

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Upon success, a response body containing the PDTQ data shall be returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/PdtqData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/pdtq-data/{pdtqReferenceId}:

parameters:

- name: pdtqReferenceId

in: path

required: true

schema:

type: string

get:

summary: Retrieves the PDTQ data information associated with a PDTQ reference Id

operationId: ReadIndividualPdtqData

tags:

- IndividualPdtqData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:pdtq-data:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Upon success, a response body containing the PDTQ data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PdtqData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Creates a PDTQ data resource associated with a PDTQ reference Id

operationId: CreateIndividualPdtqData

tags:

- IndividualPdtqData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:pdtq-data:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/PdtqData'

responses:

'201':

description: Successful case. The resource has been successfully created.

content:

application/json:

schema:

$ref: '#/components/schemas/PdtqData'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modifies a PDTQ data resource associated with a PDTQ reference Id

operationId: UpdateIndividualPdtqData

tags:

- IndividualPdtqData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:pdtq-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/PdtqDataPatch'

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

$ref: '#/components/schemas/PdtqData'

'204':

description: >

Successful case. The resource has been successfully updated and no additional content

is to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Deletes a PDTQ data resource associated with a PDTQ reference Id

operationId: DeleteIndividualPdtqData

tags:

- IndividualPdtqData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:pdtq-data:modify

responses:

'204':

description: Successful case. The resource has been successfully deleted.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/policy-data/group-control-data/{intGroupId}:

parameters:

- name: intGroupId

in: path

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

get:

summary: Retrieves a group specific policy control subscription data resource

operationId: ReadGroupPolCtrlData

tags:

- GroupPolicyControlData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:group-control-data:read

parameters:

- name: supp-feat

in: query

description: Represents the supported features.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: >

Successful case. The requested group specific policy control subscription data shall be

returned.

content:

application/json:

schema:

$ref: '#/components/schemas/GroupPolicyData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify an existing group specific policy control subscription data resource.

operationId: ModifyGroupPolCtrlData

tags:

- GroupPolicyControlData (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:policy-data

- nudr-dr:policy-data:group-control-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/GroupPolicyDataPatch'

responses:

'200':

description: >

The resource has been successfully modified and a response body containing the updated

group specific policy control subscription data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/GroupPolicyData'

'204':

description: >

The resource has been successfully modified and no additional content is to be sent in

the response body.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

components:

schemas:

PolicyDataForIndividualUe:

description: Contains policy data for a given subscriber.

type: object

properties:

uePolicyDataSet:

$ref: '#/components/schemas/UePolicySet'

smPolicyDataSet:

$ref: '#/components/schemas/SmPolicyData'

amPolicyDataSet:

$ref: '#/components/schemas/AmPolicyData'

umData:

type: object

additionalProperties:

$ref: '#/components/schemas/UsageMonData'

minProperties: 1

description: >

Contains UM policies. The value of the limit identifier is used as the key of the map.

operatorSpecificDataSet:

type: object

additionalProperties:

$ref: 'TS29505\_Subscription\_Data.yaml#/components/schemas/OperatorSpecificDataContainer'

minProperties: 1

description: >

Contains Operator Specific Data resource data. The key of the map is operator

specific data element name and the value is the operator specific data of the UE.

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

AmPolicyData:

description: Contains the AM policy data for a given subscriber.

type: object

properties:

praInfos:

type: object

additionalProperties:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PresenceInfo'

minProperties: 1

description: >

Contains Presence reporting area information. The praId attribute within the

PresenceInfo data type is the key of the map.

subscCats:

type: array

items:

type: string

minItems: 1

chfInfo:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/ChargingInformation'

subscSpendingLimits:

type: boolean

description: >

Indicates whether the PCF must enforce Access and Mobility management related

policies based on subscriber spending limits.

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

UePolicySet:

description: Contains the UE policy data for a given subscriber.

type: object

properties:

praInfos:

type: object

additionalProperties:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PresenceInfo'

minProperties: 1

description: >

Contains Presence reporting area information. The praId attribute within the

PresenceInfo data type is the key of the map.

subscCats:

type: array

items:

type: string

minItems: 1

uePolicySections:

type: object

additionalProperties:

$ref: '#/components/schemas/UePolicySection'

minProperties: 1

description: >

Contains the UE Policy Sections. The UE Policy Section Identifier is used as

the key of the map.

upsis:

type: array

items:

type: string

minItems: 1

allowedRouteSelDescs:

type: object

additionalProperties:

$ref: '#/components/schemas/PlmnRouteSelectionDescriptor'

minProperties: 1

description: >

Contains allowed route selection descriptors per serving PLMN for a UE.

The serving PLMN identifier is the key of the map.

andspInd:

type: boolean

epsUrspInd:

type: boolean

description: Indication of UE supporting URSP provisioning in EPS.

vpsUrspInd:

type: boolean

description: Indication of UE supporting VPLMN-specific URSP.

urspEnfInd:

type: boolean

description: Indication of UE supporting URSP enforcement report.

pei:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Pei'

osIds:

type: array

items:

$ref: '#/components/schemas/OsId'

minItems: 1

chfInfo:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/ChargingInformation'

subscSpendingLimits:

type: boolean

description: >

Indicates whether the PCF must enforce UE policies based on subscriber spending limits.

tracingReq:

type: array

items:

type: string

minItems: 1

description: >

Tracing requirements as defined in TS 32.421 [26]

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

UePolicySetPatch:

description: Contains the UE policy set for a given subscriber.

type: object

properties:

uePolicySections:

type: object

additionalProperties:

$ref: '#/components/schemas/UePolicySection'

minProperties: 1

description: >

Contains the UE Policy Sections. The UE Policy Section Identifier is used

as the key of the map.

upsis:

type: array

items:

type: string

minItems: 1

andspInd:

type: boolean

epsUrspInd:

type: boolean

description: Indication of UE supporting URSP provisioning in EPS.

vpsUrspInd:

type: boolean

description: Indication of UE supporting VPLMN-specific URSP.

urspEnfInd:

type: boolean

description: Indication of UE supporting URSP enforcement report.

pei:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Pei'

osIds:

type: array

items:

$ref: '#/components/schemas/OsId'

minItems: 1

UePolicySection:

description: Contains the UE policy section.

type: object

properties:

uePolicySectionInfo:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Bytes'

upsi:

type: string

required:

- uePolicySectionInfo

- upsi

SmPolicyData:

description: Contains the SM policy data for a given subscriber.

type: object

properties:

smPolicySnssaiData:

type: object

additionalProperties:

$ref: '#/components/schemas/SmPolicySnssaiData'

minProperties: 1

description: >

Contains Session Management Policy data per S-NSSAI for all the SNSSAIs

of the subscriber. The key of the map is the S-NSSAI.

umDataLimits:

type: object

additionalProperties:

$ref: '#/components/schemas/UsageMonDataLimit'

minProperties: 1

description: >

Contains a list of usage monitoring profiles associated with the subscriber.

The limit identifier is used as the key of the map.

umData:

type: object

additionalProperties:

$ref: '#/components/schemas/UsageMonData'

minProperties: 1

description: >

Contains the remaining allowed usage data associated with the subscriber.

The limit identifier is used as the key of the map.

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

required:

- smPolicySnssaiData

SmPolicySnssaiData:

description: Contains the SM policy data for a given subscriber and S-NSSAI.

type: object

properties:

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

smPolicyDnnData:

type: object

additionalProperties:

$ref: '#/components/schemas/SmPolicyDnnData'

minProperties: 1

description: >

Session Management Policy data per DNN for all the DNNs of the indicated S-NSSAI.

The key of the map is the DNN.

ueSliceMbr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SliceMbr'

required:

- snssai

SmPolicyDnnData:

description: Contains the SM policy data for a given DNN (and S-NSSAI).

type: object

properties:

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

allowedServices:

type: array

items:

type: string

minItems: 1

subscCats:

type: array

items:

type: string

minItems: 1

gbrUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

gbrDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

adcSupport:

type: boolean

subscSpendingLimits:

type: boolean

description: >

Indicates whether the PCF must enforce session management related policies based

on subscriber spending limits.

ipv4Index:

$ref: '#/components/schemas/IpIndex'

ipv6Index:

$ref: '#/components/schemas/IpIndex'

offline:

type: boolean

online:

type: boolean

chfInfo:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/ChargingInformation'

refUmDataLimitIds:

type: object

additionalProperties:

$ref: '#/components/schemas/LimitIdToMonitoringKey'

minProperties: 1

description: >

A reference to the UsageMonDataLimit or UsageMonData instances for this DNN and SNSSAI

that may also include the related monitoring key(s).

The key of the map is the limit identifier.

mpsPriority:

type: boolean

mcsPriority:

type: boolean

imsSignallingPrio:

type: boolean

mpsPriorityLevel:

type: integer

mcsPriorityLevel:

type: integer

praInfos:

type: object

additionalProperties:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PresenceInfo'

minProperties: 1

description: >

Contains Presence reporting area information. The praId attribute within the

PresenceInfo data type is the key of the map.

bdtRefIds:

type: object

additionalProperties:

$ref: '#/components/schemas/BdtReferenceIdRm'

minProperties: 1

description: >

Identifies transfer policies of background data transfer. Any string value can

be used as a key of the map.

nullable: true

locRoutNotAllowed:

type: boolean

sfcNotAllowed:

type: boolean

tnaps:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/TnapId'

minItems: 1

description: Contains the TNAP IDs collocated with the 5G-RG(s) of a specific user.

required:

- dnn

UsageMonDataLimit:

description: Contains usage monitoring control data for a subscriber.

type: object

properties:

limitId:

type: string

scopes:

type: object

additionalProperties:

$ref: '#/components/schemas/UsageMonDataScope'

minProperties: 1

description: >

Identifies the SNSSAI and DNN combinations to which the usage monitoring data

limit applies. The S-NSSAI is the key of the map.

umLevel:

$ref: '#/components/schemas/UsageMonLevel'

startDate:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

endDate:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

usageLimit:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/UsageThreshold'

resetPeriod:

$ref: '#/components/schemas/TimePeriod'

required:

- limitId

UsageMonData:

description: Contains remain allowed usage data for a subscriber.

type: object

properties:

limitId:

type: string

scopes:

type: object

additionalProperties:

$ref: '#/components/schemas/UsageMonDataScope'

minProperties: 1

description: >

Identifies the SNSSAI and DNN combinations for remain allowed usage data

for a subscriber. The S-NSSAI is the key of the map.

umLevel:

$ref: '#/components/schemas/UsageMonLevel'

allowedUsage:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/UsageThreshold'

resetTime:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

required:

- limitId

LimitIdToMonitoringKey:

description: >

Contains the limit identifier and the corresponding monitoring key for a given

S-NSSAI and DNN.

type: object

properties:

limitId:

type: string

monkey:

type: array

items:

type: string

minItems: 1

required:

- limitId

nullable: true

UsageMonDataScope:

description: >

Contains a SNSSAI and DNN combinations to which the UsageMonData instance belongs to.

type: object

properties:

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

dnn:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

required:

- snssai

TimePeriod:

description: Contains the periodicity for the defined usage monitoring data limits.

type: object

properties:

period:

$ref: '#/components/schemas/Periodicity'

maxNumPeriod:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

required:

- period

SponsorConnectivityData:

description: >

Contains the sponsored data connectivity related information for a sponsor identifier.

type: object

properties:

aspIds:

type: array

items:

type: string

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

required:

- aspIds

BdtData:

description: Contains the background data transfer data.

type: object

properties:

aspId:

type: string

transPolicy:

$ref: 'TS29554\_Npcf\_BDTPolicyControl.yaml#/components/schemas/TransferPolicy'

bdtRefId:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/BdtReferenceId'

nwAreaInfo:

$ref: 'TS29554\_Npcf\_BDTPolicyControl.yaml#/components/schemas/NetworkAreaInfo'

numOfUes:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

volPerUe:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/UsageThreshold'

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

trafficDes:

$ref: 'TS29122\_ResourceManagementOfBdt.yaml#/components/schemas/TrafficDescriptor'

bdtpStatus:

$ref: '#/components/schemas/BdtPolicyStatus'

warnNotifEnabled:

type: boolean

description: >

Indicates whether the BDT warning notification is enabled (true) or not (false).

Default value is false.

notifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

required:

- aspId

- transPolicy

PolicyDataSubscription:

description: Identifies a subscription to policy data change notification.

type: object

properties:

notificationUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

notifId:

type: string

monitoredResourceUris:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

monResItems:

type: array

items:

$ref: '#/components/schemas/ResourceItem'

minItems: 1

excludedResItems:

type: array

items:

$ref: '#/components/schemas/ResourceItem'

minItems: 1

immRep:

type: boolean

description: >

If provided and set to true, it indicates that existing entries that

match this subscription shall be immediately reported in the response.

immReports:

type: array

items:

$ref: '#/components/schemas/PolicyDataChangeNotification'

minItems: 1

description: Immediate report with existing UDR entries.

expiry:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

supportedFeatures:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

subsId:

type: string

required:

- notificationUri

- monitoredResourceUris

PolicyDataChangeNotification:

description: Contains changed policy data for which notification was requested.

type: object

properties:

amPolicyData:

$ref: '#/components/schemas/AmPolicyData'

uePolicySet:

$ref: '#/components/schemas/UePolicySet'

plmnUePolicySet:

$ref: '#/components/schemas/UePolicySet'

smPolicyData:

$ref: '#/components/schemas/SmPolicyData'

usageMonData:

$ref: '#/components/schemas/UsageMonData'

SponsorConnectivityData:

$ref: '#/components/schemas/SponsorConnectivityData'

bdtData:

$ref: '#/components/schemas/BdtData'

opSpecData:

$ref: 'TS29505\_Subscription\_Data.yaml#/components/schemas/OperatorSpecificDataContainer'

opSpecDataMap:

type: object

additionalProperties:

$ref: 'TS29505\_Subscription\_Data.yaml#/components/schemas/OperatorSpecificDataContainer'

minProperties: 1

description: >

Operator Specific Data resource data, if changed and notification was requested.

The key of the map is operator specific data element name and the value is the

operator specific data of the UE.

ueId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

sponsorId:

type: string

bdtRefId:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/BdtReferenceId'

usageMonId:

type: string

plmnId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

delResources:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

minItems: 1

notifId:

type: string

reportedFragments:

type: array

items:

$ref: '#/components/schemas/NotificationItem'

minItems: 1

slicePolicyData:

$ref: '#/components/schemas/SlicePolicyData'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

pdtqData:

$ref: '#/components/schemas/PdtqData'

pdtqRefId:

$ref: 'TS29543\_Npcf\_PDTQPolicyControl.yaml#/components/schemas/PdtqReferenceId'

groupPolicyData:

$ref: '#/components/schemas/GroupPolicyData'

intGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

PlmnRouteSelectionDescriptor:

description: >

Contains the route selection descriptors (combinations of SNSSAI, DNNs, PDU session types,

SSC modes and ATSSS information) allowed by subscription to the UE for a serving PLMN

type: object

properties:

servingPlmn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

snssaiRouteSelDescs:

type: array

items:

$ref: '#/components/schemas/SnssaiRouteSelectionDescriptor'

minItems: 1

required:

- servingPlmn

SnssaiRouteSelectionDescriptor:

description: >

Contains the route selector parameters (DNNs, PDU session types, SSC modes and ATSSS

information) per SNSSAI

type: object

properties:

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

dnnRouteSelDescs:

type: array

items:

$ref: '#/components/schemas/DnnRouteSelectionDescriptor'

minItems: 1

required:

- snssai

DnnRouteSelectionDescriptor:

description: >

Contains the route selector parameters (PDU session types, SSC modes and ATSSS

information) per DNN

type: object

properties:

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

sscModes:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SscMode'

minItems: 1

pduSessTypes:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PduSessionType'

minItems: 1

atsssInfo:

description: >

Indicates whether MA PDU session establishment is allowed for this DNN.

When set to value true MA PDU session establishment is allowed for this DNN.

type: boolean

default: false

lboRoamAllowed:

type: boolean

description: >

Indicates whether LBO for the DNN and S-NSSAI is allowed when roaming.

required:

- dnn

SmPolicyDataPatch:

description: Contains the SM policy data for a given subscriber.

type: object

properties:

umData:

type: object

additionalProperties:

$ref: '#/components/schemas/UsageMonData'

minProperties: 1

description: >

Contains the remaining allowed usage data associated with the subscriber.

The value of the limit identifier is used as the key of the map.

nullable: true

smPolicySnssaiData:

type: object

additionalProperties:

$ref: '#/components/schemas/SmPolicySnssaiDataPatch'

minProperties: 1

description: >

Modifiable Session Management Policy data per S-NSSAI for all the SNSSAIs

of the subscriber. The key of the map is the S-NSSAI.

SmPolicySnssaiDataPatch:

description: Contains the SM policy data for a given subscriber and S-NSSAI.

type: object

properties:

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

smPolicyDnnData:

type: object

additionalProperties:

$ref: '#/components/schemas/SmPolicyDnnDataPatch'

minProperties: 1

description: >

Modifiable Session Management Policy data per DNN for all the DNNs of the

indicated S-NSSAI. The key of the map is the DNN.

required:

- snssai

SmPolicyDnnDataPatch:

description: Contains the SM policy data for a given DNN (and S-NSSAI).

type: object

properties:

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

bdtRefIds:

type: object

additionalProperties:

$ref: '#/components/schemas/BdtReferenceIdRm'

minProperties: 1

description: >

Contains updated transfer policies of background data transfer.

Any string value can be used as a key of the map.

nullable: true

required:

- dnn

ResourceItem:

description: >

Identifies a subscription to policy data change notification when the change occurs

in a fragment (subset of resource data) of a given resource.

type: object

properties:

monResourceUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

items:

type: array

items:

$ref: '#/components/schemas/ItemPath'

minItems: 1

required:

- monResourceUri

- items

NotificationItem:

description: >

Identifies a data change notification when the change occurs in a fragment

(subset of resource data) of a given resource.

type: object

properties:

resourceId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

notifItems:

type: array

items:

$ref: '#/components/schemas/UpdatedItem'

minItems: 1

required:

- resourceId

- notifItems

UpdatedItem:

description: Identifies a fragment of a resource.

type: object

properties:

item:

$ref: '#/components/schemas/ItemPath'

value: {}

required:

- item

- value

BdtDataPatch:

description: Contains the modified background data transfer data.

type: object

properties:

transPolicy:

$ref: 'TS29554\_Npcf\_BDTPolicyControl.yaml#/components/schemas/TransferPolicy'

bdtpStatus:

$ref: '#/components/schemas/BdtPolicyStatus'

warnNotifEnabled:

type: boolean

description: >

Indicates whether the BDT warning notification is enabled (true) or not (false).

SlicePolicyData:

description: Contains the network slice specific policy control information.

type: object

properties:

mbrUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

mbrDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

remainMbrUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

remainMbrDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

SlicePolicyDataPatch:

description: Contains the modified network slice specific policy control information.

type: object

properties:

remainMbrUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

remainMbrDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

oneOf:

- required: [remainMbrUl]

- required: [remainMbrDl]

MbsSessPolCtrlData:

description: Represents MBS Session Policy Control Data.

type: object

properties:

5qis:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/5Qi'

minItems: 1

maxMbsArpLevel:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ArpPriorityLevel'

maxMbsSessionAmbr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

maxGbr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

MbsSessPolDataId:

description: Represents the identifier used to access the MBS Session Policy Control Data.

type: object

properties:

mbsSessionId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MbsSessionId'

afAppId:

type: string

oneOf:

- required: [mbsSessionId]

- required: [afAppId]

PdtqData:

description: Contains the planned data transfer data with QoS requirements.

type: object

properties:

aspId:

type: string

pdtqPolicy:

$ref: 'TS29543\_Npcf\_PDTQPolicyControl.yaml#/components/schemas/PdtqPolicy'

appId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ApplicationId'

pdtqRefId:

$ref: 'TS29543\_Npcf\_PDTQPolicyControl.yaml#/components/schemas/PdtqReferenceId'

nwAreaInfo:

$ref: 'TS29554\_Npcf\_BDTPolicyControl.yaml#/components/schemas/NetworkAreaInfo'

numOfUes:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

desTimeInts:

type: array

items:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/TimeWindow'

minItems: 1

description: Identifies the time interval(s).

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

altQosParamSets:

type: array

items:

$ref: 'TS29543\_Npcf\_PDTQPolicyControl.yaml#/components/schemas/AltQosParamSet'

minItems: 1

description: >

Contains the alternative QoS requirements as a list of individual QoS parameter

sets in a prioritized order.

altQosRefs:

type: array

items:

type: string

minItems: 1

description: >

Contains the alternative QoS requirements as the list of QoS references in a

prioritized order.

qosParamSet:

$ref: 'TS29543\_Npcf\_PDTQPolicyControl.yaml#/components/schemas/QosParameterSet'

qosReference:

type: string

description: >

Requested QoS requirements expressed as the QoS Reference which represents

a pre-defined QoS information.

notifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

warnNotifEnabled:

type: boolean

description: >

Indicates whether the PDTQ warning notification is enabled (true) or not (false).

Default value is false.

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

required:

- aspId

- pdtqPolicy

PdtqDataPatch:

description: Contains the modified planned data transfer data with QoS requirements.

type: object

properties:

pdtqPolicy:

$ref: 'TS29543\_Npcf\_PDTQPolicyControl.yaml#/components/schemas/PdtqPolicy'

warnNotifEnabled:

type: boolean

description: >

Indicates whether the PDTQ warning notification is enabled (true) or not (false). notifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

GroupPolicyData:

description: Contains the group specific policy control subscription information.

type: object

properties:

remainGroupMbrUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

remainGroupMbrDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

GroupPolicyDataPatch:

description: >

Contains the requested modification to the group specific policy control subscription

data.

type: object

properties:

remainGroupMbrUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

remainGroupMbrDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

anyOf:

- required: [remainGroupMbrUl]

- required: [remainGroupMbrDl]

# SIMPLE TYPES:

IpIndex:

description: >

Represents information that identifies which IP pool or external server

is used to allocate the IP address.

type: integer

OsId:

description: Represents the Operating System of the served UE.

type: string

format: uuid

ItemPath:

description: Identifies a fragment (subset of resource data) of a given resource.

type: string

BdtReferenceIdRm:

type: string

description: >

This data type is defined in the same way as the BdtReferenceId data type defined in

3GPP TS 29.122, but with the nullable property set to true.

nullable: true

# ENUMS:

UsageMonLevel:

description: Represents the usage monitoring level.

anyOf:

- type: string

enum:

- SESSION\_LEVEL

- SERVICE\_LEVEL

- type: string

description: >

This string provides forward-compatibility with future extensions to the enumeration

and is not used to encode content defined in the present version of this API.

Periodicity:

description: Represents the time period.

anyOf:

- type: string

enum:

- YEARLY

- MONTHLY

- WEEKLY

- DAILY

- HOURLY

- type: string

description: >

This string provides forward-compatibility with future extensions to the enumeration

and is not used to encode content defined in the present version of this API.

BdtPolicyStatus:

description: Indicates the validation status of a negotiated BDT policy.

anyOf:

- type: string

enum:

- INVALID

- VALID

- type: string

description: >

This string provides forward-compatibility with future extensions to the enumeration

and is not used to encode content defined in the present version of this API.

PolicyDataSubset:

description: Indicates a policy data subset.

anyOf:

- type: string

enum:

- AM\_POLICY\_DATA

- SM\_POLICY\_DATA

- UE\_POLICY\_DATA

- UM\_DATA

- OPERATOR\_SPECIFIC\_DATA

- type: string

description: >

This string provides forward-compatibility with future extensions to the enumeration

and is not used to encode content defined in the present version of this API.

# A.3 Nudr\_DataRepository API for Application Data

For the purpose of referencing entities in the Open API file defined in this Annex, it shall be assumed that this Open API file is contained in a physical file named "TS29519\_Application\_Data.yaml".

openapi: 3.0.0

info:

version: '-'

title: Unified Data Repository Service API file for Application Data

description: |

The API version is defined in 3GPP TS 29.504

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externalDocs:

description: >

3GPP TS 29.519 V18.4.0; 5G System; Usage of the Unified Data Repository Service for Policy Data,

Application Data and Structured Data for Exposure.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.519/'

paths:

/application-data/pfds:

get:

summary: Retrieve PFDs for application identifier(s)

operationId: ReadPFDData

tags:

- PFD Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:pfds:read

parameters:

- name: appId

in: query

description: >

Contains the information of the application identifier(s) for the querying PFD

Data resource. If none appId is included in the URI, it applies to all application

identifier(s) for the querying PFD Data resource.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ApplicationId'

minItems: 1

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: A representation of PFDs for request applications is returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/PfdDataForAppExt'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/pfds/{appId}:

get:

summary: Retrieve the corresponding PFDs of the specified application identifier

operationId: ReadIndividualPFDData

tags:

- Individual PFD Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:pfds:read

parameters:

- name: appId

in: path

description: >

Indicate the application identifier for the request pfd(s). It shall apply the

format of Data type ApplicationId.

required: true

schema:

type: string

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: >

A representation of PFDs for the request application identified by the application

identifier is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PfdDataForAppExt'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete the corresponding PFDs of the specified application identifier

operationId: DeleteIndividualPFDData

tags:

- Individual PFD Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:pfds:modify

parameters:

- name: appId

in: path

description: >

Indicate the application identifier for the request pfd(s). It shall apply the

format of Data type ApplicationId.

required: true

schema:

type: string

responses:

'204':

description: >

Successful case. The Individual PFD Data resource related to the application

identifier was deleted.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Create or update the corresponding PFDs for the specified application identifier

operationId: CreateOrReplaceIndividualPFDData

tags:

- Individual PFD Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:pfds:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/PfdDataForAppExt'

parameters:

- name: appId

in: path

description: >

Indicate the application identifier for the request pfd(s). It shall apply the format

of Data type ApplicationId.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual PFD Data resource related to the application-identifier

is confirmed and a representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PfdDataForAppExt'

headers:

Location:

description: >

'Contains the URI of the newly created resource, according to the structure:

{apiRoot}/nudr-dr/<apiVersion>/application-data/pfds/{appId}'

required: true

schema:

type: string

'200':

description: >

Successful case. The upgrade of an Individual PFD Data resource related to the

application identifier is confirmed and a representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PfdDataForAppExt'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/influenceData:

get:

summary: Retrieve Traffic Influence Data

operationId: ReadInfluenceData

tags:

- Influence Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:read

parameters:

- name: influence-Ids

in: query

description: Each element identifies a service.

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: dnns

in: query

description: Each element identifies a DNN.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

- name: snssais

in: query

description: Each element identifies a slice.

required: false

content:

application/json:

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

- name: internal-Group-Ids

in: query

description: Each element identifies a group of users.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

- name: internal-group-ids-Add

in: query

description: Each element identifies an internal Group.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

- name: subscriber-categories

in: query

description: >

Each element identifies a subscriber category.

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: supis

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

minItems: 1

- name: supp-feat

in: query

required: false

description: Supported Features

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: The Traffic Influence Data stored in the UDR are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/TrafficInfluData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/influenceData/{influenceId}:

put:

summary: Create or update an individual Influence Data resource

operationId: CreateOrReplaceIndividualInfluenceData

tags:

- Individual Influence Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluData'

parameters:

- name: influenceId

in: path

description: >

The Identifier of an Individual Influence Data to be created or updated.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual Traffic Influence Data resource is confirmed

and a representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluData'

headers:

Location:

description: >

'Contains the URI of the newly created resource, according to the structure:

{apiRoot}/nudr-dr/<apiVersion>/application-data/influenceData/{influenceId}'

required: true

schema:

type: string

'200':

description: >

The update of an Individual Traffic Influence Data resource is confirmed and a

response body containing Traffic Influence Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify part of the properties of an individual Influence Data resource

operationId: UpdateIndividualInfluenceData

tags:

- Individual Influence Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/TrafficInfluDataPatch'

parameters:

- name: influenceId

in: path

description: >

The Identifier of an Individual Influence Data to be updated. It shall apply

the format of Data type string.

required: true

schema:

type: string

responses:

'200':

description: >

The update of an Individual Traffic Influence Data resource is confirmed and

a response body containing Traffic Influence Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual Influence Data resource

operationId: DeleteIndividualInfluenceData

tags:

- Individual Influence Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:modify

parameters:

- name: influenceId

in: path

description: >

The Identifier of an Individual Influence Data to be deleted. It shall apply

the format of Data type string.

required: true

schema:

type: string

responses:

'204':

description: The Individual Influence Data was deleted successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/influenceData/subs-to-notify:

post:

summary: Create a new Individual Influence Data Subscription resource

operationId: CreateIndividualInfluenceDataSubscription

tags:

- Influence Data Subscriptions (Collection)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:subscriptions:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluSub'

responses:

'201':

description: The subscription was created successfully.

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluSub'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

callbacks:

trafficInfluenceDataChangeNotification:

'{$request.body#/notificationUri}':

post:

requestBody:

required: true

content:

application/json:

schema:

type: array

items:

oneOf:

- $ref: '#/components/schemas/TrafficInfluData'

- $ref: '#/components/schemas/TrafficInfluDataNotif'

minItems: 1

responses:

'204':

description: No Content, Notification was successful

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

get:

summary: Read Influence Data Subscriptions

operationId: ReadInfluenceDataSubscriptions

tags:

- Influence Data Subscriptions (Collection)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:subscriptions:read

parameters:

- name: dnn

in: query

description: Identifies a DNN.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

- name: snssai

in: query

description: Identifies a slice.

required: false

content:

application/json:

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

- name: internal-Group-Id

in: query

description: Identifies a group of users.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

- name: supi

in: query

description: Identifies a user.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

- name: internal-group-ids

in: query

description: >

Each element identifies an internal group.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

- name: subscriber-categories

in: query

description: >

Each element identifies a subscriber category.

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: roam-ue-plmn-ids

in: query

description: >

Each element identifies a PLMN.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

minItems: 1

responses:

'200':

description: >

The subscription information as request in the request URI query parameter(s)

are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/TrafficInfluSub'

minItems: 0

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/influenceData/subs-to-notify/{subscriptionId}:

get:

summary: Get an existing individual Influence Data Subscription resource

operationId: ReadIndividualInfluenceDataSubscription

tags:

- Individual Influence Data Subscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:subscriptions:read

parameters:

- name: subscriptionId

in: path

description: >

String identifying a subscription to the Individual Influence Data Subscription

required: true

schema:

type: string

responses:

'200':

description: The subscription information is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluSub'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Modify an existing individual Influence Data Subscription resource

operationId: ReplaceIndividualInfluenceDataSubscription

tags:

- Individual Influence Data Subscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:subscriptions:modify

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluSub'

parameters:

- name: subscriptionId

in: path

description: >

String identifying a subscription to the Individual Influence Data Subscription.

required: true

schema:

type: string

responses:

'200':

description: The subscription was updated successfully.

content:

application/json:

schema:

$ref: '#/components/schemas/TrafficInfluSub'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual Influence Data Subscription resource

operationId: DeleteIndividualInfluenceDataSubscription

tags:

- Individual Influence Data Subscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:influence-data:subscriptions:modify

parameters:

- name: subscriptionId

in: path

description: >

String identifying a subscription to the Individual Influence Data Subscription.

required: true

schema:

type: string

responses:

'204':

description: The subscription was terminated successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/bdtPolicyData:

get:

summary: Retrieve applied BDT Policy Data

operationId: ReadBdtPolicyData

tags:

- BdtPolicy Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:bdt-policy-data:read

parameters:

- name: bdt-policy-ids

in: query

description: Each element identifies a service.

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: internal-group-ids

in: query

description: Each element identifies a group of users.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

- name: supis

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

minItems: 1

responses:

'200':

description: The applied BDT policy Data stored in the UDR are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/BdtPolicyData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/bdtPolicyData/{bdtPolicyId}:

put:

summary: Create an individual applied BDT Policy Data resource

operationId: CreateIndividualAppliedBdtPolicyData

tags:

- Individual Applied BDT Policy Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:bdt-policy-data:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/BdtPolicyData'

parameters:

- name: bdtPolicyId

in: path

description: >

The Identifier of an Individual Applied BDT Policy Data to be created or updated.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual Applied BDT Policy Data resource is confirmed and a

representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/BdtPolicyData'

headers:

Location:

description: >

Contains the URI of the newly created resource, according to the structure:

{apiRoot}/nudr-dr/<apiVersion>/application-data/bdtPolicyData/{bdtPolicyId}

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify part of the properties of an individual Applied BDT Policy Data resource

operationId: UpdateIndividualAppliedBdtPolicyData

tags:

- Individual Applied BDT Policy Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:bdt-policy-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/BdtPolicyDataPatch'

parameters:

- name: bdtPolicyId

in: path

description: >

The Identifier of an Individual Applied BDT Policy Data to be updated. It shall

apply the format of Data type string.

required: true

schema:

type: string

responses:

'200':

description: >

The update of an Individual Applied BDT Policy Data resource is confirmed and

a response body containing Applied BDT Policy Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/BdtPolicyData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual Applied BDT Policy Data resource

operationId: DeleteIndividualAppliedBdtPolicyData

tags:

- Individual Applied BDT Policy Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:bdt-policy-data:modify

parameters:

- name: bdtPolicyId

in: path

description: >

The Identifier of an Individual Applied BDT Policy Data to be deleted.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'204':

description: The Individual Applied BDT Policy Data was deleted successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/iptvConfigData:

get:

summary: Retrieve IPTV configuration Data

operationId: ReadIPTVCongifurationData

tags:

- IPTV Configuration Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:iptv-config-data:read

parameters:

- name: config-ids

in: query

description: Each element identifies a configuration.

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: dnns

in: query

description: Each element identifies a DNN.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

- name: snssais

in: query

description: Each element identifies a slice.

required: false

content:

application/json:

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

- name: supis

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

minItems: 1

- name: inter-group-ids

in: query

description: Each element identifies a group of users.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

responses:

'200':

description: The IPTV configuration data stored in the UDR are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/IptvConfigData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/iptvConfigData/{configurationId}:

put:

summary: Create or update an individual IPTV configuration resource

operationId: CreateOrReplaceIndividualIPTVConfigurationData

tags:

- Individual IPTV Configuration Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:iptv-config-data:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/IptvConfigData'

parameters:

- name: configurationId

in: path

description: >

The Identifier of an Individual IPTV Configuration Data to be created or updated.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual IPTV Configuration Data resource is confirmed and a

representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/IptvConfigData'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'200':

description: The update of an Individual IPTV configuration resource.

content:

application/json:

schema:

$ref: '#/components/schemas/IptvConfigData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Partial update an individual IPTV configuration resource

operationId: PartialReplaceIndividualIPTVConfigurationData

tags:

- Individual IPTV Configuration Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:iptv-config-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: 'TS29522\_IPTVConfiguration.yaml#/components/schemas/IptvConfigDataPatch'

parameters:

- name: configurationId

in: path

description: >

The Identifier of an Individual IPTV Configuration Data to be updated.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'200':

description: The update of an Individual IPTV configuration resource.

content:

application/json:

schema:

$ref: '#/components/schemas/IptvConfigData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual IPTV configuration resource

operationId: DeleteIndividualIPTVConfigurationData

tags:

- Individual IPTV Configuration Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:iptv-config-data:modify

parameters:

- name: configurationId

in: path

description: >

The Identifier of an Individual IPTV Configuration to be deleted. It shall

apply the format of Data type string.

required: true

schema:

type: string

responses:

'204':

description: The resource was deleted successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/serviceParamData:

get:

summary: Retrieve Service Parameter Data

operationId: ReadServiceParameterData

tags:

- Service Parameter Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:service-param-data:read

parameters:

- name: service-param-ids

in: query

description: Each element identifies a service.

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: dnns

in: query

description: Each element identifies a DNN.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

- name: snssais

in: query

description: Each element identifies a slice.

required: false

content:

application/json:

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

- name: internal-group-ids

in: query

description: Each element identifies a group of users.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

- name: supis

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

minItems: 1

- name: ue-ipv4s

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

minItems: 1

- name: ue-ipv6s

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

minItems: 1

- name: ue-macs

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

minItems: 1

- name: any-ue

in: query

description: Indicates whether the request is for any UE.

required: false

schema:

type: boolean

- name: roam-ue-net-descs

in: query

description: >

Each element identifies oner or more PLMNs for a roaming UE.

required: false

schema:

type: array

items:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/NetworkDescription'

minItems: 1

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: The Service Parameter Data stored in the UDR are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/ServiceParameterData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/serviceParamData/{serviceParamId}:

put:

summary: Create or update an individual Service Parameter Data resource

operationId: CreateOrReplaceServiceParameterData

tags:

- Individual Service Parameter Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:service-param-data:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

parameters:

- name: serviceParamId

in: path

description: >

The Identifier of an Individual Service Parameter Data to be created or updated.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual Service Parameter Data resource is confirmed

and a representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

headers:

Location:

description: >

'Contains the URI of the newly created resource, according to the structure:

{apiRoot}/nudr-dr/<apiVersion>/application-data/serviceParamData/{serviceParamId}'

required: true

schema:

type: string

'200':

description: >

The update of an Individual Service Parameter Data resource is confirmed and

a response body containing Service Parameter Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify part of the properties of an individual Service Parameter Data resource

operationId: UpdateIndividualServiceParameterData

tags:

- Individual Service Parameter Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:service-parameter-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/ServiceParameterDataPatch'

parameters:

- name: serviceParamId

in: path

description: >

The Identifier of an Individual Service Parameter Data to be updated.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'200':

description: >

The update of an Individual Service Parameter Data resource is confirmed

and a response body containing Service Parameter Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual Service Parameter Data resource

operationId: DeleteIndividualServiceParameterData

tags:

- Individual Service Parameter Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:service-parameter-data:modify

parameters:

- name: serviceParamId

in: path

description: >

The Identifier of an Individual Service Parameter Data to be deleted.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'204':

description: The Individual Service Parameter Data was deleted successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/am-influence-data:

get:

summary: Retrieve AM Influence Data

operationId: ReadAmInfluenceData

tags:

- AM Influence Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:am-influence-data:read

parameters:

- name: am-influence-ids

in: query

description: Each element identifies a service.

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: dnns

in: query

description: Each element identifies a DNN.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

- name: snssais

in: query

description: Each element identifies a slice.

required: false

content:

application/json:

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

- name: dnn-snssai-infos

in: query

description: Each element identifies a combination of (DNN, S-NSSAI).

required: false

content:

application/json:

schema:

type: array

items:

$ref: 'TS29522\_AMInfluence.yaml#/components/schemas/DnnSnssaiInformation'

minItems: 1

- name: internal-group-ids

in: query

description: Each element identifies a group of users.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

- name: supis

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

minItems: 1

- name: any-ue

in: query

description: Indicates whether the request is for any UE.

required: false

schema:

type: boolean

- name: supp-feat

in: query

required: false

description: Supported Features

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: The AM Influence Data stored in the UDR are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/AmInfluData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/am-influence-data/{amInfluenceId}:

put:

summary: Create or update an individual AM Influence Data resource

operationId: CreateOrReplaceIndividualAmInfluenceData

tags:

- Individual AM Influence Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:am-influence-data:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/AmInfluData'

parameters:

- name: amInfluenceId

in: path

description: >

The Identifier of an Individual AM Influence Data to be created or updated.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual AM Influence Data resource is confirmed and

a representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/AmInfluData'

headers:

Location:

description: >

'Contains the URI of the newly created resource, according to the structure:

{apiRoot}/nudr-dr/<apiVersion>/application-data/am-influence-data/{amInfluenceId}'

required: true

schema:

type: string

'200':

description: >

The update of an Individual AM Influence Data resource is confirmed and a response

body containing AM Influence Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/AmInfluData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify part of the properties of an individual AM Influence Data resource

operationId: UpdateIndividualAmInfluenceData

tags:

- Individual AM Influence Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:am-influence-data:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/AmInfluDataPatch'

parameters:

- name: amInfluenceId

in: path

description: >

The Identifier of an Individual AM Influence Data to be updated. It shall

apply the format of Data type string.

required: true

schema:

type: string

responses:

'200':

description: >

The update of an Individual AM Influence Data resource is confirmed and a

response body containing AM Influence Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/AmInfluData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual AM Influence Data resource

operationId: DeleteIndividualAmInfluenceData

tags:

- Individual AM Influence Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:am-influence-data:modify

parameters:

- name: amInfluenceId

in: path

description: >

The Identifier of an Individual AM Influence Data to be deleted. It shall

apply the format of Data type string.

required: true

schema:

type: string

responses:

'204':

description: The Individual AM Influence Data was deleted successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/subs-to-notify:

post:

summary: Create a subscription to receive notification of application data changes

operationId: CreateIndividualApplicationDataSubscription

tags:

- ApplicationDataSubscriptions (Collection)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:subs-to-notify:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ApplicationDataSubs'

responses:

'201':

description: >

Upon success, a response body containing a representation of each

Individual subscription resource shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/ApplicationDataSubs'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

callbacks:

applicationDataChangeNotif:

'{$request.body#/notificationUri}':

post:

requestBody:

required: true

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/ApplicationDataChangeNotif'

minItems: 1

responses:

'204':

description: No Content, Notification was successful

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

get:

summary: Read Application Data change Subscriptions

operationId: ReadApplicationDataChangeSubscriptions

tags:

- ApplicationDataSubscriptions (Collection)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:subs-to-notify:read

parameters:

- name: data-filter

in: query

description: The data filter for the query.

required: false

content:

application/json:

schema:

$ref: '#/components/schemas/DataFilter'

responses:

'200':

description: >

The subscription information as request in the request URI query parameter(s)

are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/ApplicationDataSubs'

minItems: 0

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/af-qos-data-sets:

get:

summary: Retrieve AF Requested QoS Data

operationId: ReadAFReqQoSData

tags:

- AF Requested QoS Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:af-qos-data-sets:read

parameters:

- name: dnns

in: query

description: Each element identifies a DNN

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

- name: snssais

in: query

description: Each element identifies a slice.

required: false

content:

application/json:

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

- name: internal-group-ids

in: query

description: Each element identifies a group of users.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

- name: supis

in: query

description: Each element identifies the user.

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

minItems: 1

- name: data-set-ids

in: query

description: Each element identifies an Individual AF requested QoS resource.

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: supp-feat

in: query

required: false

description: Supported Features

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: The AF requested QoS Data stored in the UDR are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/AfRequestedQosData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/af-qos-data-sets/{afReqQosId}:

put:

summary: Create or update an Individual AF Requested QoS Data resource.

operationId: CreateIndividualAFReqQoSData

tags:

- Individual AF Requested QoS Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:af-qos-data-sets:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/AfRequestedQosData'

parameters:

- name: afReqQosId

in: path

description: >

The Identifier of an Individual AF Requested QoS Data to be created or updated.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual AF Requested QoS Data resource is confirmed and a

representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/AfRequestedQosData'

headers:

Location:

description: >

Contains the URI of the newly created resource, according to the structure:

{apiRoot}/nudr-dr/<apiVersion>/application-data/af-qos-data-sets/{afReqQosId}

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Modify part of the properties of an individual AF requested QoS Data resource

operationId: UpdateIndividualAFRequestedQoSData

tags:

- Individual AF requested QoS Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:af-qos-data-sets:modify

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/AfRequestedQosDataPatch'

parameters:

- name: afReqQosId

in: path

description: >

The Identifier of an Individual AF Requested QoS Data to be updated.

required: true

schema:

type: string

responses:

'200':

description: >

The update of an Individual AF Requested QoS Data resource is confirmed and

a response body containing AF Requested QoS Data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/AfRequestedQosData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual AF requested QoS Data resource

operationId: DeleteIndividualAFRequestedQosData

tags:

- Individual AF requested QoS Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:af-qos-data-sets:modify

parameters:

- name: afReqQosId

in: path

description: >

The Identifier of an Individual AF Requested QoS Data to be deleted.

required: true

schema:

type: string

responses:

'204':

description: The Individual AF requested QoS Data was deleted successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/subs-to-notify/{subsId}:

parameters:

- name: subsId

in: path

required: true

schema:

type: string

put:

summary: Modify a subscription to receive notification of application data changes

operationId: ReplaceIndividualApplicationDataSubscription

tags:

- IndividualApplicationDataSubscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:subs-to-notify:modify

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ApplicationDataSubs'

responses:

'200':

description: The individual subscription resource was updated successfully.

content:

application/json:

schema:

$ref: '#/components/schemas/ApplicationDataSubs'

'204':

description: >

The individual subscription resource was updated successfully and no

additional content is to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete the individual Application Data subscription

operationId: DeleteIndividualApplicationDataSubscription

tags:

- IndividualApplicationDataSubscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:subs-to-notify:modify

responses:

'204':

description: Upon success, an empty response body shall be returned.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

get:

summary: Get an existing individual Application Data Subscription resource

operationId: ReadIndividualApplicationDataSubscription

tags:

- IndividualApplicationDataSubscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:subs-to-notify:read

parameters:

- name: subsId

in: path

description: >

String identifying a subscription to the Individual Application Data Subscription

required: true

schema:

type: string

responses:

'200':

description: The subscription information is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/ApplicationDataSubs'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/eas-deploy-data:

get:

summary: Retrieve EAS Deployment Information Data

operationId: ReadEasDeployData

tags:

- EAS Deployment Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:eas-deploy-data:read

parameters:

- name: dnn

in: query

description: Identifies a DNN.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

- name: snssai

in: query

description: Identifies an S-NSSAI.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

- name: internal-group-id

in: query

description: Identifies a group of users.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

- name: appId

in: query

description: Identifies an application.

required: false

schema:

type: string

responses:

'200':

description: The EAS Deployment Data stored in the UDR are returned.

content:

application/json:

schema:

type: array

items:

$ref: 'TS29591\_Nnef\_EASDeployment.yaml#/components/schemas/EasDeployInfoData'

minItems: 1

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/eas-deploy-data/{easDeployInfoId}:

get:

summary: Retrieve an individual EAS Deployment Data resource

operationId: ReadIndividualEasDeployData

tags:

- Individual EAS Deployment Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:eas-deploy-data:read

parameters:

- name: easDeployInfoId

description: >

String identifying an Individual EAS Deployment Information Data resource.

in: path

required: true

schema:

type: string

responses:

'200':

description: >

The EAS Deployment Data stored in the UDR for an Individual EAS Deployment

Information Data resource is returned.

content:

application/json:

schema:

$ref: 'TS29591\_Nnef\_EASDeployment.yaml#/components/schemas/EasDeployInfoData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Create or update an individual EAS Deployment Data resource

operationId: CreateOrReplaceIndividualEasDeployData

tags:

- Individual EAS Deployment Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:eas-deploy-data:create

requestBody:

required: true

content:

application/json:

schema:

$ref: 'TS29591\_Nnef\_EASDeployment.yaml#/components/schemas/EasDeployInfoData'

parameters:

- name: easDeployInfoId

in: path

description: >

The Identifier of an Individual EAS Deployment Data to be created or updated.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual EAS Deployment Data resource is confirmed and a

representation of that resource is returned.

content:

application/json:

schema:

$ref: 'TS29591\_Nnef\_EASDeployment.yaml#/components/schemas/EasDeployInfoData'

headers:

Location:

description: >

Contains the URI of the newly created resource, according to the structure:

{apiRoot}/nudr-dr/<apiVersion>/application-data/eas-deploy-data/{easDeployInfoId}

required: true

schema:

type: string

'200':

description: >

The update of an Individual EAS Deployment Data resource is confirmed and a response

body containing EAS Deployment Data shall be returned.

content:

application/json:

schema:

$ref: 'TS29591\_Nnef\_EASDeployment.yaml#/components/schemas/EasDeployInfoData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual EAS Deployment Data resource

operationId: DeleteIndividualEasDeployData

tags:

- Individual EasDeployment Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:eas-deploy-data:modify

parameters:

- name: easDeployInfoId

in: path

description: >

The Identifier of an Individual EAS Deployment Data to be deleted.

It shall apply the format of Data type string.

required: true

schema:

type: string

responses:

'204':

description: The Individual EAS Deployment Data was deleted successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/dnai-eas-mappings/{dnai}:

parameters:

- name: dnai

in: path

required: true

schema:

type: string

get:

summary: Retrieves the EAS address information for a DNAI.

operationId: ReadDnaiEasMapping

tags:

- DnaiEasMapping (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:dnai-eas:read

parameters:

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: >

Upon success, a response body containing EAS address information for a DNAI

is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/DnaiEasMapping'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/ecs-address-roaming:

get:

summary: Retrieve ECS Address Roaming Data

operationId: ReadEcsRoamingData

tags:

- ECS Address Roaming Data (Store)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:ecs-address-roaming:read

parameters:

- name: internal-group-id

in: query

description: Identifies a group of users.

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

- name: any-ue

in: query

description: >

Indicates that any UE is targetted if included and set to true, otherwise set to false.

Default value is false if omitted.

required: false

schema:

type: boolean

responses:

'200':

description: The ECS Address Roaming Data stored in the UDR are returned.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/EcsAddrData'

minItems: 1

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/application-data/ecs-address-roaming/{ecsAddrInfoId}:

get:

summary: Retrieve an individual ECS Address Roaming Data resource

operationId: ReadIndividualEcsAddr

tags:

- Individual ECS Address Roaming Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:ecs-address-roaming:read

parameters:

- name: ecsAddrInfoId

description: >

String identifying an Individual ECS Address Roaming Data resource.

in: path

required: true

schema:

type: string

responses:

'200':

description: >

The ECS Address Roaming Data stored in the UDR for an Individual ECS Address Roaming

Data resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/EcsAddrData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

put:

summary: Create or update an individual ECS Address Roaming Data resource

operationId: CreateOrReplaceIndividualEcsAddressData

tags:

- Individual ECS Address Roaming Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:ecs-address-roaming:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/EcsAddrData'

parameters:

- name: ecsAddrInfoId

in: path

description: >

The Identifier of an Individual ECS Address Roaming Data to be created or updated.

required: true

schema:

type: string

responses:

'201':

description: >

The creation of an Individual EECS Address Roaming Data resource is confirmed

and a representation of that resource is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/EcsAddrData'

headers:

Location:

description: >

Contains the URI of the newly created resource.

required: true

schema:

type: string

'200':

description: >

The update of an Individual ECS Address Roaming Data resource is confirmed

and a response body containing ECS Address Roaming Data is returned.

content:

application/json:

schema:

$ref: '#/components/schemas/EcsAddrData'

'204':

description: No content

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Delete an individual ECS Address Roaming Data resource

operationId: DeleteIndividualEcsAddrData

tags:

- Individual ECS Address Roaming Data (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:application-data

- nudr-dr:application-data:ecs-address-roaming:modify

parameters:

- name: ecsAddrInfoId

in: path

description: >

The Identifier of an Individual ECS Address Roaming Data to be updated.

required: true

schema:

type: string

responses:

'204':

description: The Individual ECS Address Roaming Data was deleted successfully.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

components:

schemas:

TrafficInfluData:

description: Represents the Traffic Influence Data.

type: object

properties:

upPathChgNotifCorreId:

type: string

description: >

Contains the Notification Correlation Id allocated by the NEF for the UP

path change notification.

appReloInd:

type: boolean

description: >

Identifies whether an application can be relocated once a location of the

application has been selected.

afAppId:

type: string

description: Identifies an application.

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

ethTrafficFilters:

type: array

items:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/EthFlowDescription'

minItems: 1

description: >

Identifies Ethernet packet filters. Either "trafficFilters" or

"ethTrafficFilters" shall be included if applicable.

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

interGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

interGroupIdList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 2

description: >

Identifies a list of Internal Groups.

subscriberCatList:

type: array

items:

type: string

minItems: 1

description: >

Identifies a list of Subscriber Category(s).

supi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

trafficFilters:

type: array

items:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/FlowInfo'

minItems: 1

description: >

Identifies IP packet filters. Either "trafficFilters" or "ethTrafficFilters"

shall be included if applicable.

trafficRoutes:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RouteToLocation'

minItems: 1

description: Identifies the N6 traffic routing requirement.

sfcIdDl:

type: string

description: Reference to a pre-configured service function chain for DL traffic

sfcIdUl:

type: string

description: Reference to a pre-configured service function chain for UL traffic

metadata:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Metadata'

traffCorreInd:

type: boolean

tfcCorreInfo:

$ref: '#/components/schemas/TrafficCorrelationInfo'

validStartTime:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

validEndTime:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

tempValidities:

type: array

items:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/TemporalValidity'

minItems: 1

description: Identifies the temporal validities for the N6 traffic routing requirement.

nwAreaInfo:

$ref: 'TS29554\_Npcf\_BDTPolicyControl.yaml#/components/schemas/NetworkAreaInfo'

upPathChgNotifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

headers:

description: Contains the headers provisioned by the NEF.

type: array

items:

type: string

minItems: 1

subscribedEvents:

type: array

items:

$ref: 'TS29522\_TrafficInfluence.yaml#/components/schemas/SubscribedEvent'

minItems: 1

dnaiChgType:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DnaiChangeType'

afAckInd:

type: boolean

addrPreserInd:

type: boolean

maxAllowedUpLat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

simConnInd:

type: boolean

description: >

Indicates whether simultaneous connectivity should be temporarily

maintained for the source and target PSA.

simConnTerm:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'

supportedFeatures:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

resetIds:

type: array

items:

type: string

minItems: 1

nscSuppFeats:

type: object

additionalProperties:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

minProperties: 1

description: >

Identifies a list of Network Function Service Consumer supported per service. The key

used in this map for each entry is the ServiceName value as defined in

3GPP TS 29.510[24].

allOf:

- oneOf:

- required: [afAppId]

- required: [trafficFilters]

- required: [ethTrafficFilters]

- oneOf:

- required: [supi]

- required: [interGroupId]

- required: [interGroupIdList]

TrafficInfluDataPatch:

description: Represents the Traffic Influence Data to be updated in the UDR.

type: object

properties:

upPathChgNotifCorreId:

type: string

description: >

Contains the Notification Correlation Id allocated by the NEF for the

UP path change notification.

appReloInd:

type: boolean

description: >

Identifies whether an application can be relocated once a location of the application

has been selected.

ethTrafficFilters:

type: array

items:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/EthFlowDescription'

minItems: 1

description: >

Identifies Ethernet packet filters. Either "trafficFilters" or "ethTrafficFilters"

shall be included if applicable.

trafficFilters:

type: array

items:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/FlowInfo'

minItems: 1

description: >

Identifies IP packet filters. Either "trafficFilters" or "ethTrafficFilters"

shall be included if applicable.

trafficRoutes:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RouteToLocation'

minItems: 1

description: Identifies the N6 traffic routing requirement.

sfcIdDl:

type: string

description: Reference to a pre-configured service function chain for DL traffic

nullable: true

sfcIdUl:

type: string

description: Reference to a pre-configured service function chain for UL traffic

nullable: true

metadata:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Metadata'

traffCorreInd:

type: boolean

tfcCorreInfo:

$ref: '#/components/schemas/TrafficCorrelationInfo'

validStartTime:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

validEndTime:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

tempValidities:

type: array

items:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/TemporalValidity'

minItems: 1

nullable: true

description: Identifies the temporal validities for the N6 traffic routing requirement.

nwAreaInfo:

$ref: 'TS29554\_Npcf\_BDTPolicyControl.yaml#/components/schemas/NetworkAreaInfo'

upPathChgNotifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

headers:

description: Contains the headers provisioned by the NEF.

type: array

items:

type: string

minItems: 1

afAckInd:

type: boolean

addrPreserInd:

type: boolean

maxAllowedUpLat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/UintegerRm'

simConnInd:

type: boolean

description: >

Indicates whether simultaneous connectivity should be temporarily maintained

for the source and target PSA.

simConnTerm:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DurationSecRm'

TrafficInfluSub:

description: Represents traffic influence subscription data.

type: object

properties:

dnns:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

description: Each element identifies a DNN.

snssais:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

description: Each element identifies a slice.

internalGroupIds:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

description: Each element identifies a group of users.

internalGroupIdsAdd:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

description: >

Each element identifies an internal group.

subscriberCatList:

type: array

items:

type: string

minItems: 1

description: >

Each element identifies a subscriber category.

supis:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

minItems: 1

description: Each element identifies the user.

notificationUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

expiry:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

supportedFeatures:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

immRep:

type: boolean

description: >

If provided and set to true, it indicates that existing entries that

match this subscription shall be immediately reported in the response.

immReports:

type: array

items:

$ref: '#/components/schemas/TrafficInfluDataNotif'

minItems: 1

description: Immediate report with existing UDR entries.

required:

- notificationUri

oneOf:

- required: [dnns]

- required: [snssais]

- required: [internalGroupIds]

- required: [internalGroupIdsAdd]

- required: [supis]

TrafficInfluDataNotif:

description: Represents traffic influence data for notification.

type: object

properties:

resUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

trafficInfluData:

$ref: '#/components/schemas/TrafficInfluData'

required:

- resUri

PfdDataForAppExt:

description: Represents the PFDs and related data for the application.

type: object

properties:

applicationId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ApplicationId'

pfds:

type: array

items:

$ref: 'TS29551\_Nnef\_PFDmanagement.yaml#/components/schemas/PfdContent'

minItems: 1

cachingTime:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

allowedDelay:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'

required:

- applicationId

- pfds

BdtPolicyData:

description: Represents applied BDT policy data.

type: object

properties:

interGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

supi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

bdtRefId:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/BdtReferenceId'

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

resUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

resetIds:

type: array

items:

type: string

minItems: 1

required:

- bdtRefId

BdtPolicyDataPatch:

description: >

Represents modification instructions to be performed on the applied BDT policy data.

type: object

properties:

bdtRefId:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/BdtReferenceId'

required:

- bdtRefId

IptvConfigData:

description: Represents IPTV configuration data information.

type: object

properties:

supi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

interGroupId:

description: Identifies a group of users.

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

afAppId:

type: string

multiAccCtrls:

type: object

additionalProperties:

$ref: 'TS29522\_IPTVConfiguration.yaml#/components/schemas/MulticastAccessControl'

minProperties: 1

description: >

Identifies a list of multicast address access control information. Any string

value can be used as a key of the map.

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

resetIds:

type: array

items:

type: string

minItems: 1

required:

- afAppId

- multiAccCtrls

oneOf:

- required: [interGroupId]

- required: [supi]

ServiceParameterData:

description: Represents the service parameter data.

type: object

properties:

appId:

type: string

description: Identifies an application.

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

interGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

supi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

ueIpv4:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv4Addr'

ueIpv6:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv6Addr'

ueMac:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

anyUeInd:

type: boolean

description: >

Identifies whether the service parameters applies to any non roaming UE.

roamUeNetDescs:

type: array

items:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/NetworkDescription'

minItems: 1

description: Each element identifies one or more PLMN IDs of inbound roamers.

paramOverPc5:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParameterOverPc5'

paramOverUu:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParameterOverUu'

a2xParamsPc5:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/A2xParamsPc5'

paramForProSeDd:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeDd'

paramForProSeDc:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeDc'

paramForProSeU2NRelUe:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeU2NRelUe'

paramForProSeRemUe:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeRemUe'

paramForProSeU2URelUe:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeU2URelUe'

paramForProSeEndUe:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeEndUe'

urspGuidance:

type: array

items:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/UrspRuleRequest'

minItems: 1

description: >

Contains the service parameter used to guide the URSP and/or VPLMN specific URSP.

tnaps:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/TnapId'

minItems: 1

description: Contains the TNAP IDs collocated with the 5G-RG(s) of a specific user.

deliveryEvents:

type: array

items:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/Event'

minItems: 1

description: Contains the outcome of the UE Policy Delivery.

policDelivNotifCorreId:

type: string

description: >

Contains the Notification Correlation Id allocated by the NEF for the notification

of UE Policy delivery outcome.

policDelivNotifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

headers:

description: Contains the headers provisioned by the NEF.

type: array

items:

type: string

minItems: 1

resetIds:

type: array

items:

type: string

minItems: 1

paramForRangingSlPos:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForRangingSlPos'

ServiceParameterDataPatch:

description: Represents the service parameter data that can be updated.

type: object

properties:

paramOverPc5:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParameterOverPc5Rm'

paramOverUu:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParameterOverUuRm'

a2xParamsPc5:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/A2xParamsPc5Rm'

paramForProSeDd:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeDdRm'

paramForProSeDc:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeDcRm'

paramForProSeU2NRelUe:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeU2NRelUeRm'

paramForProSeRemUe:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeRemUeRm'

paramForProSeU2URelUE:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeU2URelUeRm'

paramForProSeEndUe:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForProSeEndUeRm'

urspInfluence:

type: array

items:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/UrspRuleRequest'

minItems: 1

deprecated: true

description: Contains the service parameter used to influence the URSP. This attribute is

deprecated by the urspGuidance attribute.

urspGuidance:

type: array

items:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/UrspRuleRequest'

minItems: 1

nullable: true

description: >

Contains the service parameter used to influence the URSP and/or VPLMN specific URSP.

tnaps:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/TnapId'

minItems: 1

description: Contains the TNAP IDs collocated with the 5G-RG(s) of a specific user.

nullable: true

deliveryEvents:

type: array

items:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/Event'

minItems: 1

nullable: true

description: Contains the outcome of the UE Policy Delivery.

policDelivNotifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

headers:

description: Contains the headers provisioned by the NEF.

type: array

items:

type: string

minItems: 1

paramForRangingSlPos:

$ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ParamForRangingSlPosRm'

AmInfluData:

description: Represents the AM Influence Data.

type: object

properties:

appIds:

type: array

items:

type: string

minItems: 1

description: Identifies one or more applications.

dnnSnssaiInfos:

type: array

items:

$ref: 'TS29522\_AMInfluence.yaml#/components/schemas/DnnSnssaiInformation'

minItems: 1

description: Identifies one or more DNN, S-NSSAI combinations.

interGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

supi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

anyUeInd:

type: boolean

description: >

When set to true, it indicates whether the data is applicable for any UE. Otherwise set

to "false". Default value is "false" if omitted.

roamUePlmnIds:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

minItems: 1

description: >

Indicates a list of PLMNs representing the home PLMN for the inbound roaming

UEs in LBO roaming scenario.

policyDuration:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'

evSubs:

type: array

items:

$ref: 'TS29522\_AMInfluence.yaml#/components/schemas/AmInfluEvent'

minItems: 1

description: List of AM related events for which a subscription is required.

notifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

notifCorrId:

type: string

description: Notification correlation identifier.

headers:

type: array

description: Contains the headers provisioned by the NEF.

items:

type: string

minItems: 1

thruReq:

type: boolean

description: >

When set to true, it indicates whether high throughput is desired for the

indicated UE traffic. Otherwise set to "false". Default value is "false" if omitted.

covReq:

type: array

items:

$ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/ServiceAreaCoverageInfo'

minItems: 1

description: Indicates the service area coverage requirement.

supportedFeatures:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

resetIds:

type: array

items:

type: string

minItems: 1

allOf:

- anyOf:

- required: [thruReq]

- required: [covReq]

- oneOf:

- required: [supi]

- required: [interGroupId]

- required: [anyUeInd]

- required: [roamUePlmnIds]

AmInfluDataPatch:

description: Represents the AM Influence Data that can be updated.

type: object

properties:

appIds:

type: array

items:

type: string

minItems: 1

description: Identifies one or more applications.

nullable: true

dnnSnssaiInfos:

type: array

items:

$ref: 'TS29522\_AMInfluence.yaml#/components/schemas/DnnSnssaiInformation'

minItems: 1

description: Identifies one or more DNN, S-NSSAI combinations.

nullable: true

evSubs:

type: array

items:

$ref: 'TS29522\_AMInfluence.yaml#/components/schemas/AmInfluEvent'

minItems: 1

description: List of AM related events for which a subscription is required.

nullable: true

headers:

type: array

description: Contains the headers provisioned by the NEF.

items:

type: string

minItems: 1

thruReq:

type: boolean

description: Indicates whether high throughput is desired for the indicated UE traffic.

nullable: true

notifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/UriRm'

notifCorrId:

type: string

description: Notification correlation identifier.

nullable: true

covReq:

type: array

items:

$ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/ServiceAreaCoverageInfo'

minItems: 1

description: Indicates the service area coverage requirement.

nullable: true

ApplicationDataSubs:

description: Identifies a subscription to application data change notification.

type: object

properties:

notificationUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

dataFilters:

type: array

items:

$ref: '#/components/schemas/DataFilter'

minItems: 1

expiry:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

immRep:

type: boolean

description: Immediate reporting indication.

amInfluEntries:

type: array

items:

$ref: '#/components/schemas/AmInfluData'

minItems: 1

description: The AM Influence Data entries stored in the UDR that match a subscription.

supportedFeatures:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

immReports:

type: array

items:

$ref: '#/components/schemas/ApplicationDataChangeNotif'

minItems: 1

description: Immediate report with existing UDR entries.

required:

- notificationUri

ApplicationDataChangeNotif:

description: Contains changed application data for which notification was requested.

type: object

properties:

iptvConfigData:

$ref: '#/components/schemas/IptvConfigData'

pfdData:

$ref: 'TS29551\_Nnef\_PFDmanagement.yaml#/components/schemas/PfdChangeNotification'

bdtPolicyData:

$ref: '#/components/schemas/BdtPolicyData'

resUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

serParamData:

$ref: '#/components/schemas/ServiceParameterData'

amInfluData:

$ref: '#/components/schemas/AmInfluData'

dnaiEasData:

$ref: '#/components/schemas/DnaiEasMapping'

afReqQosData:

$ref: '#/components/schemas/AfRequestedQosData'

ecsAddrData:

$ref: '#/components/schemas/EcsAddrData'

required:

- resUri

DataFilter:

description: Identifies a data filter.

type: object

properties:

dataInd:

$ref: '#/components/schemas/DataInd'

dnns:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

snssais:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

internalGroupIds:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

supis:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

minItems: 1

appIds:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ApplicationId'

minItems: 1

ueIpv4s:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

minItems: 1

ueIpv6s:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

minItems: 1

ueMacs:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

minItems: 1

anyUeInd:

type: boolean

description: Indicates the request is for any UE.

dnnSnssaiInfos:

description: >

Indicates the request is for any DNN and S-NSSAI combination present in the array.

type: array

items:

$ref: 'TS29522\_AMInfluence.yaml#/components/schemas/DnnSnssaiInformation'

minItems: 1

dnais:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnai'

minItems: 1

required:

- dataInd

TrafficCorrelationInfo:

description: >

Contains the information for traffic correlation.

type: object

properties:

corrType:

$ref: '#/components/schemas/CorrelationType'

tfcCorrId:

type: string

description: >

Identification of a set of UEs accessing the application identified by the

Application Identifier or traffic filtering information.

comEasIpv4Addr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4AddrRm'

comEasIpv6Addr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6AddrRm'

fqdnRange:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/FqdnPatternMatchingRule'

minItems: 1

nullable: true

notifUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/UriRm'

notifCorrId:

type: string

nullable: true

description: Notification correlation identifier.

nullable: true

AfRequestedQosData:

description: Represents AF Requested QoS data.

type: object

properties:

supi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

interGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

afAppId:

type: string

description: Identifies an AF application.

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

sliceInfo:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

evSubsc:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/EventsSubscReqData'

flowInfos:

type: array

items:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/FlowInfo'

minItems: 1

qosReference:

type: string

altSerReqs:

type: array

items:

type: string

minItems: 1

altSerReqsData:

type: array

items:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/AlternativeServiceRequirementsData'

minItems: 1

description: >

Contains alternative service requirements that include individual QoS parameter sets.

disUeNotif:

type: boolean

marBwDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

marBwUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

mirBwDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

mirBwUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

tempInValidity:

$ref: 'TS29565\_Ntsctsf\_QoSandTSCAssistance.yaml#/components/schemas/TemporalInValidity'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

required:

- suppFeat

oneOf:

- required: [supi]

- required: [interGroupId]

AfRequestedQosDataPatch:

description: Represents modification of Individual AF Requested QoS data.

type: object

properties:

afAppId:

type: string

description: Identifies an AF application.

nullable: true

evSubsc:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/EventsSubscReqDataRm'

flowInfos:

type: array

items:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/FlowInfo'

minItems: 1

nullable: true

qosReference:

type: string

nullable: true

altSerReqs:

type: array

items:

type: string

minItems: 1

nullable: true

altSerReqsData:

type: array

items:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/AlternativeServiceRequirementsData'

minItems: 1

description: >

Contains removable alternative service requirements that include individual QoS

parameter sets.

nullable: true

disUeNotif:

type: boolean

nullable: true

marBwDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRateRm'

marBwUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRateRm'

mirBwDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRateRm'

mirBwUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRateRm'

tempInValidity:

$ref: 'TS29565\_Ntsctsf\_QoSandTSCAssistance.yaml#/components/schemas/TemporalInValidity'

DnaiEasMapping:

description: Contains DNAI to EAS mapping information.

type: object

properties:

dnaiEasInfos:

type: array

items:

$ref: '#/components/schemas/DnaiEasInfo'

minItems: 1

description: Each element conrtains EAS address information for a DNAI.

required:

- dnaiEasInfos

DnaiEasInfo:

description: Contains EAS information for a DNAI.

type: object

properties:

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

easIpAddrs:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/IpAddr'

minItems: 1

description: Each element contains EAS addresses, address ranges, and/or prefixes.

fqdns:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/FqdnPatternMatchingRule'

minItems: 1

description: Each element conrtains FQDN matching rules for the EAS(s) of a DNAI.

anyOf:

- required: [dnn]

- required: [snssai]

oneOf:

- required: [easIpAddrs]

- required: [fqdns]

EcsAddrData:

description: Represents ECS Address Data.

type: object

properties:

self:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/Link'

ecsServerAddr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/EcsServerAddr'

spatialValidityCond:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SpatialValidityCond'

anyUeInd:

type: boolean

description: >

If provided and set to true it indicates that all the UEs are targetted,

otherwise set to false. The default value is false if omitted.

internalGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

required:

- ecsServerAddr

DataInd:

anyOf:

- type: string

enum:

- PFD

- IPTV

- BDT

- SVC\_PARAM

- AM

- DNAI\_EAS

- REQ\_QOS

- ECS

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration but is not used to encode

content defined in the present version of this API.

description: |

Indicates the type of data.

Possible values are

- PFD: PFD data.

- IPTV: IPTV configuration data.

- BDT: BDT data.

- SVC\_PARAM: Service parameter data.

- AM: AM influence data.

- DNAI\_EAS: DNAI EAS mapping data.

- REQ\_QOS: AF Requested QoS data for a UE or group of UE(s) not identified by UE address(es).

- ECS: ECS Address data.

CorrelationType:

description: Indicates that a common DNAI or common EAS should be selected.

anyOf:

- type: string

enum:

- COMMON\_DNAI

- COMMON\_EAS

- type: string

description: >

This string provides forward-compatibility with future extensions to the enumeration

and is not used to encode content defined in the present version of this API.

# A.4 Nudr\_DataRepository API for Exposure Data

For the purpose of referencing entities defined in the Open API file defined in this Annex, it shall be assumed that this Open API file is contained in a physical file termed "TS29519\_Exposure\_Data.yaml".

openapi: 3.0.0

info:

version: '-'

title: Unified Data Repository Service API file for structured data for exposure

description: |

The API version is defined in 3GPP TS 29.504

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externalDocs:

description: >

3GPP TS 29.519 V18.1.0; 5G System; Usage of the Unified Data Repository Service for Policy Data,

Application Data and Structured Data for Exposure.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.519/'

paths:

/exposure-data/{ueId}/access-and-mobility-data:

put:

summary: Creates and updates the access and mobility exposure data for a UE

operationId: CreateOrReplaceAccessAndMobilityData

tags:

- AccessAndMobilityData

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:access-and-mobility-data:create

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/AccessAndMobilityData'

responses:

'201':

description: >

Successful case. The resource has been successfully created and a response

body containing a representation of the access and mobility data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/AccessAndMobilityData'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'200':

description: >

Successful case. The resource has been successfully updated and a response

body containing a representation of the access and mobility data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/AccessAndMobilityData'

'204':

description: >

Successful case. The resource has been successfully updated and no additional content

is to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

get:

summary: Retrieves the access and mobility exposure data for a UE

operationId: QueryAccessAndMobilityData

tags:

- AccessAndMobilityData

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:access-and-mobility-data:read

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: The response body contains the access and mobility data

content:

application/json:

schema:

$ref: '#/components/schemas/AccessAndMobilityData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Deletes the access and mobility exposure data for a UE

operationId: DeleteAccessAndMobilityData

tags:

- AccessAndMobilityData

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:access-and-mobility-data:modify

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

responses:

'204':

description: Upon success, an empty response body shall be returned

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

patch:

summary: Updates the access and mobility exposure data for a UE

operationId: UpdateAccessAndMobilityData

tags:

- AccessAndMobilityData

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:access-and-mobility-data:modify

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/AccessAndMobilityData'

responses:

'204':

description: >

Successful case. The resource has been successfully updated and no additional

content is to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/exposure-data/{ueId}/session-management-data/{pduSessionId}:

put:

summary: Creates and updates the session management data for a UE and for an individual PDU session

operationId: CreateOrReplaceSessionManagementData

tags:

- PduSessionManagementData

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:session-management-data:create

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: pduSessionId

in: path

description: PDU session id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PduSessionId'

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/PduSessionManagementData'

responses:

'201':

description: >

Successful case. The resource has been successfully created and a response

body containing a representation of the session management data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PduSessionManagementData'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'200':

description: >

Successful case. The resource has been successfully updated and a response body

containing a representation of the session management data shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/PduSessionManagementData'

'204':

description: >

Successful case. The resource has been successfully updated and no additional

content is to be sent in the response message.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

get:

summary: Retrieves the session management data for a UE and for an individual PDU session

operationId: QuerySessionManagementData

tags:

- PduSessionManagementData

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:session-management-data:read

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: pduSessionId

in: path

description: PDU session id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PduSessionId'

- name: ipv4-addr

in: query

description: IPv4 Address of the UE

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

- name: ipv6-prefix

in: query

description: IPv6 Address Prefix of the UE

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

- name: dnn

in: query

description: DNN of the UE

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

- name: fields

in: query

description: attributes to be retrieved

required: false

schema:

type: array

items:

type: string

minItems: 1

- name: supp-feat

in: query

description: Supported Features

required: false

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: The response body contains the session management data

content:

application/json:

schema:

$ref: '#/components/schemas/PduSessionManagementData'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29571\_CommonData.yaml#/components/responses/406'

'414':

$ref: 'TS29571\_CommonData.yaml#/components/responses/414'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Deletes the session management data for a UE and for an individual PDU session

operationId: DeleteSessionManagementData

tags:

- PduSessionManagementData

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:session-management-data:modify

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: pduSessionId

in: path

description: PDU session id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PduSessionId'

responses:

'204':

description: Upon success, an empty response body shall be returned

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/exposure-data/subs-to-notify:

post:

summary: Create a subscription to receive notification of exposure data changes

operationId: CreateIndividualExposureDataSubscription

tags:

- ExposureDataSubscriptions (Collection)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:subs-to-notify:create

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ExposureDataSubscription'

responses:

'201':

description: Created

content:

application/json:

schema:

$ref: '#/components/schemas/ExposureDataSubscription'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

callbacks:

exposureDataChangeNotification:

'{$request.body#/notificationUri}':

post:

requestBody:

required: true

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/ExposureDataChangeNotification'

minItems: 1

responses:

'204':

description: No Content, Notification was successful

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

/exposure-data/subs-to-notify/{subId}:

put:

summary: updates a subscription to receive notifications of exposure data changes

operationId: ReplaceIndividualExposureDataSubscription

tags:

- IndividualExposureDataSubscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:subs-to-notify:modify

parameters:

- name: subId

in: path

description: Subscription id

required: true

schema:

type: string

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ExposureDataSubscription'

responses:

'200':

description: >

Resource was successfully modified and a body with the modified subscription

to notifications about exposure data is returned..

content:

application/json:

schema:

$ref: '#/components/schemas/ExposureDataSubscription'

'204':

description: The individual subscription resource was successfully modified.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

delete:

summary: Deletes the individual Exposure Data subscription

operationId: DeleteIndividualExposureDataSubscription

tags:

- IndividualExposureDataSubscription (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:exposure-data

- nudr-dr:exposure-data:subs-to-notify:modify

parameters:

- name: subId

in: path

description: Subscription id

required: true

schema:

type: string

responses:

'204':

description: Resource was successfully deleted.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

components:

schemas:

AccessAndMobilityData:

description: Represents Access and Mobility data for a UE.

type: object

properties:

location:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/UserLocation'

locationTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

timeZone:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/TimeZone'

timeZoneTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

accessType:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/AccessType'

regStates:

type: array

items:

$ref: 'TS29518\_Namf\_EventExposure.yaml#/components/schemas/RmInfo'

regStatesTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

connStates:

type: array

items:

$ref: 'TS29518\_Namf\_EventExposure.yaml#/components/schemas/CmInfo'

connStatesTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

reachabilityStatus:

$ref: 'TS29518\_Namf\_EventExposure.yaml#/components/schemas/UeReachability'

reachabilityStatusTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

smsOverNasStatus:

$ref: 'TS29518\_Namf\_Communication.yaml#/components/schemas/SmsSupport'

smsOverNasStatusTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

roamingStatus:

type: boolean

description: >

True The serving PLMN of the UE is different from the HPLMN of the UE; False

The serving PLMN of the UE is the HPLMN of the UE.

roamingStatusTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

currentPlmn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

currentPlmnTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

ratType:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RatType'

ratTypesTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

PduSessionManagementData:

description: Represents Session management data for a UE and a PDU session.

type: object

properties:

pduSessionStatus:

$ref: '#/components/schemas/PduSessionStatus'

pduSessionStatusTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

dnai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnai'

dnaiTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

n6TrafficRoutingInfo:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RouteToLocation'

n6TrafficRoutingInfoTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

ipv4Addr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

ipv6Prefix:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

minItems: 1

description: UE IPv6 prefix.

ipv6Addrs:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

minItems: 1

pduSessType:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PduSessionType'

ipAddrTs:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

pduSessionId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PduSessionId'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

ExposureDataSubscription:

description: Represents a Subscription to Notifications about Exposure Data.

type: object

properties:

notificationUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

monitoredResourceUris:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

minItems: 1

expiry:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

supportedFeatures:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

resetIds:

type: array

items:

type: string

minItems: 1

immRep:

type: boolean

description: >

If provided and set to true, it indicates that existing entries that

match this subscription shall be immediately reported in the response.

immReports:

type: array

items:

$ref: '#/components/schemas/ExposureDataChangeNotification'

minItems: 1

description: Immediate report with existing UDR entries.

required:

- notificationUri

- monitoredResourceUris

ExposureDataChangeNotification:

description: Represents changed exposure data for one UE for which Notification was requested.

type: object

properties:

ueId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

accessAndMobilityData:

$ref: '#/components/schemas/AccessAndMobilityData'

pduSessionManagementData:

type: array

items:

$ref: '#/components/schemas/PduSessionManagementData'

minItems: 1

delResources:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

minItems: 1

PduSessionStatus:

anyOf:

- type: string

enum:

- "ACTIVE"

- "RELEASED"

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration but is not used to encode

content defined in the present version of this API.

description: |

Represents the state of the PDU session.

Possible values are

- "ACTIVE": the PDU session is active.

- "RELEASED": the PDU session released.

Annex B (informative):  
Change history

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Change history | | | | | | | |
| **Date** | **Meeting #** | **TSG Doc.** | **CR** | **Rev** | **Cat** | **Subject/Comment** | **New** |
| 2018-01 | CT3#94 |  |  |  |  | TS skeleton of Usage of the Unified Data Repository service for Policy Data and Structured Data for exposure | 0.0.0 |
| 2018-01 | CT3#94 |  |  |  |  | Inclusion of C3-180352, C3-180326, C3-180327 | 0.1.0 |
| 2018-03 | CT3#95 |  |  |  |  | Inclusion of C3-181145, C3-181288, C3-181289, C3-181313 | 0.2.0 |
| 2018-04 | CT3#96 |  |  |  |  | Inclusion of C3-182402, C3-182476, C3-182456, C3-182404, C3-182457, C3-182458 | 0.3.0 |
| 2018-05 | CT3#97 |  |  |  |  | Inclusion of C3-183872, C3-183705, C3-183704, C3-183873, C3-183732, C3-183706 C3-183874, C3-183709, C3-183876, C3-183263, C3-183877, C3-183712, C3-183715 and editorial changes by Rapporteur | 0.4.0 |
| 2018-06 | CT#80 | CP-181033 |  |  |  | TS sent to plenary for approval | 1.0.0 |
| 2018-06 | CT#80 | CP-181033 |  |  |  | TS approved by plenary | 15.0.0 |
| 2018-09 | CT#81 | CP-182015 | 0006 |  | F | Scope and Overview | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0007 |  | F | Introduction subclauses 5.1, 6.1 and 7.1 | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0008 |  | F | Resource overview subclauses 5.2.1, 6.2.1 and 7.2.1 | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0009 | 3 | F | Nudr reused data types | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0010 | 6 | B | AM policy data resource definition | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0011 | 8 | B | SM policy data resource definition | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0012 | 3 | B | Sponsored data connectivity profiles | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0014 | 5 | B | Background Data Transfer data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0015 | 4 | B | Policy data change subcription | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0016 | 5 | B | Data change notification | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0017 | 2 | F | Error handling subcaluses | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0018 | 1 | F | Feature negotiation | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0019 | 1 | F | Resource PFD Datas and Data types definition | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0020 | 1 | F | OpenAPI schema for Policy Data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0021 | 3 | F | Stage 2 Allignments for Structured Data for Exposure | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0022 | 4 | B | Subscription for Structured Data for Exposure | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0023 | 3 | F | Get query parameters for structured data for exposure | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0024 | 5 | F | HTTP error responses for structured data for exposure | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0025 | 1 | F | Description of Structured data types | 15.1.0 |
| 2018-09 | CT#81 | CP-182032 | 0026 | 3 | B | Resource Structure for policy data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0027 |  | F | n6 Traffic Routing Information encoding | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0028 | 1 | F | Removal of ExternalDocs section in OpenApi file for Exposure Data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0029 | 1 | F | VarUeId used in TS 29.519 | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0034 | 1 | F | OpenAPI schema for PolicyData | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0035 | 3 | F | External information stored in UDR for Application Data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0036 |  | F | Clean up the Editor Note in applicatoin data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0037 | 4 | F | Correction the data type of application data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0038 | 3 | B | Introduce the operator policy data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0039 | 2 | B | OpenAPI of Application data | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0040 | 1 | F | Update of resource structure of application data 29.519 | 15.1.0 |
| 2018-09 | CT#81 | CP-182015 | 0041 | 1 | F | Ethernet packet filter for traffic influence data of applicatoin data 29.519 | 15.1.0 |
| 2018-12 | CP#82 | CP-183205 | 0042 | 1 | F | DNAI reused data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0043 | 1 | F | ExternalDocs field | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0044 |  | F | PduSessionStatus | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0045 | 1 | F | Query parameters correction on application data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0046 | 1 | F | PUT operation for Individual Influence Data Subscription | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0047 | 3 | F | Background Data Transfer Data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0048 | 1 | F | Cardinality for array and map | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0049 | 1 | F | Resource URI for ExposureData | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0050 |  | F | UeId definition | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0052 | 1 | F | Error status codes for HTTP responses | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0053 |  | F | Service name | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0054 | 1 | F | Reference to the yaml file of Npcf\_BDTPolicyControl API | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0055 |  | F | Missed GET method on UEPolicySetResource | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0055 | 2 | F | Missed GET method on UEPolicySetResource | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0056 | 4 | F | Corrections on AM Policy and UE Policy data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0057 | 6 | F | Corrections on SM Policy Data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0058 | 1 | F | Correct TrafficRoute data type | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0060 | 4 | F | Correct subscription for application data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0062 | 3 | F | Correction to the AF Influence on traffic steering control | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0063 | 3 | F | PLMN ID as key for UE data sets | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0066 | 1 | F | Supported features | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0067 | 1 | F | Add AF application ID for traffic influence | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0068 |  | F | Correct referenced file in openAPI for application data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0069 |  | F | Correct referenced file in openAPI for exposure data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0070 | 1 | F | Use correct naming convention | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0071 | 1 | F | Correct subscription for Application Data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0072 | 1 | F | Status code update for Application Data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0073 | 1 | F | Correction on UsageThreshold | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0075 | 2 | F | Status code update for Exposure Data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0076 | 2 | F | Status code update for Policy Data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0077 | 2 | F | Incorrect response code of PUT method for individual PFD Data creation | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0078 | 1 | F | corrections on individual Influence Data | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0079 | 2 | F | Adding timestamp for allowed usage storage | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0080 |  | F | Missing 201 response body for /policy-data/subs-to-notify | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0081 | 1 | F | Location header | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0083 | 4 | F | Corrections on Usage Monitoring information | 15.2.0 |
| 2018-12 | CP#82 | CP-183205 | 0087 |  | F | Correction on PduSessionManagementData | 15.2.0 |
| 2019-03 | CP#83 | CP-190115 | 0090 | 1 | F | Correction on ChargingInformation data type reference in the OpenAPI file | 15.3.0 |
| 2019-03 | CP#83 | CP-190115 | 0091 | 1 | F | Formatting of structured data types in query parameters | 15.3.0 |
| 2019-03 | CP#83 | CP-190115 | 0092 | 1 | F | Correcting resource definitions | 15.3.0 |
| 2019-03 | CP#83 | CP-190115 | 0093 |  | F | References to data types | 15.3.0 |
| 2019-03 | CP#83 | CP-190115 | 0095 | 2 | F | Correction on Policy Data change notification | 15.3.0 |
| 2019-03 | CP#83 | CP-190115 | 0096 | 1 | F | Correction on BDT data | 15.3.0 |
| 2019-03 | CP#83 | CP-190115 | 0098 | 1 | F | Support of allowed Route Selection data | 15.3.0 |
| 2019-03 | CP#83 | CP-190115 | 0099 | 1 | F | Support of PEI, OSid and ANDSP support indication in UE Policy Set | 15.3.0 |
| 2019-03 | CP#83 | CP-190115 | 0100 |  | F | Support of PRA information | 15.3.0 |
| 2019-06 | CP#84 | CP-191077 | 0101 |  | F | Correction of OpenAPI file and main body misalignments for Notification messages | 15.4.0 |
| 2019-06 | CP#84 | CP-191077 | 0102 | 2 | F | Corrections in PolicyDataSubscription and PolicyDataChangeNotification types | 15.4.0 |
| 2019-06 | CP#84 | CP-191077 | 0106 | 1 | F | Precedence of OpenAPI file | 15.4.0 |
| 2019-06 | CP#84 | CP-191077 | 0113 |  | F | Correcting the name of URI to receive notifications | 15.4.0 |
| 2019-06 | CP#84 | CP-191077 | 0103 | 4 | F | "201 Created" response without body and other HTTP response errors | 15.4.0 |
| 2019-06 | CP#84 | CP-191077 | 0116 | 1 | F | Expiry time in subscription data types | 15.4.0 |
| 2019-06 | CP#84 | CP-191184 | 0117 | 3 | F | Notification of resource deletion | 15.4.0 |
| 2019-06 | CP#84 | CP-191208 | 0118 | 3 | F | Copyright Note in YAML file | 15.4.0 |
| 2019-06 | CP#84 | CP-191077 | 0119 | 1 | F | Missed Traffic Influence information | 15.4.0 |
| 2019-06 | CP#84 | CP-191183 | 0120 | 4 | F | Notification of resource deletion for Application and Exposure data sets | 15.4.0 |
| 2019-06 | CP#84 | CP-191089 | 0105 | 2 | B | PFD extension for domain name protocol | 16.0.0 |
| 2019-06 | CP#84 | CP-191071 | 0109 | 3 | B | AF acknowledgement to be expected | 16.0.0 |
| 2019-06 | CP#84 | CP-191071 | 0110 | 2 | B | UE IP address preservation indication | 16.0.0 |
| 2019-06 | CP#84 | CP-191100 | 0114 | 1 | B | NEF stored exposure data | 16.0.0 |
| 2019-09 | CT#85 | CP-192169 | 0125 | 2 | F | UDR Application Errors | 16.1.0 |
| 2019-09 | CT#85 | CP-192145 | 0127 | 2 | A | Missed any UE traffic influence data | 16.1.0 |
| 2019-09 | CT#85 | CP-192169 | 0128 | 1 | B | Multiple temporal validity conditions for AF traffic influence | 16.1.0 |
| 2019-09 | CT#85 | CP-192244 | 0130 | 2 | A | Remove PFD change notification | 16.1.0 |
| 2019-09 | CT#85 | CP-192156 | 0131 | 1 | B | Support a set of MAC addresses in traffic filter | 16.1.0 |
| 2019-09 | CT#85 | CP-192196 | 0138 | 4 | B | Application Data update to support xBDT | 16.1.0 |
| 2019-09 | CT#85 | CP-192152 | 0140 | 3 | B | Subscription and Notification of IPTV configuration data change | 16.1.0 |
| 2019-09 | CT#85 | CP-192152 | 0141 | 2 | B | Resource structure of Nudr API for Application Data | 16.1.0 |
| 2019-09 | CT#85 | CP-192152 | 0142 | 2 | B | Storage of IPTV configuration data | 16.1.0 |
| 2019-09 | CT#85 | CP-192156 | 0143 | 2 | F | Subscription/unsubscription for PFDs update notifications and related callback correction | 16.1.0 |
| 2019-10 | CT#85 | - | - | - | - | Addition of missing yaml files | 16.1.1 |
| 2019-12 | CT#86 | CP-193223 | 0144 | 2 | B | Retrieval of BDT policy data for a set of BDT reference identifiers | 16.2.0 |
| 2019-12 | CT#86 | CP-193181 | 0145 | 1 | F | Open issue for AddrPreservation feature | 16.2.0 |
| 2019-12 | CT#86 | CP-193223 | 0149 | 3 | B | Support of BDT reference Id within Session Management data | 16.2.0 |
| 2019-12 | CT#86 | CP-193191 | 0151 | 3 | B | Partial update of IPTVConfiguration API | 16.2.0 |
| 2019-12 | CT#86 | CP-193210 | 0152 | 2 | B | Patch Report to Nudr\_DataRepository API for Policy data | 16.2.0 |
| 2019-12 | CT#86 | CP-193223 | 0153 |  | F | Reference correction to BdtReferenceId | 16.2.0 |
| 2019-12 | CT#86 | CP-193212 | 0155 | 1 | F | Update of TS version\_Rel-16 | 16.2.0 |
| 2019-12 | CT#86 | CP-193197 | 0156 | 2 | B | MCS Priority Indication | 16.2.0 |
| 2019-12 | CT#86 | CP-193187 | 0158 | - | A | Definition of BdtData in OpenAPI | 16.2.0 |
| 2019-12 | CT#86 | CP-193197 | 0159 | - | F | Usage of BdtReferenceId data type | 16.2.0 |
| 2019-12 | CT#86 | CP-193223 | 0161 | 1 | B | include S-NSSAI and DNN in Application Data for xBDT | 16.2.0 |
| 2019-12 | CT#86 | CP-193223 | 0162 |  | F | remove 204 response on PUT request for AppliedBDTPolicyData | 16.2.0 |
| 2019-12 | CT#86 | CP-193210 | 0164 |  | B | Feature Negotiation for OperatorSpecificData resource | 16.2.0 |
| 2019-12 | CT#86 | CP-193210 | 0165 |  | B | Feature Negotiation for Influence Data resource | 16.2.0 |
| 2019-12 | CT#86 | CP-193126 | 0166 |  | B | URI correction on resource Individual Applied BDT Policy Data | 16.2.0 |
| 2020-03 | CT#87e | CP-200141 | 0167 | 2 | B | Application data change notification | 16.3.0 |
| 2020-03 | CT#87e | CP-200203 | 0168 | 1 | B | Complete the IPTV configuration | 16.3.0 |
| 2020-03 | CT#87e | CP-200263 | 0169 | 2 | B | Nudr\_DataRepository API update for Service Parameter provisioning | 16.3.0 |
| 2020-03 | CT#87e | CP-200218 | 0170 | 1 | B | Indication of traffic correlation | 16.3.0 |
| 2020-03 | CT#87e | CP-200136 | 0171 | 2 | B | Include influenceId into TrafficInfluData for Notification | 16.3.0 |
| 2020-03 | CT#87e | CP-200219 | 0172 | 2 | B | Correct the mapping of ASPid for xBDT | 16.3.0 |
| 2020-03 | CT#87e | CP-200207 | 0173 | 1 | B | Subscription and notification to data changes related to a subset of resource data, Policy Data set | 16.3.0 |
| 2020-03 | CT#87e | CP-200203 | 0174 |  | F | Correct content type in PATCHing IPTV application data | 16.3.0 |
| 2020-03 | CT#87e | CP-200198 | 0175 |  | B | Additional PDU session status data | 16.3.0 |
| 2020-03 | CT#87e | CP-200219 | 0176 |  | F | Correct content type in PATCHing BDT application data | 16.3.0 |
| 2020-03 | CT#87e | CP-200219 | 0177 |  | F | Removal of the BDT policy from the "bdtRefIds" object | 16.3.0 |
| 2020-06 | CT#88e | CP-201220 | 0179 | 2 | A | internalGroupId in Influence Data | 16.4.0 |
| 2020-06 | CT#88e | CP-201238 | 0180 | 2 | F | Definition of ServiceParameterData in openAPI | 16.4.0 |
| 2020-06 | CT#88e | CP-201246 | 0181 | 3 | F | Data Types for Application Data | 16.4.0 |
| 2020-06 | CT#88e | CP-201228 | 0183 | 1 | F | Correction to IPTV Configuration | 16.4.0 |
| 2020-06 | CT#88e | CP-201253 | 0184 | 1 | F | Correction to BDT Policy | 16.4.0 |
| 2020-06 | CT#88e | CP-201220 | 0185 | 1 | A | Correction to notifications of Operator Specific Data changes | 16.4.0 |
| 2020-06 | CT#88e | CP-201220 | 0188 |  | A | Correct content type in PATCHing traffic influence application data | 16.4.0 |
| 2020-06 | CT#88e | CP-201233 | 0189 |  | F | Correct DataFilter presence condition | 16.4.0 |
| 2020-06 | CT#88e | CP-201233 | 0190 |  | F | Correct resourceId in required field | 16.4.0 |
| 2020-06 | CT#88e | CP-201233 | 0191 | 1 | B | Support local traffic routing in session subscription | 16.4.0 |
| 2020-06 | CT#88e | CP-201244 | 0192 | 1 | F | Storage of YAML files in ETSI Forge | 16.4.0 |
| 2020-06 | CT#88e | CP-201276 | 0194 | 1 | F | Traffic descriptor for xBDT | 16.4.0 |
| 2020-06 | CT#88e | CP-201256 | 0195 | 1 | F | URI of the Nudr\_DataRepository service for Policy, Application and Exposure data | 16.4.0 |
| 2020-06 | CT#88e | CP-201313 | 0197 |  | F | Data type of internalGroupId attribute | 16.4.0 |
| 2020-06 | CT#88e | CP-201228 | 0199 |  | F | Data model correction for IPTV | 16.4.0 |
| 2020-06 | CT#88e | CP-201228 | 0200 |  | F | Remove feature for IPTV data configuration | 16.4.0 |
| 2020-06 | CT#88e | CP-201244 | 0201 |  | F | Optionality of ProblemDetails | 16.4.0 |
| 2020-06 | CT#88e | CP-201233 | 0202 | 2 | F | Corrections on supported features definition | 16.4.0 |
| 2020-06 | CT#88e | CP-201244 | 0203 |  | F | required field in OpenAPI file | 16.4.0 |
| 2020-06 | CT#88e | CP-201244 | 0204 | 1 | F | Supported headers, Resource Data type | 16.4.0 |
| 2020-06 | CT#88e | CP-201255 | 0206 |  | F | Update in TS version in externalDocs field | 16.4.0 |
| 2020-09 | CT#89e | CP-202059 | 0207 |  | F | Include resouceURI in IptvConfigData for change notification association | 16.5.0 |
| 2020-09 | CT#89e | CP-202069 | 0208 |  | F | Include resouceURI in ServiceParameterData for change notification association | 16.5.0 |
| 2020-09 | CT#89e | CP-202209 | 0209 |  | F | Include resouceURI in TrafficInfluData for change notification association | 16.5.0 |
| 2020-09 | CT#89e | CP-202082 | 0210 |  | F | Include resouceURI in BdtPolicyData for change notification association | 16.5.0 |
| 2020-09 | CT#89e | CP-202073 | 0211 |  | F | Removal of sibling elements | 17.0.0 |
| 2020-09 | CT#89e | CP-202073 | 0212 |  | B | Resource Level Authorization for Policy Data, Application Data, and Exposure Data | 17.0.0 |
| 2020-09 | CT#89e | CP-202085 | 0214 |  | F | Update of TS version in externalDocs field | 17.0.0 |
| 2020-12 | CT#90e | CP-203139 | 0216 |  | A | TS 29.519 Essential Corrections and alignments | 17.1.0 |
| 2020-12 | CT#90e | CP-203110 | 0218 | 1 | A | Correction to support NEF binding indication | 17.1.0 |
| 2020-12 | CT#90e | CP-203129 | 0220 | 1 | A | Correction to the BDT policy re-negotiation | 17.1.0 |
| 2020-12 | CT#90e | CP-203139 | 0222 |  | A | Storage of YAML files in 3GPP Forge | 17.1.0 |
| 2020-12 | CT#90e | CP-203147 | 0223 | 2 | B | Data retrieval of multiple policy data sets | 17.1.0 |
| 2020-12 | CT#90e | CP-203154 | 0225 |  | A | MA Support indication within UE Context policy control subscription information | 17.1.0 |
| 2020-12 | CT#90e | CP-203139 | 0227 | 1 | A | Callback URI correction | 17.1.0 |
| 2020-12 | CT#90e | CP-203153 | 0229 |  | F | Update of TS version in externalDocs field | 17.1.0 |
| 2021-03 | CT#91e | CP-210226 | 0230 | 1 | B | Allow the retrieval of a set of policy data subsets for a UE | 17.2.0 |
| 2021-03 | CT#91e | CP-210218 | 0231 |  | F | Adding "description" field for map data types | 17.2.0 |
| 2021-03 | CT#91e | CP-210218 | 0232 |  | F | OpenAPI reference | 17.2.0 |
| 2021-03 | CT#91e | CP-210226 | 0233 |  | F | Encoding of Snssai as key of a map | 17.2.0 |
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| 2021-03 | CT#91e | CP-210198 | 0238 | 1 | A | UsageMonData: definition of "scopes" attribute | 17.2.0 |
| 2021-03 | CT#91e | CP-210198 | 0242 | 1 | A | PUT method for Exposure Data modification | 17.2.0 |
| 2021-03 | CT#91e | CP-210206 | 0244 | 1 | A | extend bdtpStatus to include VALID | 17.2.0 |
| 2021-03 | CT#91e | CP-210240 | 0248 |  | F | Update of TS version in externalDocs field | 17.2.0 |
| 2021-06 | CT#92e | CP-211242 | 0250 | 1 | F | Correction to Charging Information | 17.3.0 |
| 2021-06 | CT#92e | CP-211211 | 0252 | 3 | B | Correction to OSD handling | 17.3.0 |
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| 2021-06 | CT#92e | CP-211218 | 0257 | 1 | B | UDR application data update to support AF influence on URSP | 17.3.0 |
| 2021-06 | CT#92e | CP-211265 | 0259 |  | F | Update of TS version in externalDocs field | 17.3.0 |
| 2021-09 | CT#93e | CP-212242 | 0260 | 1 | B | AM Influence UDR models for DCAMP | 17.4.0 |
| 2021-09 | CT#93e | CP-212206 | 0261 | 1 | B | PDU session policy data extension for UE-Slice-MBR | 17.4.0 |
| 2021-09 | CT#93e | CP-212206 | 0263 | 1 | B | Policy Data extension for Slice-MBR | 17.4.0 |
| 2021-09 | CT#93e | CP-212224 | 0264 | 1 | F | Corrections to IPTV configuration data | 17.4.0 |
| 2021-09 | CT#93e | CP-212229 | 0266 | 1 | F | Correction of cardinality for xBDT | 17.4.0 |
| 2021-09 | CT#93e | CP-212190 | 0269 |  | F | Correction of data types of resetPeriod and resetTime in openAPI file | 17.4.0 |
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| 2021-09 | CT#93e | CP-2112223 | 0272 |  | F | Update of externalDocs field | 17.4.0 |
| 2021-12 | CT#94e | CP-213230 | 0275 | 1 | B | Correction on Network Slice Policy Control Subscription information | 17.5.0 |
| 2021-12 | CT#94e | CP-213230 | 0276 |  | B | Correction on PolicyDataChangeNotification | 17.5.0 |
| 2021-12 | CT#94e | CP-213222 | 0277 | 1 | B | Nudr impacts for the notification on the outcome of UE Policies delivery due to service specific parameter provisioning | 17.5.0 |
| 2021-12 | CT#94e | CP-213194 | 0278 |  | F | AM Influence Data: alignment with naming convention | 17.5.0 |
| 2021-12 | CT#94e | CP-213230 | 0279 | 1 | F | Presence conditions for attributes in SlicePolicyData | 17.5.0 |
| 2021-12 | CT#94e | CP-213234 | 0280 | 1 | B | Time Synch data in UDR | 17.5.0 |
| 2021-12 | CT#94e | CP-213239 | 0281 | 1 | F | Clarification about the data type used for UE policy section information | 17.5.0 |
| 2021-12 | CT#94e | CP-213194 | 0282 | 1 | B | AM Influence data model updates | 17.5.0 |
| 2021-12 | CT#94e | CP-213213 | 0283 | 1 | B | Updates to the 5G ProSe service parameters | 17.5.0 |
| 2021-12 | CT#94e | CP-213223 | 0286 | 1 | B | Clarification of AF preference for the user plane latency | 17.5.0 |
| 2021-12 | CT#94e | CP-213168 | 0288 | 2 | F | Feature negotiation at PFD data retrieval | 17.5.0 |
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| 2021-12 | CT#94e | CP-213223 | 0291 | 1 | B | AF Request for Simultaneous Connectivity over Source and Target PSA at Edge Relocation | 17.5.0 |
| 2021-12 | CT#94e | CP-213239 | 0293 | 1 | F | Naming Convention | 17.5.0 |
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| 2022-03 | CT#95e | CP-220327 | 0300 | 2 | B | resetId assignment to UDR consumers (PCF, NEF) | 17.6.0 |
| 2022-03 | CT#95e | CP-220195 | 0301 | 1 | D | Clause Correction | 17.6.0 |
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| 2022-03 | CT#95e | CP-220330 | 0303 | 2 | B | OpenAPI to support EAS Deployment Information Data | 17.6.0 |
| 2022-03 | CT#95e | CP-220183 | 0304 | 1 | B | Time Synch data updates | 17.6.0 |
| 2022-03 | CT#95e | CP-220176 | 0306 |  | A | Correction of query parameter content type | 17.6.0 |
| 2022-03 | CT#95e | CP-220215 | 0308 | 2 | F | Introduction of ServiceParameterDataPatch | 17.6.0 |
| 2022-03 | CT#95e | CP-220185 | 0309 |  | F | Removal of Editor's Notes for URSP encoding and DeliveryOutcome feature | 17.6.0 |
| 2022-03 | CT#95e | CP-220186 | 0310 | 1 | B | Support of binding principles for UE Policy Delivery outcome | 17.6.0 |
| 2022-03 | CT#95e | CP-220198 | 0312 | 1 | F | Updates of AM Influence Data resource | 17.6.0 |
| 2022-03 | CT#95e | CP-220198 | 0313 | 1 | F | Query for AM Influence data for Any UE | 17.6.0 |
| 2022-03 | CT#95e | CP-220197 | 0314 | 1 | B | Support of service area coverage notifications | 17.6.0 |
| 2022-03 | CT#95e | CP-220198 | 0315 | 1 | F | Solving Editor's Note on query parameters | 17.6.0 |
| 2022-03 | CT#95e | CP-220201 | 0316 | 1 | F | Formatting of description fields | 17.6.0 |
| 2022-03 | CT#95e | CP-220334 | 0318 | 2 | F | Query for Service Parameter Data for Any UE | 17.6.0 |
| 2022-03 | CT#95e | CP-220196 | 0320 | 1 | F | Subscription to notifications for Any UE | 17.6.0 |
| 2022-03 | CT#95e | CP-220195 | 0321 | 1 | F | Updates of Traffic Influence resource | 17.6.0 |
| 2022-03 | CT#95e | CP-220195 | 0322 | 2 | F | Correction to default values | 17.6.0 |
| 2022-03 | CT#95e | CP-220194 | 0324 |  | F | Update of info and externalDocs fields | 17.6.0 |
| 2022-06 | CT#96 | CP-221157 | 0326 |  | F | Removal of allowEmptyValue parameter | 17.7.0 |
| 2022-06 | CT#96 | CP-221153 | 0327 | 2 | F | Support of allowedDelay for PFD data | 17.7.0 |
| 2022-06 | CT#96 | CP-221126 | 0328 |  | F | Correction of supported features for Edge Computing functionality | 17.7.0 |
| 2022-06 | CT#96 | CP-221159 | 0329 | 2 | F | Handling of query parameters for AM Influence Data resource | 17.7.0 |
| 2022-06 | CT#96 | CP-221157 | 0330 | 1 | B | Policy Data Subscription enhancements | 17.7.0 |
| 2022-06 | CT#96 | CP-221157 | 0331 | 1 | F | Handling of combinations of attributes of DataFilter data type | 17.7.0 |
| 2022-06 | CT#96 | CP-221158 | 0332 | 2 | F | Handling of query parameters in Applied BDT Data | 17.7.0 |
| 2022-06 | CT#96 | CP-221158 | 0333 | 2 | F | Handling of query parameters in IPTV Configuration resource | 17.7.0 |
| 2022-06 | CT#96 | CP-221157 | 0334 | 1 | F | Handling of query parameters for PFD Data | 17.7.0 |
| 2022-06 | CT#96 | CP-221158 | 0335 | 2 | F | Handling of query parameters in Traffic Influence Data | 17.7.0 |
| 2022-06 | CT#96 | CP-221158 | 0336 | 2 | F | Handling of query parameters in Service Parameter Data resource | 17.7.0 |
| 2022-06 | CT#96 | CP-221155 | 0337 | 1 | B | Nudr\_DataRepository Application data Access Scope update for API, resource, operation | 17.7.0 |
| 2022-06 | CT#96 | CP-221155 | 0338 | 1 | B | Nudr\_DataRepository Exposure Data Access Scope update for API, resource, operation | 17.7.0 |
| 2022-06 | CT#96 | CP-221155 | 0339 | 1 | B | Nudr\_DataRepository Policy data Access Scope update for API, resource, operation | 17.7.0 |
| 2022-06 | CT#96 | CP-221126 | 0340 | 1 | F | Update on EAS Deployment Information Data | 17.7.0 |
| 2022-06 | CT#96 | CP-221159 | 0341 | 1 | F | Clarification about subscription to cha | 17.7.0 |
| 2022-06 | CT#96 | CP-221154 | 0342 | 1 | F | Removing the apiVersion placeholder from the Resource URI variables tables | 17.7.0 |
| 2022-06 | CT#96 | CP-221154 | 0343 |  | F | Nudr\_DataRepository Policy data description field update | 17.7.0 |
| 2022-06 | CT#96 | CP-221158 | 0344 | 1 | F | Dependencies between UM resource(s) and SM resource | 17.7.0 |
| 2022-06 | CT#96 | CP-221151 | 0345 |  | F | Update of info and externalDocs fields | 17.7.0 |
| 2022-09 | CT#97e | CP-222123 | 0346 | 2 | F | Correction in the handling of individual AM Influence Data resource | 17.8.0 |
| 2022-09 | CT#97e | CP-222123 | 0347 | 2 | F | Correction in the handling of individual Applied BDT Policy Data resource | 17.8.0 |
| 2022-09 | CT#97e | CP-222123 | 0348 | 2 | F | Correction in the handling of individual Influence Data resource | 17.8.0 |
| 2022-09 | CT#97e | CP-222123 | 0349 | 2 | F | Correction in the handling of individual IPTV configuration resource | 17.8.0 |
| 2022-09 | CT#97e | CP-222123 | 0350 | 2 | F | Correction in the handling of individual Service Parameter Data resource | 17.8.0 |
| 2022-09 | CT#97e | CP-222123 | 0351 |  | F | OpenAPI file for policy data: tabs removal and "description" field adding | 17.8.0 |
| 2022-09 | CT#97e | CP-222123 | 0352 | 1 | F | Application data API: definitions of 403 and 404 responses | 17.8.0 |
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| 2022-09 | CT#97e | CP-222121 | 0360 |  | F | Update of info and externalDocs fields | 17.8.0 |
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| 2022-12 | CT#98e | CP-223166 | 0367 |  | F | Correction to MbsSessPolCtrlData data type | 17.9.0 |
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| 2022-12 | CT#98e | CP-223192 | 0363 | 1 | F | Nudr\_DataRepository API for policy data: enumeration definitions | 18.0.0 |
| 2022-12 | CT#98e | CP-223199 | 0365 | 1 | F | Corrections to the resource EAS Deployment Information Data | 18.0.0 |
| 2022-12 | CT#98e | CP-223192 | 0369 |  | F | Corrections on Resource URI structures | 18.0.0 |
| 2022-12 | CT#98e | CP-223198 | 0370 |  | F | Correction to DNN encoding | 18.0.0 |
| 2022-12 | CT#98e | CP-223189 | 0371 |  | F | Update of info and externalDocs fields | 18.0.0 |
| 2023-03 | CT#99 | CP-230170 | 0372 | 1 | B | Service Function Chaining support in Nudr\_DataRepository | 18.1.0 |
| 2023-03 | CT#99 | CP-230165 | 0375 | 1 | A | Partial subscriptions corrections | 18.1.0 |
| 2023-03 | CT#99 | CP-230167 | 0377 | 1 | B | Immediate reporting for application data | 18.1.0 |
| 2023-03 | CT#99 | CP-230167 | 0378 | 1 | B | Immediate reporting for exposure data | 18.1.0 |
| 2023-03 | CT#99 | CP-230167 | 0380 | 1 | B | Addressing inconsistencies in the supported features negotiation | 18.1.0 |
| 2023-03 | CT#99 | CP-230137 | 0381 |  |  | Support External Subscriber Category | 18.1.0 |
| 2023-03 | CT#99 | CP-230163 | 0383 |  | A | Correction to allowedDelay for PFD data | 18.1.0 |
| 2023-03 | CT#99 | CP-230164 | 0386 |  | A | nternal-Group-Ids attribute correction | 18.1.0 |
| 2023-03 | CT#99 | CP-230166 | 0387 |  | F | Correction of the description fields in enumerations | 18.1.0 |
| 2023-03 | CT#99 | CP-230137 | 0389 | 1 | B | Support for AF traffic influence for common EAS, DNAI selection | 18.1.0 |
| 2023-03 | CT#99 | CP-230175 | 0390 | 1 | F | Support of indirect feature negotiation | 18.1.0 |
| 2023-03 | CT#99 | CP-230152 | 0391 | 1 | B | New Indication of URSP provisioning support in EPS | 18.1.0 |
| 2023-03 | CT#99 | CP-230167 | 0392 | 1 | B | Solving Editor’s Notes for Immediate Report of Policy Data | 18.1.0 |
| 2023-03 | CT#99 | CP-230167 | 0393 | 1 | B | Retrieval of Policy Data Subscriptions | 18.1.0 |
| 2023-03 | CT#99 | CP-230129 | 0397 | 1 | A | Correction of a misalignment in an attribute's name | 18.1.0 |
| 2023-03 | CT#99 | CP-230166 | 0398 |  | F | Corrections to query parameters not respecting the naming convention | 18.1.0 |
| 2023-03 | CT#99 | CP-230161 | 0399 |  | F | Update of info and externalDocs fields | 18.1.0 |
| 2023-06 | CT#100 | CP-231156 | 0400 | 1 | B | Support for A2X service parameters provisioning | 18.2.0 |
| 2023-06 | CT#100 | CP-231127 | 0401 |  | B | Introduction of PDTQ impacts in Nudr service | 18.2.0 |
| 2023-06 | CT#100 | CP-231131 | 0402 |  | F | Missing implementation for immediate reporting functionality | 18.2.0 |
| 2023-06 | CT#100 | CP-231149 | 0405 | 3 | B | Resource for Group-MBR in Nudr\_DataRepository service for Policy Data | 18.2.0 |
| 2023-06 | CT#100 | CP-231149 | 0406 | 3 | B | Data Model for Group-MBR in Nudr\_DataRepository service for Policy Data | 18.2.0 |
| 2023-06 | CT#100 | CP-231158 | 0407 | 1 | B | Correction to AF influence on Service Function Chaining | 18.2.0 |
| 2023-06 | CT#100 | CP-231135 | 0408 |  | B | Complete common DNAI and EAS selection | 18.2.0 |
| 2023-06 | CT#100 | CP-231171 | 0410 | 1 | B | Adding list of PLMN ID(s) for inbound roaming UEs in AM Influence Data. | 18.2.0 |
| 2023-06 | CT#100 | CP-231145 | 0411 | 1 | B | Add applicability information for URSP provisioning in EPS | 18.2.0 |
| 2023-06 | CT#100 | CP-231149 | 0412 | 1 | B | OpenAPI for Group-MBR in Nudr\_DataRepository service for Policy Data | 18.2.0 |
| 2023-06 | CT#100 | CP-231141 | 0414 |  | F | Update of externalDocs fields | 18.2.0 |
| 2023-09 | CT#101 | CP-232090 | 0416 | 1 | F | Corrections to the definition of Group related Policy Control Data | 18.3.0 |
| 2023-09 | CT#101 | CP-232114 | 0417 | 1 | A | Correction in ServiceParameterDataPatch data type | 18.3.0 |
| 2023-09 | CT#101 | CP-232099 | 0418 | 1 | B | CHF address(es) for policy decision | 18.3.0 |
| 2023-09 | CT#101 | CP-232099 | 0419 | 1 | B | Spending limits control for policy decision | 18.3.0 |
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| 2023-09 | CT#101 | CP-232101 | 0422 | 1 | B | Adding TNAP IDs to Service Parameter data | 18.3.0 |
| 2023-09 | CT#101 | CP-232101 | 0423 | 1 | B | Adding subscribed TNAP IDs to Policy data | 18.3.0 |
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| 2023-09 | CT#101 | CP-232086 | 0425 | 1 | B | Support for AM policy data in the operator specific data resource | 18.3.0 |
| 2023-09 | CT#101 | CP-232090 | 0427 | 1 | B | Removal of ENs on Group-MBR | 18.3.0 |
| 2023-09 | CT#101 | CP-232102 | 0429 | 1 | F | Correction on SFC terminology and editorial issues | 18.3.0 |
| 2023-09 | CT#101 | CP-232087 | 0430 | 1 | B | Update the storage of the PDTQ policy data | 18.3.0 |
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| 2023-09 | CT#101 | CP-232087 | 0432 |  | F | Correction of resource URI for resource IndividualPdtqData | 18.3.0 |
| 2023-09 | CT#101 | CP-232106 | 0434 |  | A | Correction on headers attribute | 18.3.0 |
| 2023-09 | CT#101 | CP-232183 | 0435 | 2 | B | Common EAS/DNAI determination for a set of UEs | 18.3.0 |
| 2023-09 | CT#101 | CP-232092 | 0436 | 1 | B | Completion of eUEPO impacts | 18.3.0 |
| 2023-09 | CT#101 | CP-232086 | 0438 | 1 | F | Correction to Service Parameter Data query | 18.3.0 |
| 2023-09 | CT#101 | CP-232103 | 0439 | 3 | B | Add ParmForRangingSl | 18.3.0 |
| 2023-09 | CT#101 | CP-232085 | 0442 |  | F | Update of info and externalDocs fields | 18.3.0 |
| 2023-09 | CT#101 | CP-232086 | 0443 |  | F | defining BdtReferenceIdRm data type | 18.3.0 |
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| 2023-12 | CT#102 | CP-233245 | 0450 | 2 | B | Resolving the remaining EN on group data rate control | 18.4.0 |
| 2023-12 | CT#102 | CP-233228 | 0451 |  | F | HTTP RFCs obsoleted by IETF RFC 9110 | 18.4.0 |
| 2023-12 | CT#102 | CP-233239 | 0452 | 1 | F | Data model corrections for TrafficCorrelationInfo | 18.4.0 |
| 2023-12 | CT#102 | CP-233240 | 0453 | 3 | B | DNAI-EAS Mappings data subset in the UDR | 18.4.0 |
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| 2023-12 | CT#102 | CP-233228 | 0456 |  | F | Correction in data type for AmInfluData | 18.4.0 |
| 2023-12 | CT#102 | CP-233235 | 0457 | 1 | F | Handling of the warning notification enabled flag. | 18.4.0 |
| 2023-12 | CT#102 | CP-233245 | 0460 | 3 | B | AF Requested QoS for a UE or Group of UEs | 18.4.0 |
| 2023-12 | CT#102 | CP-233245 | 0461 | 1 | B | Subscription to notification of changes of AF Requested QoS | 18.4.0 |
| 2023-12 | CT#102 | CP-233228 | 0462 |  | F | Correction to presence conditions in the OpenAPI file | 18.4.0 |
| 2023-12 | CT#102 | CP-233247 | 0464 | 1 | F | Correction to subscription to notification of changes of AF influence on AM Policies | 18.4.0 |
| 2023-12 | CT#102 | CP-233228 | 0465 |  | F | Removing the unnecessary resetIds attributes | 18.4.0 |
| 2023-12 | CT#102 | CP-233239 | 0466 | 1 | B | ECS Address Information in Roaming | 18.4.0 |
| 2023-12 | CT#102 | CP-233245 | 0467 | 1 | F | Security scopes are missing in OpenAPI definition for GroupPolicyControlData. | 18.4.0 |
| 2023-12 | CT#102 | CP-233267 | 0468 |  | F | Correcting the presence indicator of metadata attribute | 18.4.0 |
| 2023-12 | CT#102 | CP-233270 | 0469 | 1 | F | Incorrect feature name | 18.4.0 |
| 2023-12 | CT#102 | CP-233147 | 0470 | 2 | A | Correction of anyUeInd attribute | 18.4.0 |
| 2023-12 | CT#102 | CP-233247 | 0472 | 1 | F | EAS Deployment Data corrections | 18.4.0 |
| 2023-12 | CT#102 | CP-233244 | 0474 | 1 | B | Completion of LBO roaming information | 18.4.0 |
| 2023-12 | CT#102 | CP-233237 | 0475 |  | F | Update of externalDocs fields | 18.4.0 |