**3GPP TSG- Meeting #1 *5132***

**, , -**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **522** | **CR** | **1109** | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | EN related to PIN ID resolution. | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | PIN | | | | |  | ***Date:*** | | | 2023-11-06 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | 8 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Most of the attributes that represent different traffic descriptor component are of type string: for example – AppDescriptor – which is composed of OsId (defined as string in TS 29.519) and ApplicationId (defined as string in TS 29.571, flowDescs (defined as string in TS 29.522), domainDescs (defined as string in TS 29.522), DNN (defined as string in TS 29.571).  Hence it gives the AF, flexibility to assign different value to PIN ID, if it's defined as string type, inline with other traffic descriptors already defined. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | update pinId attribute data type as string and resolve the EN.  Editor’s note: The final data type of the "pinId" attribute is FFS. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Incomplete requirements. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.11.2.3.8, A.9 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR 24.526 CR 0236 | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR introduces new backward compatible correction to the open API – ServiceParmeter API | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* First change \* \* \* \*

##### 5.11.2.3.8 Type: TrafficDescriptorComponents

Table 5.11.2.3.8-1: Definition of type TrafficDescriptorComponents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| appDescs | map(AppDescriptor) | C | 1..N | Describes the operation systems and the corresponding applications for each operation systems. The key of map is osId. (NOTE 2) |  |
| flowDescs | array(string) | C | 1..N | Destination IP 3 tuple(s) (IP address or IPv6 network prefix, port number, protocol ID of the protocol above IP). The content of the string has the same encoding as the IPFilterRule AVP value as defined in IETF RFC 6733 [54], applicable only to the destination IP 3 tuple(s). (NOTE 3) |  |
| domainDescs | array(string) | C | 1..N | FQDN(s) or a regular expression which are used as a domain name matching criteria. (NOTE 4) |  |
| ethFlowDescs | array(EthFlowDescription) | C | 1..N | Descriptor(s) for destination information of non-IP traffic in which only ethernet flow description is defined. (NOTE 3) |  |
| dnns | array(Dnn) | C | 1..N | This is matched against the DNN information provided by the application. |  |
| connCaps | array(ConnectionCapabilities) | C | 1..N | This is matched against the information provided by a UE application when it requests a network connection with certain capabilities. |  |
| pinId | string | C | 0..1 | This is matched against a PIN ID for a specific PIN configured in the PEGC.  Its encoding shall comply with the UE policy part type URSP as defined inclause 5.3 of3GPP TS 24.526 [48].  (NOTE 5) | PIN |
| NOTE 1: At least one attribute of the above Traffic descriptor components shall be present.  NOTE 2: The information is used to identify the Application(s) that is(are) running on the UE's OS. The OSId does not include an OS version number. The OSAppId does not include a version number for the application.  NOTE 3: "flowDescs" attribute and "ethFlowDescs" attribute are mutually exclusive.  NOTE 4: The match of this traffic descriptor component does not require successful DNS resolution of the FQDN provided by the UE Application.  NOTE 5: "pinId" attribute and other attributes are mutually exclusive. | | | | | |

\* \* \* \* Next change \* \* \* \*

# A.9 ServiceParameter API

openapi: 3.0.0

info:

title: 3gpp-service-parameter

version: 1.2.0-alpha.3

description: |

API for AF service paramter

© 2023, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

All rights reserved.

externalDocs:

description: >

3GPP TS 29.522 V18.2.0; 5G System; Network Exposure Function Northbound APIs.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

- {}

- oAuth2ClientCredentials: []

servers:

- url: '{apiRoot}/3gpp-service-parameter/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122.

paths:

/{afId}/subscriptions:

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

get:

summary: read all of the active subscriptions for the AF

operationId: ReadAllSubscriptions

tags:

- Service Parameter Subscriptions

parameters:

- name: gpsis

in: query

description: The GPSI of the requested UE(s).

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

minItems: 1

- name: ip-addrs

in: query

description: The IP address(es) of the requested UE(s).

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/IpAddr'

minItems: 1

- name: ip-domain

in: query

description: >

The IPv4 address domain identifier. The attribute may only be provided

if IPv4 address is included in the ip-addrs query parameter.

required: false

schema:

type: string

- name: mac-addrs

in: query

description: The MAC address(es) of the requested UE(s).

required: false

schema:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

minItems: 1

responses:

'200':

description: OK.

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/ServiceParameterData'

minItems: 0

'307':

$ref: 'TS29122\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29122\_CommonData.yaml#/components/responses/308'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29122\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

post:

summary: Creates a new subscription resource

operationId: CreateAnSubscription

tags:

- Service Parameter Subscriptions

requestBody:

description: Request to create a new subscription resource

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

responses:

'201':

description: Created (Successful creation of subscription)

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

headers:

Location:

description: Contains the URI of the newly created resource.

required: true

schema:

type: string

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

callbacks:

notificationDestination:

'{$request.body#/notificationDestination}':

post:

requestBody:

description: >

Notifications upon AF Service Parameter Authorization Update,

and/or AF subscribed event notification of the outcome related

to the invocation of service parameters provisioning.

required: true

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/AfNotification'

minItems: 1

responses:

'204':

description: Expected response to a successful callback processing without a body

'307':

$ref: 'TS29122\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29122\_CommonData.yaml#/components/responses/308'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/{afId}/subscriptions/{subscriptionId}:

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

- name: subscriptionId

in: path

description: Identifier of the subscription resource

required: true

schema:

type: string

get:

summary: read an active subscriptions for the SCS/AS and the subscription Id

operationId: ReadAnSubscription

tags:

- Individual Service Parameter Subscription

responses:

'200':

description: OK (Successful get the active subscription)

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

'307':

$ref: 'TS29122\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29122\_CommonData.yaml#/components/responses/308'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'406':

$ref: 'TS29122\_CommonData.yaml#/components/responses/406'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

put:

summary: Fully updates/replaces an existing subscription resource

operationId: FullyUpdateAnSubscription

tags:

- Individual Service Parameter Subscription

requestBody:

description: Parameters to update/replace the existing subscription

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

responses:

'200':

description: OK (Successful update of the subscription)

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

'204':

description: OK (Successful update of the subscription)

'307':

$ref: 'TS29122\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29122\_CommonData.yaml#/components/responses/308'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

patch:

summary: Partial updates/replaces an existing subscription resource

operationId: PartialUpdateAnSubscription

tags:

- Individual Service Parameter Subscription

requestBody:

required: true

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/ServiceParameterDataPatch'

responses:

'200':

description: OK. The subscription was modified successfully.

content:

application/json:

schema:

$ref: '#/components/schemas/ServiceParameterData'

'204':

description: OK. The subscription was modified successfully.

'307':

$ref: 'TS29122\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29122\_CommonData.yaml#/components/responses/308'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

delete:

summary: Deletes an already existing subscription

operationId: DeleteAnSubscription

tags:

- Individual Service Parameter Subscription

responses:

'204':

description: No Content (Successful deletion of the existing subscription)

'307':

$ref: 'TS29122\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29122\_CommonData.yaml#/components/responses/308'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

ServiceParameterData:

description: Represents an individual Service Parameter subscription resource.

type: object

properties:

afServiceId:

type: string

description: Identifies a service on behalf of which the AF is issuing the request.

appId:

type: string

description: Identifies an application.

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

externalGroupId:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/ExternalGroupId'

anyUeInd:

type: boolean

description: >

Identifies whether the AF request applies to any UE. This attribute

shall set to "true" if applicable for any UE, otherwise, set to "false".

gpsi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

ueIpv4:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

ueIpv6:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

ueMac:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

self:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/Link'

subNotifEvents:

type: array

items:

$ref: '#/components/schemas/Event'

minItems: 1

notificationDestination:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

requestTestNotification:

type: boolean

description: >

Set to true by the AF to request the NEF to send a test notification

as defined in clause 5.2.5.3 of 3GPP TS 29.122. Set to false or omitted otherwise.

websockNotifConfig:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/WebsockNotifConfig'

paramOverPc5:

$ref: '#/components/schemas/ParameterOverPc5'

paramOverUu:

$ref: '#/components/schemas/ParameterOverUu'

paramForProSeDd:

$ref: '#/components/schemas/ParamForProSeDd'

paramForProSeDc:

$ref: '#/components/schemas/ParamForProSeDc'

paramForProSeU2NRelUe:

$ref: '#/components/schemas/ParamForProSeU2NRelUe'

paramForProSeRemUe:

$ref: '#/components/schemas/ParamForProSeRemUe'

paramForProSeU2URelUe:

$ref: '#/components/schemas/ParamForProSeU2URelUe'

paramForProSeEndUe:

$ref: '#/components/schemas/ParamForProSeEndUe'

urspGuidance:

type: array

items:

$ref: '#/components/schemas/UrspRuleRequest'

minItems: 1

description: Contains the service parameter used to guide the URSP.

a2xParamsPc5:

$ref: '#/components/schemas/A2xParamsPc5'

mtcProviderId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MtcProviderInformation'

suppFeat:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

ServiceParameterDataPatch:

description: >

Represents the parameters to request the modification of a service parameter

subscription resource.

type: object

properties:

paramOverPc5:

$ref: '#/components/schemas/ParameterOverPc5Rm'

paramOverUu:

$ref: '#/components/schemas/ParameterOverUuRm'

paramForProSeDd:

$ref: '#/components/schemas/ParamForProSeDdRm'

paramForProSeDc:

$ref: '#/components/schemas/ParamForProSeDcRm'

paramForProSeU2NRelUe:

$ref: '#/components/schemas/ParamForProSeU2NRelUeRm'

paramForProSeRemUe:

$ref: '#/components/schemas/ParamForProSeRemUeRm'

paramForProSeU2URelUe:

$ref: '#/components/schemas/ParamForProSeU2URelUeRm'

paramForProSeEndUe:

$ref: '#/components/schemas/ParamForProSeEndUeRm'

urspGuidance:

type: array

items:

$ref: '#/components/schemas/UrspRuleRequest'

minItems: 1

description: Contains the service parameter used to guide the URSP.

a2xParamsPc5:

$ref: '#/components/schemas/A2xParamsPc5Rm'

subNotifEvents:

type: array

items:

$ref: '#/components/schemas/Event'

minItems: 1

nullable: true

notificationDestination:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

ParameterOverPc5:

description: >

Represents configuration parameters for V2X communications over PC5 reference point.

type: string

ParameterOverPc5Rm:

description: >

Represents the same as the ParameterOverPc5 data type but with the nullable:true property.

type: string

nullable: true

ParameterOverUu:

description: >

Represents configuration parameters for V2X communications over Uu reference point.

type: string

ParameterOverUuRm:

description: >

Represents the same as the ParameterOverUu data type but with the nullable:true property.

type: string

nullable: true

ParamForProSeDd:

description: Represents the service parameters for 5G ProSe direct discovery.

type: string

ParamForProSeDdRm:

description: >

This data type is defined in the same way as the ParamForProSeDd data type,

but with the OpenAPI nullable property set to true.

type: string

nullable: true

ParamForProSeDc:

description: Represents the service parameters for 5G ProSe direct communications.

type: string

ParamForProSeDcRm:

description: >

This data type is defined in the same way as the ParamForProSeDc data type,

but with the OpenAPI nullable property set to true.

type: string

nullable: true

ParamForProSeU2NRelUe:

description: Represents the service parameters for 5G ProSe UE-to-network relay UE.

type: string

ParamForProSeU2NRelUeRm:

description: >

This data type is defined in the same way as the ParamForProSeU2NRelay data type,

but with the OpenAPI nullable property set to true.

type: string

nullable: true

ParamForProSeRemUe:

description: Represents the service parameters for 5G ProSe Remote UE.

type: string

ParamForProSeRemUeRm:

description: >

This data type is defined in the same way as the ParamForProSeRemUe data type,

but with the OpenAPI nullable property set to true.

type: string

nullable: true

ParamForProSeU2URelUe:

description: Represents the service parameters for 5G ProSe UE-to-UE relay UE.

type: string

ParamForProSeU2URelUeRm:

description: >

This data type is defined in the same way as the ParamForProSeU2URelay data type,

but with the OpenAPI nullable property set to true.

type: string

nullable: true

ParamForProSeEndUe:

description: Represents the service parameters for 5G ProSe End UE.

type: string

ParamForProSeEndUeRm:

description: >

This data type is defined in the same way as the ParamForProSeEndUe data type,

but with the OpenAPI nullable property set to true.

type: string

nullable: true

A2xParamsPc5:

description: >

Represents configuration parameters for A2X communications over PC5 reference point.

type: string

A2xParamsPc5Rm:

description: >

Represents the same as the A2xParamsPc5 data type but with the nullable:true property.

type: string

nullable: true

UrspRuleRequest:

description: Contains parameters that can be used to guide the URSP.

type: object

properties:

trafficDesc:

$ref: '#/components/schemas/TrafficDescriptorComponents'

relatPrecedence:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

routeSelParamSets:

type: array

items:

$ref: '#/components/schemas/RouteSelectionParameterSet'

minItems: 1

description: >

Sets of parameters that may be used to guide the Route Selection Descriptors of the

URSP.

RouteSelectionParameterSet:

description: >

Contains parameters that can be used to guide the Route Selection

Descriptors of the URSP.

type: object

properties:

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

precedence:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

spatialValidityAreas:

type: array

items:

$ref: 'TS29522\_AMPolicyAuthorization.yaml#/components/schemas/GeographicalArea'

minItems: 1

description: >

Indicates where the route selection parameters apply. It may correspond

to a geographical area, for example using a geographic shape that

is known to the AF and is configured by the operator to correspond to a list

of or TAIs.

spatialValidityTais:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Tai'

minItems: 1

description: >

Indicates the TAIs in which the route selection parameters apply. This attribute is

applicable only within the 5GC and it shall not be included in the request messages of

untrusted AFs for URSP guidance.

Event:

anyOf:

- type: string

enum:

- SUCCESS\_UE\_POL\_DEL\_SP

- UNSUCCESS\_UE\_POL\_DEL\_SP

- 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.

description: |

Represents the AF subscribe to event notification of the outcome related to the

invocation of AF provisioned service parameters.

Possible values are:

- SUCCESS\_UE\_POL\_DEL\_SP: Successful UE Policy Delivery related to

the invocation of AF provisioned Service Parameters.

- UNSUCCESS\_UE\_POL\_DEL\_SP: Unsuccessful UE Policy Delivery related to the invocation of AF

provisioned Service Parameters.

AfNotification:

description: >

Notifications upon AF Service Parameter Authorization Update e.g. to

revoke the authorization, and/or AF subscribed event notification of the

outcome related to the invocation of service parameter provisioning.

type: object

properties:

subscription:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/Link'

reportEvent:

$ref: '#/components/schemas/Event'

authResult:

$ref: '#/components/schemas/AuthorizationResult'

gpsis:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

minItems: 1

dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

snssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

eventInfo:

$ref: '#/components/schemas/EventInfo'

required:

- subscription

anyOf:

- required: [reportEvent]

- required: [authResult]

TrafficDescriptorComponents:

description: Traffic descriptor components for the requested URSP.

type: object

properties:

appDescs:

type: object

additionalProperties:

$ref: 'TS29522\_5GLANParameterProvision.yaml#/components/schemas/AppDescriptor'

minProperties: 1

description: >

Describes the operation systems and the corresponding applications for each

operation systems. The key of map is osId.

flowDescs:

type: array

items:

type: string

minItems: 1

description: >

Represents a 3-tuple with protocol, server ip and server port for UL/DL

application traffic. The content of the string has the same encoding as the IPFilterRule

AVP value as defined in IETF RFC 6733.

domainDescs:

type: array

items:

type: string

minItems: 1

description: >

FQDN(s) or a regular expression which are used as a domain name matching

criteria.

ethFlowDescs:

type: array

items:

$ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/EthFlowDescription'

minItems: 1

description: >

Descriptor(s) for destination information of non-IP traffic in which only

ethernet flow description is defined.

dnns:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

minItems: 1

description: This is matched against the DNN information provided by the application.

connCaps:

type: array

items:

$ref: '#/components/schemas/ConnectionCapabilities'

minItems: 1

description: >

This is matched against the information provided by a UE application when it

requests a network connection with certain capabilities.

pinId:

type: string

description: This is matched against a PIN ID for a specific PIN configured in the PEGC.

oneOf:

- required: [pinId]

- anyOf:

- required: [appDescs]

- required: [flowDescs]

- required: [domainDescs]

- required: [ethFlowDescs]

- required: [dnns]

- required: [connCaps]

AuthorizationResult:

anyOf:

- type: string

enum:

- AUTH\_REVOKED

- 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.

description: |

Represents the NEF notify the AF about the service parameters authorization updates result,

e.g. to revoke an authorization.

Possible values are:

- AUTH\_REVOKED: Indicated the service parameters authorization is revoked.

EventInfo:

description: Indicates the event information.

type: object

properties:

failureCause:

$ref: '#/components/schemas/Failure'

Failure:

oneOf:

- type: string

enum:

- UNSPECIFIED

- UE\_NOT\_REACHABLE

- UNKNOWN

- UE\_TEMP\_UNREACHABLE

- 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.

description: |

Represents the failure reason for the unsuccessful result.

Possible values are:

- UNSPECIFIED: Indicates the PCF received the UE sent UE policy delivery service cause #111

(Protocol error, unspecified).

- UE\_NOT\_REACHABLE: Indicates the PCF received the notification from the AMF that the UE is

not reachable.

- UNKNOWN: Indicates unknown reasons upon no response from the UE, e.g. UPDS message type is

not defined or not implemented by the UE, or not compatible with the UPDS state, in which

the UE shall ignore the UPDS message.

- UE\_TEMP\_UNREACHABLE: Indicates the PCF received the notification from the AMF that the UE

is not reachable but the PCF will retry again.

ConnectionCapabilities:

anyOf:

- type: string

enum:

- IMS

- MMS

- SUPL

- INTERNET

- 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.

description: |

Represents the information provided by a UE application when it requests a network

connection with certain capabilities.

Possible values are:

- IMS: Indicates the connection capability to support IMS service.

- MMS: Indicates the connection capability to support MMS service.

- SUPL: Indicates the connection capability to support SUPL service.

- INTERNET: Indicates the connection capability to support Internet service.

\* \* \* \* End of changes \* \* \* \*