**3GPP TSG CT WG3 Meeting #142 C3-253387**

**Goteborg, Sweden, 25 – 29 August, 2025 is revision of C3-253050, 3080, 3387**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.514** | **CR** | **0790** | **rev** | **1** | **Current version:** | **19.3.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Update the multiplexed media information handling | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | China Mobile, Ericsson, Huawei, Lenovo, Nokia, Interdigital Communications | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | XRM\_Ph2 | | | | |  | ***Date:*** | | | 2025-08-05 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | **Regarding the following editor's notes:**  Editor's note: Further (S)RTP Multiplexed Media Information for identification of multiplexed RTCP packets is FFS depending on input from SA4.  Editor's note: Whether the RTP payload type and RTCP packet type in the multiplexed media can share the overlapping range is FFS.  LS [S4-242065](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_130_Orlando/Docs/S4-242065.zip) has clarified that certain (S)RTP header fields are sufficient to identify the multiplexed RTCP packets.  In addition, LS [S4-251471](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_133-e/Docs/S4-251471.zip) points out the rules listed in section 4 of RFC 5761 can be used to distinguish the RTP packets and the RTCP packets which are multiplexed in the same port. There is a possibility for RTP payload type and RTCP packet type overlapping. However, it has to be ensured that they cannot have the same value at the same time.  **Regarding the following editor's note:**  Editor's note: How the data type "MpxMediaInfo" is used for the attribute "mpxMediaInfos" and the corresponding impact to the OpenAPI are FFS.  There is a statement in TS 23.501 saying  *Several media flows could be multiplexed on the same end-to-end transport layer connection. In order to uniquely identify each media flow, the IP Packet Filter can further include multiplexed media specific (S)RTP Multiplexed Media Identification Information to differentiate the media flow among multiple media flows that share the same transport layer related elements in the packet filter (see clause 5.7.6.2).*  Also TS 23.502 stated, the AF may include the SRTP Multiplexed Media Identification Information in the FlowDescription as:  *The AF may include (S)RTP Multiplexed Media Identification Information in the Flow Description and separate service requirements per media flow and requests for differentiated QoS handling for media flows multiplexed into a single UDP/IP traffic flow as described in clause 6.1.3.27.7 of TS 23.503 [20].*  In addition, CR#0031 against TS 26.510 in document number [S4-251225](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_133-e/Docs/S4-251225.zip), shows in Annex D.1.2 that the attribute with the data type MpxMediaInfo is an array.  Therefore, it is clear that the multiplexed media information shall be defined in the flow description. In stage 3, the data type for the multiplexed media information is still open with editor’s note and now it can be removed and finalized with SA4 LS reply. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Update the MediaSubComponent and MediaSubComponentRm to be able to include the multiplexed media identification information.  Remove editor’s notes for multiplexed media identification information related.  Add clarification for RTP payload type and RTCP packet type. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Multiplexed media identificaiton information is not complete and not aligned with SA2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.2.2.47, 4.2.3.46, 5.6.2.8, 5.6.2.27, 5.6.2.61, A.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 26.510 CR 0031 | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR introduces backward compatible feature to the following APIs:  TS29122\_AsSessionWithQoS.yaml  TS29514\_Npcf\_PolicyAuthorization.yaml  TS29565\_Ntsctsf\_QoSandTSCAssistance.yaml | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\*\*\* 1st Change \*\*\*

4.2.2.47 Provisioning of the Multiplexed Media Identification Information

When the "MpxMedia" feature is supported, the NF service consumer may specify the Multiplexed Media Identification Information for the Uplink and/or Downlink IP flows within the "mpxMediaUlInfos" and/or "mpxMediaDlInfos" attributes, repectively to uniquely identify each media flow of multiplexed media.

NOTE: Data traffic of different media components with different QoS requirements could be multiplexed on the same end-to-end transport layer connection. Multiplexed Media Identification Information can be useful when another packet filter attribute is needed to differentiate between the multiplexed media flows.

The PCF shall reply to the NF service consumer as described in clause 4.2.2.2.

As result of this action, the PCF shall determine the PCC rules and provide to the SMF as described in 3GPP TS 29.512 [8].

\*\*\* Next Change \*\*\*

4.2.3.46 Modification of the Multiplexed Media Identification Information

When the "MpxMedia" feature is supported, the NF service consumer may include in the HTTP PATCH request message described in clause 4.2.3.2, in the "ascReqData" attribute, in the corresponding "medSubComponent" entries of the "medComponents" attribute, the "mpxMediaUlInfos" and/or "mpxMediaDlInfos" attributes with the Multiplexed Media Identification Information.

As a result of this action, the PCF shall update the policies for the multiplexed media flows to the SMF as described in 3GPP TS 29.512 [8].

\*\*\* Next Change \*\*\*

#### 5.6.2.8 Type MediaSubComponent

Table 5.6.2.8-1: Definition of type MediaSubComponent

| Attribute name | Data type | P | Cardinality | Description | Applicability |
| --- | --- | --- | --- | --- | --- |
| afSigProtocol | AfSigProtocol | O | 0..1 | Indicates the protocol used for signalling between the UE and the NF service consumer. It may be included only if the "flowUsage" attribute is set to the value "AF\_SIGNALLING". | ProvAFsignalFlow |
| ethfDescs | array(EthFlowDescription) | O | 1..2 | Contains the flow description for the Uplink and/or Downlink Ethernet flows. |  |
| fNum | integer | M | 1 | Identifies the ordinal number of the service data flow. |  |
| fDescs | array(FlowDescription) | O | 1..2 | Contains the flow description for the Uplink and/or Downlink IP flows. |  |
| addInfoFlowDescs | array(AddFlowDescriptionInfo) | O | 1..2 | Represents additional flow description information (flow label and IPsec SPI) per Uplink and/or Downlink IP flows represented in the "fDescs" attribute. | AddFlowDescriptionInformation |
| fStatus | FlowStatus | O | 0..1 | Indicates whether the status of the service data flows is enabled or disabled. |  |
| flowUsage | FlowUsage | O | 0..1 | Flow usage of the flows (e.g. RTCP, AF signalling). |  |
| marBwUl | BitRate | O | 0..1 | Maximum requested bandwidth for the Uplink. |  |
| marBwDl | BitRate | O | 0..1 | Maximum requested bandwidth for the Downlink. |  |
| tosTrCl | TosTrafficClass | O | 0..1 | Type of Service or Traffic Class. |  |
| evSubsc | EventsSubscReqData | O | 0..1 | Identifies the events the application subscribes to at creation of a media component. (NOTE 1, NOTE 2) | EnQoSMon,  L4S |
| mpxMediaUlInfos | array(MpxMediaInfo) | O | 1..N | Contains the Multiplexed Media Identification Information for the Uplink IP flows based on the flow description. | MpxMedia |
| mpxMediaDlInfos | array(MpxMediaInfo) | O | 1..N | Contains the Multiplexed Media Identification Information for the Downlink IP flows based on the flow description. | MpxMedia |
| NOTE 1: If attribute "evSubsc" is present, one or more of the following IEs within EventsSubscReqData data type may be included: "events", "notifUri", "reqQosMonParams", "qosMon", "qosMonDatRate", "pdvReqMonParams", "pdvMon", "congestMon", "notifCorreId", "rttMon", "directNotifInd", "avrgWndw". In addition, when the attribute "events" is present, only the following Enumeration "AfEvent" may be included: "QOS\_MONITORING", "PACK\_DEL\_VAR", "RT\_DELAY\_TWO\_QOS\_FLOWS", "L4S\_SUPP".  NOTE 2: Within the MediaSubComponent entry, the NF service consumer may include the subscription for congestion measurements within the "evSubsc" attribute only if the "l4sInd" attribute is not included within the corresponding MediaComponent entry. | | | | | |

The bit rate information and flow status information provided within the "MediaSubComponent" data type takes precedence over information provided within "MediaComponent" data type.

All service data flows within a "MediaSubComponent" data type are permanently disabled by supplying "FlowStatus" data type with a deletion indication.

If the "EnQoSMon" feature is supported, and the NF service consumer includes the attribute "evSubsc" in the "MediaSubComponent" data type with a subscription to a specific event, then the "evSubsc" attribute within the "AppSessionContextReqData" data type shall not include a subscription to notifications for that specific event. In this case, the PCF shall use the value of the "notifUri" attribute included within the "evSubsc" attribute in the "MediaSubComponent" data type as target URI of the HTTP POST request for that specific event notification.

NOTE: The NF service consumer can provide different values per media subcomponent for the "notifUri" attribute and/or "notifCorreId" attribute, e.g. to identify to the media subcomponent of a received report.

\*\*\* Next Change \*\*\*

#### 5.6.2.27 Type MediaSubComponentRm

This data type is defined in the same way as the "MediaSubComponent" data type, but:

- with the OpenAPI "nullable: true" property;

- the removable attributes "marBwDl", "marBwUl", defined with the removable data type "BitRateRm"; the removable attribute "tosTrCl", defined with the removable data type "TosTrafficClassRm"; the removable attribute "evSubsc" defined with the removable data type "EventsSubscReqDataRm"; and

- the removable attributes "ethfDescs" and "fDescs" and "addInfoFlowDescs" are defined as nullable in the OpenAPI.

Table 5.6.2.27-1: Definition of type MediaSubComponentRm

| Attribute name | Data type | P | Cardinality | Description | Applicability |
| --- | --- | --- | --- | --- | --- |
| afSigProtocol | AfSigProtocol | O | 0..1 | Indicates the protocol used for signalling between the UE and the NF service consumer. It may be included only if the "flowUsage" attribute is set to the value "AF\_SIGNALLING". | ProvAFsignalFlow |
| ethfDescs | array(EthFlowDescription) | O | 1..2 | Contains the flow description for the Uplink and/or Downlink Ethernet flows. |  |
| fNum | integer | M | 1 | Identifies the ordinal number of the IP flow. |  |
| fDescs | array(FlowDescription) | O | 1..2 | Contains the flow description for the Uplink and/or Downlink IP flows. |  |
| addInfoFlowDescs | array(AddFlowDescriptionInfo) | O | 1..2 | Represents additional flow description information (flow label and IPsec SPI) per Uplink and/or Downlink IP flows represented in the "fDescs" attribute. | AddFlowDescriptionInformation |
| fStatus | FlowStatus | O | 0..1 | Indicates whether the status of the service data flows is enabled or disabled. |  |
| flowUsage | FlowUsage | O | 0..1 | Flow usage of the flows (e.g. RTCP, AF signalling). |  |
| marBwUl | BitRateRm | O | 0..1 | Maximum requested bandwidth for the Uplink. |  |
| marBwDl | BitRateRm | O | 0..1 | Maximum requested bandwidth for the Downlink. |  |
| tosTrCl | TosTrafficClassRm | O | 0..1 | Type of Service or Traffic Class. |  |
| evSubsc | EventsSubscReqDataRm | O | 0..1 | Identifies the events the application subscribes to at update of a media component. (NOTE 1, NOTE 2) | EnQoSMon,  L4S |
| mpxMediaUlInfos | array(MpxMediaInfo) | O | 1..N | Contains the Multiplexed Media Identification Information for the Uplink IP flows based on the flow description. | MpxMedia |
| mpxMediaDlInfos | array(MpxMediaInfo) | O | 1..N | Contains the Multiplexed Media Identification Information for the Downlink IP flows based on the flow description. | MpxMedia |
| NOTE 1: If attribute "evSubsc" is present, one or more of the following IEs within EventsSubscReqDataRm data type may be included: "events", "notifUri", "reqQosMonParams", "qosMon", "qosMonDatRate", "pdvReqMonParams", "pdvMon", "congestMon", "notifCorreId", "rttMon", "directNotifInd", "avrgWndw". In addition, when the attribute "events" is present, only the following Enumeration "AfEvent" may be included: "QOS\_MONITORING", "PACK\_DEL\_VAR", "RT\_DELAY\_TWO\_QOS\_FLOWS", "L4S\_SUPP".  NOTE 2: Within a MediaSubComponentRm entry, the NF service consumer may include the subscription for congestion measurements within the "evSubsc" attribute only if the "l4sInd" attribute is not included within the corresponding MediaComponent entry. | | | | | |

\*\*\* Next Change \*\*\*

#### 5.6.2.61 Type MpxMediaInfo

Table 5.6.2.61-1: Definition of type MpxMediaInfo

| Attribute name | Data type | P | Cardinality | Description | Applicability |
| --- | --- | --- | --- | --- | --- |
| ssrcId | Uint32 | C | 0..1 | Contains the synchronization source as defined in IETF RFC 3550 [58].  (NOTE 1) |  |
| payloadType | Uinteger | C | 0..1 | Contains the Payload Type value in the RTP header of RTP packets as defined in IETF RFC 3550 [58].  When this attribute is present, the multiplex media information instance may be applicable only to (S)RTP traffic.  Minimum = 0. Maximum = 127. (NOTE 1), (NOTE 2), (NOTE 3) |  |
| identificationTag | string | C | 0..1 | Contains the media identification in terms of identification-tag as defined in IETF RFC 9143 [59].  (NOTE 1) |  |
| rtpSdesHdrExtId | Uinteger | C | 0..1 | Contains the RTP SDES Header Extension ID for MID as defined in clause 9.1 of IETF RFC 9143 [59] and IETF RFC 8285 [60].  This attribute may be present only when identification-tag attribute is present.  For SDP example of RTP SDES header extension ID:  a=extmap:**1** urn:ietf:params:rtp-hdrext:sdes:mid  extmap attribute's value "1" has to be transmitted as RTP SDES Header Extension ID for MID.  (NOTE 1) |  |
| rtcpPacketType | Uinteger | C | 0..1 | Contains the Packet Type value of RTCP packets.  When this attribute is present, the multiplex media information instance may be applicable only to (S)RTCP traffic.  Minimum = 0. Maximum = 255. (NOTE 1), (NOTE 2), (NOTE 3) |  |
| NOTE 1: At least one of the "ssrcId", "payloadType", "rtcpPacketType", "identificationTag" and the combination of "identificationTag" and "rtpSdesHdrExtId" attributes shall be present.  NOTE 2: These attributes are mutually exclusive.  NOTE 3: End System shall ensure the RTP type and RTCP type are distinguishable as specified in IETF RFC 5761 [31]. | | | | | |

\*\*\* Next Change \*\*\*

# A.2 Npcf\_PolicyAuthorization API

openapi: 3.0.0

info:

title: Npcf\_PolicyAuthorization Service API

version: 1.4.0-alpha.4

description: |

PCF Policy Authorization Service.

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externalDocs:

description: 3GPP TS 29.514 V19.3.0; 5G System; Policy Authorization Service; Stage 3.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.514/'

servers:

- url: '{apiRoot}/npcf-policyauthorization/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 4.4 of 3GPP TS 29.501

security:

- {}

- oAuth2ClientCredentials:

- npcf-policyauthorization

paths:

/app-sessions:

post:

summary: Creates a new Individual Application Session Context resource

operationId: PostAppSessions

tags:

- Application Sessions (Collection)

security:

- {}

- oAuth2ClientCredentials:

- npcf-policyauthorization

- oAuth2ClientCredentials:

- npcf-policyauthorization

- npcf-policyauthorization:policy-auth-mgmt

requestBody:

description: Contains the information for the creation the resource.

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Successful creation of the resource

content:

application/json:

schema:

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

headers:

Location:

description: >

Contains the URI of the created individual application session context resource,

according to the structure

{apiRoot}/npcf-policyauthorization/v1/app-sessions/{appSessionId}

or the URI of the created events subscription sub-resource,

according to the structure

{apiRoot}/npcf-policyauthorization/v1/app-sessions/{appSessionId}

/events-subscription

required: true

schema:

type: string

'303':

description: >

See Other. The result of the HTTP POST request would be equivalent to the existing

Application Session Context.

headers:

Location:

description: >

Contains the URI of the existing individual Application Session Context resource.

required: true

schema:

type: string

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

description: Forbidden

content:

application/problem+json:

schema:

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

headers:

Retry-After:

description: >

Indicates the time the AF has to wait before making a new request. It can be a

non-negative integer (decimal number) indicating the number of seconds the AF

has to wait before making a new request or an HTTP-date after which the AF can

retry a new request.

schema:

anyOf:

- type: integer

- type: string

'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:

terminationRequest:

'{$request.body#/ascReqData/notifUri}/terminate':

post:

requestBody:

description: >

Request of the termination of the Individual Application Session Context.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

eventNotification:

'{$request.body#/ascReqData/evSubsc/notifUri}/notify':

post:

requestBody:

description: Notification of an event occurrence in the PCF.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

detected5GsBridgeForPduSession:

'{$request.body#/ascReqData/evSubsc/notifUri}/new-bridge':

post:

requestBody:

description: Notification of a new TSC user plane node detected in the PCF.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

eventNotificationPduSession:

'{$request.body#/ascReqData/evSubsc/notifUri}/pdu-session':

post:

requestBody:

description: Notification of PDU session established or terminated.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

/app-sessions/pcscf-restoration:

post:

summary: "Indicates P-CSCF restoration and does not create an Individual Application Session Context"

operationId: PcscfRestoration

tags:

- PCSCF Restoration Indication

requestBody:

description: PCSCF Restoration Indication.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The deletion is confirmed without returning additional data.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

/app-sessions/{appSessionId}:

get:

summary: "Reads an existing Individual Application Session Context"

operationId: GetAppSession

tags:

- Individual Application Session Context (Document)

security:

- {}

- oAuth2ClientCredentials:

- npcf-policyauthorization

- oAuth2ClientCredentials:

- npcf-policyauthorization

- npcf-policyauthorization:policy-auth-mgmt

parameters:

- name: appSessionId

description: String identifying the resource.

in: path

required: true

schema:

type: string

responses:

'200':

description: A representation of the resource is returned.

content:

application/json:

schema:

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

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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: "Modifies an existing Individual Application Session Context"

operationId: ModAppSession

tags:

- Individual Application Session Context (Document)

security:

- {}

- oAuth2ClientCredentials:

- npcf-policyauthorization

- oAuth2ClientCredentials:

- npcf-policyauthorization

- npcf-policyauthorization:policy-auth-mgmt

parameters:

- name: appSessionId

description: String identifying the resource.

in: path

required: true

schema:

type: string

requestBody:

description: Modification of the resource.

required: true

content:

application/merge-patch+json:

schema:

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

responses:

'200':

description: >

Successful modification of the resource and a representation of that resource is

returned.

content:

application/json:

schema:

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

'204':

description: The successful modification.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

description: Forbidden

content:

application/problem+json:

schema:

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

headers:

Retry-After:

description: >

Indicates the time the AF has to wait before making a new request. It can be a

non-negative integer (decimal number) indicating the number of seconds the AF has

to wait before making a new request or an HTTP-date after which the AF can retry

a new request.

schema:

anyOf:

- type: integer

- type: string

'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:

eventNotification:

'{$request.body#/ascReqData/evSubsc/notifUri}/notify':

post:

requestBody:

description: Notification of an event occurrence in the PCF.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

/app-sessions/{appSessionId}/delete:

post:

summary: "Deletes an existing Individual Application Session Context"

operationId: DeleteAppSession

tags:

- Individual Application Session Context (Document)

security:

- {}

- oAuth2ClientCredentials:

- npcf-policyauthorization

- oAuth2ClientCredentials:

- npcf-policyauthorization

- npcf-policyauthorization:policy-auth-mgmt

parameters:

- name: appSessionId

description: String identifying the Individual Application Session Context resource.

in: path

required: true

schema:

type: string

requestBody:

description: >

Deletion of the Individual Application Session Context resource, req notification.

required: false

content:

application/json:

schema:

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

responses:

'200':

description: The deletion of the resource is confirmed and a resource is returned.

content:

application/json:

schema:

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

'204':

description: The deletion is confirmed without returning additional data.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

/app-sessions/{appSessionId}/events-subscription:

put:

summary: "creates or modifies an Events Subscription subresource"

operationId: updateEventsSubsc

tags:

- Events Subscription (Document)

parameters:

- name: appSessionId

description: String identifying the Events Subscription resource.

in: path

required: true

schema:

type: string

requestBody:

description: Creation or modification of an Events Subscription resource.

required: true

content:

application/json:

schema:

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

responses:

'201':

description: >

The creation of the Events Subscription resource is confirmed and its representation is

returned.

content:

application/json:

schema:

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

headers:

Location:

description: >

Contains the URI of the created Events Subscription resource,

according to the structure

{apiRoot}/npcf-policyauthorization/v1/app-sessions/{appSessionId}/

events-subscription

required: true

schema:

type: string

'200':

description: >

The modification of the Events Subscription resource is confirmed its representation is

returned.

content:

application/json:

schema:

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

'204':

description: >

The modification of the Events Subscription subresource is confirmed without returning

additional data.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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:

eventNotification:

'{$request.body#/notifUri}/notify':

post:

requestBody:

description: >

Contains the information for the notification of an event occurrence in the PCF.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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 Events Subscription subresource

operationId: DeleteEventsSubsc

tags:

- Events Subscription (Document)

parameters:

- name: appSessionId

description: String identifying the Individual Application Session Context resource.

in: path

required: true

schema:

type: string

responses:

'204':

description: >

The deletion of the of the Events Subscription sub-resource is confirmed without

returning additional data.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{nrfApiRoot}/oauth2/token'

scopes:

npcf-policyauthorization: Access to the Npcf\_PolicyAuthorization API

npcf-policyauthorization:policy-auth-mgmt: >

Access to service operations applying to PCF Policy Authorization for creation,

updation, deletion, retrieval.

schemas:

AppSessionContext:

description: Represents an Individual Application Session Context resource.

type: object

properties:

ascReqData:

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

ascRespData:

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

evsNotif:

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

AppSessionContextReqData:

description: Identifies the service requirements of an Individual Application Session Context.

type: object

required:

- notifUri

- suppFeat

oneOf:

- required: [ueIpv4]

- required: [ueIpv6]

- required: [ueMac]

properties:

afAppId:

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

afChargId:

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

afReqData:

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

afRoutReq:

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

afSfcReq:

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

afHdrReq:

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

aspId:

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

bdtRefId:

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

dnn:

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

evSubsc:

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

mcpttId:

description: Indication of MCPTT service request.

type: string

mcVideoId:

description: Indication of MCVideo service request.

type: string

medComponents:

type: object

additionalProperties:

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

minProperties: 1

description: >

Contains media component information. The key of the map is the medCompN attribute.

multiModalId:

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

ipDomain:

type: string

mpsAction:

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

mpsId:

description: Indication of MPS service request.

type: string

mcsId:

description: Indication of MCS service request.

type: string

preemptControlInfo:

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

qosDuration:

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

qosInactInt:

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

resPrio:

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

servInfStatus:

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

notifUri:

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

servUrn:

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

sliceInfo:

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

sponId:

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

sponStatus:

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

supi:

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

gpsi:

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

suppFeat:

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

ueIpv4:

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

ueIpv6:

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

ueMac:

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

tsnBridgeManCont:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/BridgeManagementContainer'

tsnPortManContDstt:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/PortManagementContainer'

tsnPortManContNwtts:

type: array

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/PortManagementContainer'

minItems: 1

tscNotifUri:

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

tscNotifCorreId:

type: string

description: >

Correlation identifier for TSC management information notifications.

AppSessionContextRespData:

description: >

Describes the authorization data of an Individual Application Session Context created by

the PCF.

type: object

properties:

servAuthInfo:

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

directNotifReports:

type: array

items:

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

minItems: 1

description: >

QoS monitoring parameter(s) that cannot be directly notified for the indicated flows.

ueIds:

type: array

items:

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

minItems: 1

suppFeat:

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

AppSessionContextUpdateDataPatch:

description: >

Identifies the modifications to an Individual Application Session Context and/or the

modifications to the sub-resource Events Subscription.

type: object

properties:

ascReqData:

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

AppSessionContextUpdateData:

description: >

Identifies the modifications to the "ascReqData" property of an Individual Application

Session Context which may include the modifications to the sub-resource Events Subscription.

type: object

properties:

afAppId:

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

afRoutReq:

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

afSfcReq:

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

afHdrReq:

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

aspId:

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

bdtRefId:

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

evSubsc:

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

mcpttId:

description: Indication of MCPTT service request.

type: string

mcVideoId:

description: Indication of modification of MCVideo service.

type: string

medComponents:

type: object

additionalProperties:

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

minProperties: 1

description: >

Contains media component information. The key of the map is the medCompN attribute.

mpsAction:

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

mpsId:

description: Indication of MPS service request.

type: string

mcsId:

description: Indication of MCS service request.

type: string

preemptControlInfo:

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

qosDuration:

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

qosInactInt:

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

resPrio:

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

servInfStatus:

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

sipForkInd:

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

sponId:

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

sponStatus:

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

tsnBridgeManCont:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/BridgeManagementContainer'

tsnPortManContDstt:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/PortManagementContainer'

tsnPortManContNwtts:

type: array

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/PortManagementContainer'

minItems: 1

tscNotifUri:

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

tscNotifCorreId:

type: string

description: >

Correlation identifier for TSC management information notifications.

EventsSubscReqData:

description: Identifies the events the application subscribes to.

type: object

required:

- events

properties:

events:

type: array

items:

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

minItems: 1

notifUri:

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

reqQosMonParams:

type: array

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/RequestedQosMonitoringParameter'

minItems: 1

qosMon:

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

qosMonDatRate:

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

pdvReqMonParams:

type: array

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/RequestedQosMonitoringParameter'

minItems: 1

pdvMon:

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

congestMon:

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

rttMon:

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

avlBitRateMon:

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

rttFlowRef:

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

reqAnis:

type: array

items:

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

minItems: 1

usgThres:

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

notifCorreId:

type: string

afAppIds:

type: array

items:

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

minItems: 1

directNotifInd:

type: boolean

description: >

Indicates whether the direct event notification is requested (true) or not (false) for

the provided QoS monitoring parameters.

Default value is false.

avrgWndw:

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

EventsSubscReqDataRm:

description: >

This data type is defined in the same way as the EventsSubscReqData data type, but with

the OpenAPI nullable property set to true.

type: object

required:

- events

properties:

events:

type: array

items:

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

minItems: 1

notifUri:

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

reqQosMonParams:

type: array

nullable: true

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/RequestedQosMonitoringParameter'

minItems: 1

qosMon:

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

qosMonDatRate:

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

pdvReqMonParams:

type: array

nullable: true

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/RequestedQosMonitoringParameter'

minItems: 1

pdvMon:

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

congestMon:

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

rttMon:

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

rttFlowRef:

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

avlBitRateMon:

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

reqAnis:

type: array

items:

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

minItems: 1

usgThres:

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

notifCorreId:

type: string

directNotifInd:

type: boolean

nullable: true

description: >

Indicates whether the direct event notification is requested (true) or not (false) for

the provided and/or previously provided QoS monitoring parameters.

avrgWndw:

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

nullable: true

MediaComponent:

description: Identifies a media component.

type: object

required:

- medCompN

allOf:

- not:

required: [altSerReqs,altSerReqsData]

- not:

required: [qosReference,altSerReqsData]

properties:

afAppId:

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

afRoutReq:

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

afSfcReq:

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

afHdrReq:

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

qosReference:

type: string

disUeNotif:

type: boolean

altSerReqs:

type: array

items:

type: string

minItems: 1

altSerReqsData:

type: array

items:

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

minItems: 1

description: >

Contains alternative service requirements that include individual QoS parameter sets.

contVer:

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

codecs:

type: array

items:

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

minItems: 1

maxItems: 2

desMaxLatency:

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

desMaxLoss:

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

flusId:

type: string

fStatus:

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

marBwDl:

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

marBwUl:

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

maxPacketLossRateDl:

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

maxPacketLossRateUl:

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

maxSuppBwDl:

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

maxSuppBwUl:

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

medCompN:

type: integer

medSubComps:

type: object

additionalProperties:

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

minProperties: 1

description: >

Contains the requested bitrate and filters for the set of service data flows identified

by their common flow identifier. The key of the map is the fNum attribute.

medType:

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

minDesBwDl:

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

minDesBwUl:

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

mirBwDl:

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

mirBwUl:

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

preemptCap:

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

preemptVuln:

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

prioSharingInd:

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

resPrio:

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

rrBw:

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

rsBw:

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

sharingKeyDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

sharingKeyUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

tsnQos:

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

tscaiInputDl:

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

tscaiInputUl:

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

tscaiTimeDom:

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

capBatAdaptation:

type: boolean

description: >

Indicates the capability for AF to adjust the burst sending time, when it is supported

and set to "true".

rTLatencyInd:

type: boolean

description: >

Indicates the service data flow needs to meet the Round-Trip (RT) latency requirement of

the service, when it is included and set to "true".

pdb:

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

rTLatencyIndCorreId:

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

pduSetQosDl:

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

pduSetQosUl:

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

protoDescDl:

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

protoDescUl:

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

periodUl:

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

periodDl:

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

l4sInd:

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

datBurstSizeInd:

type: boolean

description: >

Indicates the Data Burst Size marking for the DL service data flow is supported if

present and set to "true". The default value is "false" if omitted.

timetoNextBurstInd:

type: boolean

description: >

Indicates the Time to Next Burst for the DL service data flow is supported, when it is

included and set to "true". The default value is "false" if omitted.

onPathN6SigInfo:

$ref: '#/components/schemas/OnPathN6SigInfo'

expTranInd:

type: boolean

description: >

Expedited Transfer Indication for the downlink traffic to enable expedited data transfer

with reflective QoS for the Non-GBR service data flow. "true": the expedited data

transfer of larger payload for XR application is enabled in the flow. "false": the

expedited data transfer of larger payload for XR application is not enabled in the flow.

The default value is "false" if omitted.

MediaComponentRm:

description: >

This data type is defined in the same way as the MediaComponent data type, but with the

OpenAPI nullable property set to true.

type: object

required:

- medCompN

not:

required: [altSerReqs,altSerReqsData]

properties:

afAppId:

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

afRoutReq:

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

afSfcReq:

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

afHdrReq:

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

qosReference:

type: string

nullable: true

altSerReqs:

type: array

items:

type: string

minItems: 1

nullable: true

altSerReqsData:

type: array

items:

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

minItems: 1

description: >

Contains removable alternative service requirements that include individual QoS

parameter sets.

nullable: true

disUeNotif:

type: boolean

contVer:

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

codecs:

type: array

items:

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

minItems: 1

maxItems: 2

desMaxLatency:

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

desMaxLoss:

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

flusId:

type: string

nullable: true

fStatus:

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

marBwDl:

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

marBwUl:

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

maxPacketLossRateDl:

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

maxPacketLossRateUl:

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

maxSuppBwDl:

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

maxSuppBwUl:

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

medCompN:

type: integer

medSubComps:

type: object

additionalProperties:

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

minProperties: 1

description: >

Contains the requested bitrate and filters for the set of service data flows identified

by their common flow identifier. The key of the map is the fNum attribute.

medType:

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

minDesBwDl:

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

minDesBwUl:

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

mirBwDl:

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

mirBwUl:

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

preemptCap:

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

preemptVuln:

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

prioSharingInd:

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

resPrio:

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

rrBw:

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

rsBw:

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

sharingKeyDl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32Rm'

sharingKeyUl:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32Rm'

tsnQos:

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

tscaiInputDl:

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

tscaiInputUl:

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

tscaiTimeDom:

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

capBatAdaptation:

type: boolean

description: >

Indicates the capability for AF to adjust the burst sending time, when it is supported

and set to "true". The default value is "false" if omitted.

rTLatencyInd:

type: boolean

nullable: true

description: >

Indicates the service data flow needs to meet the Round-Trip (RT) latency requirement of

the service, when it is included and set to "true". The default value is "false" if

omitted.

pdb:

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

rTLatencyIndCorreId:

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

pduSetQosDl:

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

pduSetQosUl:

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

protoDescDl:

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

protoDescUl:

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

periodUl:

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

periodDl:

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

l4sInd:

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

datBurstSizeInd:

type: boolean

nullable: true

description: >

Indicates the Data Burst Size marking for the DL service data flow is supported if

present and set to "true".

timetoNextBurstInd:

type: boolean

nullable: true

description: >

Indicates the Time to Next Burst for the DL service data flow is supported, when it is

included and set to "true".

onPathN6SigInfo:

$ref: '#/components/schemas/OnPathN6SigInfo'

expTranInd:

type: boolean

nullable: true

description: >

Expedited Transfer Indication for the downlink traffic to enable expedited data transfer

with reflective QoS for the Non-GBR service data flow. "true": the expedited data

transfer of larger payload for XR application is enabled in the flow. "false":

the expedited data transfer of larger payload for XR application is not enabled in the

flow.

nullable: true

MediaSubComponent:

description: Identifies a media subcomponent.

type: object

required:

- fNum

properties:

afSigProtocol:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/AfSigProtocol'

ethfDescs:

type: array

items:

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

minItems: 1

maxItems: 2

fNum:

type: integer

fDescs:

type: array

items:

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

minItems: 1

maxItems: 2

addInfoFlowDescs:

type: array

items:

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

minItems: 1

maxItems: 2

description: >

Represents additional flow description information (flow label and IPsec SPI)

per Uplink and/or Downlink IP flows.

fStatus:

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

marBwDl:

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

marBwUl:

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

tosTrCl:

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

flowUsage:

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

evSubsc:

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

mpxMediaUlInfos:

type: array

items:

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

minItems: 1

description: Multiplexed media identification information for the Uplink IP flow.

mpxMediaDlInfos:

type: array

items:

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

minItems: 1

description: Multiplexed media identification information for the Downlink IP flow.

MediaSubComponentRm:

description: >

This data type is defined in the same way as the MediaSubComponent data type, but with the

OpenAPI nullable property set to true. Removable attributes marBwDl and marBwUl are defined

with the corresponding removable data type.

type: object

required:

- fNum

properties:

afSigProtocol:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/AfSigProtocol'

ethfDescs:

type: array

items:

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

minItems: 1

maxItems: 2

nullable: true

fNum:

type: integer

fDescs:

type: array

items:

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

minItems: 1

maxItems: 2

nullable: true

addInfoFlowDescs:

type: array

items:

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

minItems: 1

maxItems: 2

nullable: true

description: >

Represents additional flow description information (flow label and IPsec SPI)

per Uplink and/or Downlink IP flows.

fStatus:

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

marBwDl:

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

marBwUl:

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

tosTrCl:

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

flowUsage:

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

evSubsc:

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

mpxMediaUlInfos:

type: array

items:

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

minItems: 1

description: Multiplexed media identification information for the Uplink IP flow.

nullable: true

mpxMediaDlInfos:

type: array

items:

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

minItems: 1

description: Multiplexed media identification information for the Downlink IP flow.

nullable: true

nullable: true

EventsNotification:

description: Describes the notification of a matched event.

type: object

required:

- evSubsUri

- evNotifs

properties:

adReports:

type: array

items:

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

minItems: 1

description: Includes the detected application report.

accessType:

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

addAccessInfo:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/AdditionalAccessInfo'

relAccessInfo:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/AdditionalAccessInfo'

anChargAddr:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/AccNetChargingAddress'

anChargIds:

type: array

items:

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

minItems: 1

anGwAddr:

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

l4sReports:

type: array

items:

$ref: '#/components/schemas/L4sSupport'

minItems: 1

evSubsUri:

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

evNotifs:

type: array

items:

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

minItems: 1

failedResourcAllocReports:

type: array

items:

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

minItems: 1

succResourcAllocReports:

type: array

items:

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

minItems: 1

noNetLocSupp:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/NetLocAccessSupport'

outOfCredReports:

type: array

items:

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

minItems: 1

plmnId:

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

qncReports:

type: array

items:

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

minItems: 1

qosMonReports:

type: array

items:

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

minItems: 1

qosMonDatRateReps:

type: array

items:

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

minItems: 1

pdvMonReports:

type: array

items:

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

minItems: 1

congestReports:

type: array

items:

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

minItems: 1

rttMonReports:

type: array

items:

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

minItems: 1

qosMonCapRepos:

type: object

additionalProperties:

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

minProperties: 1

description: >

Contains the QoS monitoring is supported or not. It shall be present when

the notified event is "QOS\_MON\_CAP\_REPO". The key of the map is the attribute

"capType".

ranNasRelCauses:

type: array

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/RanNasRelCause'

minItems: 1

description: Contains the RAN and/or NAS release cause.

ratType:

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

satBackhaulCategory:

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

ueLoc:

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

ueLocTime:

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

ueTimeZone:

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

usgRep:

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

urspEnfRep:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/UrspEnforcementInfo'

sscMode:

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

ueReqDnn:

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

ueReqPduSessionType:

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

tsnBridgeManCont:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/BridgeManagementContainer'

tsnPortManContDstt:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/PortManagementContainer'

tsnPortManContNwtts:

type: array

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/PortManagementContainer'

minItems: 1

ipv4AddrList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4AddrMask'

minItems: 1

ipv6PrefixList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

minItems: 1

batOffsetInfo:

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

ueReachStatus:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/UeReachabilityStatus'

retryAfter:

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

servSatId:

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

rateLimitRepo:

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

AfEventSubscription:

description: Describes the event information delivered in the subscription.

type: object

required:

- event

properties:

event:

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

notifMethod:

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

repPeriod:

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

waitTime:

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

qosMonParamType:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosMonitoringParamType'

capTypes:

type: array

items:

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

minItems: 1

description: >

Contains the type(s) of QoS Monitoring capability report is applied.

AfEventNotification:

description: Describes the event information delivered in the notification.

type: object

required:

- event

properties:

event:

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

flows:

type: array

items:

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

minItems: 1

retryAfter:

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

TerminationInfo:

description: >

Indicates the cause for requesting the deletion of the Individual Application Session

Context resource.

type: object

required:

- termCause

- resUri

properties:

termCause:

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

resUri:

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

AfRoutingRequirement:

description: Describes AF requirements on routing traffic.

type: object

properties:

appReloc:

type: boolean

routeToLocs:

type: array

items:

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

minItems: 1

spVal:

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

tempVals:

type: array

items:

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

minItems: 1

upPathChgSub:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/UpPathChgEvent'

outcomeSub:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/TraffRouteReqOutcomeEvent'

simConnFailSub:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/SimConnFailEvent'

addrPreserInd:

type: boolean

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'

easIpReplaceInfos:

type: array

items:

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

minItems: 1

description: Contains EAS IP replacement information.

easRedisInd:

type: boolean

description: Indicates the EAS rediscovery is required.

maxAllowedUpLat:

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

tfcCorreInfo:

$ref: 'TS29519\_Application\_Data.yaml#/components/schemas/TrafficCorrelationInfo'

candDnaiInd:

type: boolean

description: Indicates whether candidate DNAI(s) are requested to be reported.

n6DelayInd:

type: boolean

description: >

Indication of whether the N6 delay measurement is requested to be considered or not.

The N6 delay measurement is requested to be considered if it is set to true.

The N6 delay measurement is not requested to be considered if it is set to false.

The default value is false.

AfSfcRequirement:

description: Describes AF requirements on steering traffic to N6-LAN.

type: object

properties:

sfcIdDl:

type: string

description: Reference to a pre-configured SFC for downlink traffic.

nullable: true

sfcIdUl:

type: string

description: Reference to a pre-configured SFC for uplink traffic.

nullable: true

spVal:

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

metadata:

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

nullable: true

SpatialValidity:

description: Describes explicitly the route to an Application location.

type: object

required:

- presenceInfoList

properties:

presenceInfoList:

type: object

additionalProperties:

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

minProperties: 1

description: >

Defines the presence information provisioned by the AF. The praId attribute within the

PresenceInfo data type is the key of the map.

SpatialValidityRm:

description: >

This data type is defined in the same way as the SpatialValidity data type, but with the

OpenAPI nullable property set to true.

type: object

required:

- presenceInfoList

properties:

presenceInfoList:

type: object

additionalProperties:

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

minProperties: 1

description: >

Defines the presence information provisioned by the AF. The praId attribute within the

PresenceInfo data type is the key of the map.

nullable: true

AfRoutingRequirementRm:

description: >

This data type is defined in the same way as the AfRoutingRequirement data type, but with

the OpenAPI nullable property set to true and the spVal and tempVals attributes defined as

removable.

type: object

properties:

appReloc:

type: boolean

routeToLocs:

type: array

items:

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

minItems: 1

nullable: true

spVal:

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

tempVals:

type: array

items:

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

minItems: 1

nullable: true

upPathChgSub:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/UpPathChgEvent'

simConnFailSub:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/SimConnFailEvent'

addrPreserInd:

type: boolean

nullable: true

simConnInd:

type: boolean

nullable: true

description: >

Indicates whether simultaneous connectivity should be temporarily maintained for the

source and target PSA.

simConnTerm:

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

easIpReplaceInfos:

type: array

items:

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

minItems: 1

description: Contains EAS IP replacement information.

nullable: true

easRedisInd:

type: boolean

description: Indicates the EAS rediscovery is required.

maxAllowedUpLat:

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

tfcCorreInfo:

$ref: 'TS29519\_Application\_Data.yaml#/components/schemas/TrafficCorrelationInfo'

candDnaiInd:

type: boolean

description: Indicates whether candidate DNAI(s) are requested to be reported.

n6DelayInd:

type: boolean

description: >

Indication of whether the N6 delay measurement is requested to be considered or not.

The N6 delay measurement is requested to be considered if it is set to true.

The N6 delay measurement is not requested to be considered if it is set to false.

nullable: true

nullable: true

AnGwAddress:

description: Describes the address of the access network gateway control node.

type: object

anyOf:

- required: [anGwIpv4Addr]

- required: [anGwIpv6Addr]

properties:

anGwIpv4Addr:

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

anGwIpv6Addr:

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

Flows:

description: Identifies the flows.

type: object

required:

- medCompN

properties:

contVers:

type: array

items:

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

minItems: 1

fNums:

type: array

items:

type: integer

minItems: 1

medCompN:

type: integer

EthFlowDescription:

description: Identifies an Ethernet flow.

type: object

required:

- ethType

properties:

destMacAddr:

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

ethType:

type: string

fDesc:

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

fDir:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/FlowDirection'

sourceMacAddr:

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

vlanTags:

type: array

items:

type: string

minItems: 1

maxItems: 2

srcMacAddrEnd:

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

destMacAddrEnd:

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

ResourcesAllocationInfo:

description: Describes the status of the PCC rule(s) related to certain media components.

type: object

properties:

mcResourcStatus:

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

flows:

type: array

items:

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

minItems: 1

altSerReq:

type: string

description: >

Indicates whether NG-RAN supports alternative QoS parameters. The default value false

shall apply if the attribute is not present. It shall be set to false to indicate that

the lowest priority alternative QoS profile could not be fulfilled.

TemporalValidity:

description: Indicates the time interval(s) during which the AF request is to be applied.

type: object

properties:

startTime:

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

stopTime:

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

QosNotificationControlInfo:

description: >

Indicates whether the QoS targets for a GRB flow are not guaranteed or guaranteed again.

type: object

required:

- notifType

properties:

notifType:

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

flows:

type: array

items:

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

minItems: 1

altSerReq:

type: string

description: >

Indicates the alternative service requirement NG-RAN can guarantee. When it is omitted

and the notifType attribute is set to NOT\_GUAARANTEED it indicates that the lowest

priority alternative alternative service requirement could not be fulfilled by NG-RAN.

altSerReqNotSuppInd:

type: boolean

description: >

When present and set to true it indicates that Alternative Service Requirements are not

supported by NG-RAN.

AcceptableServiceInfo:

description: Indicates the maximum bandwidth that shall be authorized by the PCF.

type: object

properties:

accBwMedComps:

type: object

additionalProperties:

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

description: >

Indicates the maximum QoS parameters that shall be authorized by the PCF for

each media component of the map. The key of the map is the media component number.

minProperties: 1

marBwUl:

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

marBwDl:

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

mirBwUl:

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

mirBwDl:

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

tsnQos:

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

addAccQosCombs:

type: array

items:

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

minItems: 1

description: Contains additional combinations of acceptable service information.

UeIdentityInfo:

description: Represents 5GS-Level UE identities.

type: object

anyOf:

- required: [gpsi]

- required: [pei]

- required: [supi]

properties:

gpsi:

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

pei:

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

supi:

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

AccessNetChargingIdentifier:

description: Describes the access network charging identifier.

type: object

oneOf:

- required: [accNetChaIdValue]

- required: [accNetChargIdString]

properties:

accNetChaIdValue:

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

accNetChargIdString:

type: string

description: A character string containing the access network charging identifier.

flows:

type: array

items:

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

minItems: 1

OutOfCreditInformation:

description: >

Indicates the SDFs without available credit and the corresponding termination action.

type: object

required:

- finUnitAct

properties:

finUnitAct:

$ref: 'TS32291\_Nchf\_ConvergedCharging.yaml#/components/schemas/FinalUnitAction'

flows:

type: array

items:

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

minItems: 1

QosMonitoringInformation:

description: >

Indicates the QoS Monitoring information to report, i.e. UL and/or DL and or

round trip delay.

type: object

properties:

repThreshDl:

type: integer

repThreshUl:

type: integer

repThreshRp:

type: integer

repThreshDatRateUl:

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

repThreshDatRateDl:

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

conThreshDl:

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

conThreshUl:

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

avlBitrateUlThrs:

type: array

items:

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

minItems: 1

description: Indicates a list of thresholds for uplink available bitrate reporting.

avlBitrateDlThrs:

type: array

items:

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

minItems: 1

description: Indicates a list of thresholds for downlink available bitrate reporting.

PduSessionTsnBridge:

description: >

Contains the new TSC user plane node information and may contain the DS-TT port and/or

NW-TT port management information.

type: object

required:

- tsnBridgeInfo

properties:

tsnBridgeInfo:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/TsnBridgeInfo'

tsnBridgeManCont:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/BridgeManagementContainer'

tsnPortManContDstt:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/PortManagementContainer'

tsnPortManContNwtts:

type: array

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/PortManagementContainer'

minItems: 1

ueIpv4Addr:

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

dnn:

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

snssai:

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

ipDomain:

type: string

description: IPv4 address domain identifier.

ueIpv6AddrPrefix:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

QosMonitoringInformationRm:

description: >

This data type is defined in the same way as the QosMonitoringInformation data type, but

with the OpenAPI nullable property set to true.

type: object

properties:

repThreshDl:

type: integer

nullable: true

repThreshUl:

type: integer

nullable: true

repThreshRp:

type: integer

nullable: true

repThreshDatRateUl:

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

repThreshDatRateDl:

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

conThreshDl:

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

conThreshUl:

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

avlBitrateUlThrs:

type: array

items:

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

minItems: 1

avlBitrateDlThrs:

type: array

items:

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

minItems: 1

nullable: true

PcscfRestorationRequestData:

description: Indicates P-CSCF restoration.

type: object

oneOf:

- required: [ueIpv4]

- required: [ueIpv6]

properties:

dnn:

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

ipDomain:

type: string

sliceInfo:

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

supi:

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

ueIpv4:

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

ueIpv6:

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

QosMonitoringReport:

description: QoS Monitoring reporting information.

type: object

properties:

flows:

type: array

items:

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

minItems: 1

ulDelays:

type: array

items:

type: integer

minItems: 1

dlDelays:

type: array

items:

type: integer

minItems: 1

rtDelays:

type: array

items:

type: integer

minItems: 1

pdmf:

type: boolean

description: Represents the packet delay measurement failure indicator.

ulConInfo:

type: array

items:

type: integer

minItems: 1

dlConInfo:

type: array

items:

type: integer

minItems: 1

ulDataRate:

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

dlDataRate:

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

TsnQosContainer:

description: Indicates TSC Traffic QoS.

type: object

properties:

maxTscBurstSize:

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

tscPackDelay:

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

maxPer:

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

tscPrioLevel:

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

TsnQosContainerRm:

description: Indicates removable TSC Traffic QoS.

type: object

properties:

maxTscBurstSize:

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

tscPackDelay:

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

maxPer:

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

tscPrioLevel:

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

nullable: true

TscaiInputContainer:

description: Indicates TSC Traffic pattern.

type: object

properties:

periodicity:

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

burstArrivalTime:

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

surTimeInNumMsg:

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

surTimeInTime:

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

burstArrivalTimeWnd:

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

periodicityRange:

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

nullable: true

AppDetectionReport:

description: >

Indicates the start or stop of the detected application traffic and the application

identifier of the detected application traffic.

type: object

required:

- adNotifType

- afAppId

properties:

adNotifType:

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

afAppId:

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

PduSessionEventNotification:

description: >

Indicates PDU session related events information.

type: object

required:

- evNotif

properties:

evNotif:

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

supi:

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

ueIpv4:

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

ueIpv6:

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

ueMac:

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

status:

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

pcfInfo:

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

dnn:

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

snssai:

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

gpsi:

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

PcfAddressingInfo:

description: Contains PCF address information.

type: object

properties:

pcfFqdn:

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

pcfIpEndPoints:

type: array

items:

$ref: 'TS29510\_Nnrf\_NFManagement.yaml#/components/schemas/IpEndPoint'

minItems: 1

description: IP end points of the PCF hosting the Npcf\_PolicyAuthorization service.

bindingInfo:

type: string

description: contains the binding indications of the PCF.

AlternativeServiceRequirementsData:

description: Contains an alternative QoS related parameter set.

type: object

required:

- altQosParamSetRef

properties:

altQosParamSetRef:

type: string

description: Reference to this alternative QoS related parameter set.

gbrUl:

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

gbrDl:

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

pdb:

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

per:

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

averWindow:

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

maxDataBurstVol:

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

pduSetQosDl:

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

pduSetQosUl:

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

EventsSubscPutData:

description: >

Identifies the events the application subscribes to within an Events Subscription

sub-resource data. It may contain the notification of the already met events.

anyOf:

- $ref: '#/components/schemas/EventsSubscReqData'

- $ref: '#/components/schemas/EventsNotification'

PeriodicityRange:

description: >

Contains the acceptable range (which is formulated as lower bound and upper bound of

the periodicity of the start twobursts in reference to the external GM) or

acceptable periodicity value(s) (which is formulated as a list of values for

the periodicity).

type: object

oneOf:

- required: [lowerBound, upperBound]

- required: [periodicVals]

properties:

lowerBound:

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

upperBound:

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

periodicVals:

type: array

items:

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

minItems: 1

addPeriodicVals:

type: array

items:

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

minItems: 1

BatOffsetInfo:

description: >

Indicates the offset of the BAT and the optionally adjusted periodicity.

type: object

required:

- ranBatOffsetNotif

properties:

ranBatOffsetNotif:

type: integer

description: >

Indicates the BAT offset of the arrival time of the data burst in units

of milliseconds.

adjPeriod:

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

flows:

type: array

items:

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

minItems: 1

description: >

Identification of the flows. If no flows are provided, the BAT offset applies

for all flows of the AF session.

PdvMonitoringReport:

description: Packet Delay Variation reporting information.

type: object

properties:

flows:

type: array

items:

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

minItems: 1

description: Identification of the flows.

ulPdv:

type: integer

description: Uplink packet delay variation in units of milliseconds.

dlPdv:

type: integer

description: Downlink packet delay variation in units of milliseconds.

rtPdv:

type: integer

description: Round trip packet delay variation in units of milliseconds.

AddFlowDescriptionInfo:

description: Contains additional flow description information.

type: object

properties:

spi:

type: string

description: >

4-octet string representing the security parameter index of the IPSec packet

in hexadecimal representation.

flowLabel:

type: string

description: >

3-octet string representing the IPv6 flow label header field in hexadecimal

representation.

flowDir:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/FlowDirection'

L4sSupport:

description: >

Indicates whether the ECN marking for L4S support is not available or available

again in 5GS.

type: object

required:

- notifType

properties:

notifType:

$ref: '#/components/schemas/L4sNotifType'

flows:

type: array

items:

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

minItems: 1

DirectNotificationReport:

description: >

Represents the QoS monitoring parameters that cannot be directly notified for

the indicated flows.

type: object

required:

- qosMonParamType

properties:

qosMonParamType:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosMonitoringParamType'

flows:

type: array

items:

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

minItems: 1

RttFlowReference:

description: >

Contains the shared key with the media subcomponent that shares the subscription to

round trip time measurements in the complementary direction.

type: object

required:

- sharedKey

properties:

flowDir:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/FlowDirection'

sharedKey:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

RttFlowReferenceRm:

description: >

It is defined as the RttFlowRerence data type but with the OpenAPI nullable true property.

type: object

required:

- sharedKey

properties:

flowDir:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/FlowDirection'

sharedKey:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

nullable: true

CapabilityReport:

description: Contains capability support information.

type: object

properties:

capReport:

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

capType:

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

required:

- capReport

- capType

AfHeaderHandlingControlInfo:

description: Describes AF requirements on handling of payload headers.

type: object

required:

- hDetectionReference

properties:

hDetectionReference:

description: Indication of header detection reference.

type: string

hDetectionSuppInfo:

description: Indication of transparent dynamic information.

type: string

nullable: true

notifUri:

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

notifId:

type: string

nullable: true

spVal:

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

tempVals:

type: array

items:

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

minItems: 1

nullable: true

hHndlgUl:

type: array

items:

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

minItems: 1

nullable: true

description: >

Contains the list of header handling action request parameters in the uplink

direction.

hHndlgDl:

type: array

items:

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

minItems: 1

nullable: true

description: >

Contains the list of header handling action request parameters in the downlink

direction.

nullable: true

HeaderHandlingActionRequest:

description: >

Represents the header handling action request.

properties:

hHndlgCtrlRef:

type: string

hHndlgAction:

type: array

items:

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

minItems: 1

hInfo:

type: string

hVal:

type: string

hHndlgCond:

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

hHndlgRep:

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

OnPathN6SigInfo:

description: >

Represents the on path N6 signaling information.

nullable: true

properties:

onPathN6Method:

$ref: '#/components/schemas/OnPathN6Method'

asProxyAddr:

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

required:

- onPathN6Method

HeaderHandlingReporting:

description: >

Indicates that reporting is requested for the performed Header Handling Action.

properties:

notifFlag:

type: boolean

description: >

Indicates whether reporting is requested for the performed Header Handling Action.

True indicates a reporting is requested.

False indicates a reporting is not requested.

repSuggInfo:

$ref: 'TS29564\_Nupf\_EventExposure.yaml#/components/schemas/ReportingSuggestionInformation'

oneTimeInd:

type: boolean

description: >

Indicates whether the reporting of a first occurrence of the action per packet flow

is enough.

True indicates that the reporting applies to the first occurrence.

False indicates that the reporting applies to all occurrences.

RateLimitRepo:

description: >

Contains the rate limit information for the non-GRB flows.

properties:

rateLimitRepoUl:

type: array

items:

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

minItems: 1

description: >

Indicates the maximum uplink data rate authorized for the non-GBR service data flow(s)

as indicated in the attribute "flows". If no flows are provided, the maximum data rate

applies for all the flows.

rateLimitRepoDl:

type: array

items:

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

minItems: 1

description: >

Indicates the maximum downlink data rate authorized for the non-GBR service data flow(s)

as indicated in the attribute "flows". If no flows are provided, the maximum data rate

applies for all the flows.

flows:

type: array

items:

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

minItems: 1

description: Identifications of the non-GBR service data flows.

MpxMediaInfo:

description: Contains the Multiplexed Media Identification Information.

type: object

properties:

ssrcId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

payloadType:

type: integer

minimum: 0

maximum: 127

identificationTag:

type: string

rtpSdesHdrExtId:

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

rtcpPacketType:

type: integer

minimum: 0

maximum: 255

anyOf:

- required: [ ssrcId ]

- required: [ payloadType ]

- required: [ identificationTag ]

- required: [ rtcpPacketType ]

- required: [ identificationTag, rtpSdesHdrExtId ]

#

# EXTENDED PROBLEMDETAILS

#

ExtendedProblemDetails:

description: Extends ProblemDetails to also include the acceptable service info.

allOf:

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

- type: object

properties:

acceptableServInfo:

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

#

# SIMPLE DATA TYPES

#

AfAppId:

description: Contains an AF application identifier.

type: string

AspId:

description: Contains an identity of an application service provider.

type: string

CodecData:

description: Contains codec related information.

type: string

ContentVersion:

description: Represents the content version of some content.

type: integer

FlowDescription:

description: Defines a packet filter of an IP flow.

type: string

SponId:

description: Contains an identity of a sponsor.

type: string

ServiceUrn:

description: Contains values of the service URN and may include subservices.

type: string

TosTrafficClass:

description: >

2-octet string, where each octet is encoded in hexadecimal representation. The first octet

contains the IPv4 Type-of-Service or the IPv6 Traffic-Class field and the second octet

contains the ToS/Traffic Class mask field.

type: string

TosTrafficClassRm:

description: >

This data type is defined in the same way as the TosTrafficClass data type, but with the

OpenAPI nullable property set to true.

type: string

nullable: true

MultiModalId:

description: >

This data type contains a multi-modal service identifier.

type: string

TscPriorityLevel:

description: Represents the priority level of TSC Flows.

type: integer

minimum: 1

maximum: 8

TscPriorityLevelRm:

description: >

This data type is defined in the same way as the TscPriorityLevel data type, but with the

OpenAPI nullable property set to true.

type: integer

minimum: 1

maximum: 8

nullable: true

DurationMilliSec:

description: Indicates the time interval in units of milliseconds.

type: integer

DurationMilliSecRm:

description: >

This data type is defined in the same way as the "DurationMillisec" data type, but with the

OpenAPI nullable property set to true.

type: integer

MaxDataBurstVol:

type: integer

minimum: 1

maximum: 2000000

nullable: true

description: Unsigned integer indicating Maximum Data Burst Volume value.

#

# ENUMERATIONS DATA TYPES

#

MediaType:

description: Indicates the media type of a media component.

anyOf:

- type: string

enum:

- AUDIO

- VIDEO

- DATA

- APPLICATION

- CONTROL

- TEXT

- MESSAGE

- OTHER

- 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.

MpsAction:

description: >

Indicates whether it is an invocation, a revocation or an invocation with authorization of

the MPS for DTS or Messaging service.

anyOf:

- type: string

enum:

- DISABLE\_MPS\_FOR\_DTS

- ENABLE\_MPS\_FOR\_DTS

- AUTHORIZE\_AND\_ENABLE\_MPS\_FOR\_DTS

- AUTHORIZE\_AND\_ENABLE\_MPS\_FOR\_AF\_SIGNALLING

- DISABLE\_MPS\_FOR\_MESSAGING\_FOR\_AF\_SIGNALLING

- ENABLE\_MPS\_FOR\_MESSAGING\_FOR\_AF\_SIGNALLING

- 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.

ReservPriority:

description: Indicates the reservation priority.

anyOf:

- type: string

enum:

- PRIO\_1

- PRIO\_2

- PRIO\_3

- PRIO\_4

- PRIO\_5

- PRIO\_6

- PRIO\_7

- PRIO\_8

- PRIO\_9

- PRIO\_10

- PRIO\_11

- PRIO\_12

- PRIO\_13

- PRIO\_14

- PRIO\_15

- PRIO\_16

- 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.

ServAuthInfo:

description: Indicates the result of the Policy Authorization service request from the AF.

anyOf:

- type: string

enum:

- TP\_NOT\_KNOWN

- TP\_EXPIRED

- TP\_NOT\_YET\_OCURRED

- ROUT\_REQ\_NOT\_AUTHORIZED

- DIRECT\_NOTIF\_NOT\_POSSIBLE

- 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.

SponsoringStatus:

description: Indicates whether sponsored data connectivity is enabled or disabled/not enabled.

anyOf:

- type: string

enum:

- SPONSOR\_DISABLED

- SPONSOR\_ENABLED

- 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.

AfEvent:

description: Represents an event to notify to the AF.

anyOf:

- type: string

enum:

- ACCESS\_TYPE\_CHANGE

- ANI\_REPORT

- APP\_DETECTION

- CHARGING\_CORRELATION

- EPS\_FALLBACK

- EXTRA\_UE\_ADDR

- FAILED\_QOS\_UPDATE

- FAILED\_RESOURCES\_ALLOCATION

- OUT\_OF\_CREDIT

- PDU\_SESSION\_STATUS

- PLMN\_CHG

- QOS\_MONITORING

- QOS\_MON\_CAP\_REPO

- QOS\_NOTIF

- RAN\_NAS\_CAUSE

- REALLOCATION\_OF\_CREDIT

- SAT\_CATEGORY\_CHG

- SUCCESSFUL\_QOS\_UPDATE

- SUCCESSFUL\_RESOURCES\_ALLOCATION

- TSN\_BRIDGE\_INFO

- UP\_PATH\_CHG\_FAILURE

- USAGE\_REPORT

- UE\_REACH\_STATUS\_CH

- BAT\_OFFSET\_INFO

- URSP\_ENF\_INFO

- PACK\_DEL\_VAR

- L4S\_SUPP

- RT\_DELAY\_TWO\_QOS\_FLOWS

- RATE\_LIMIT\_INFO\_REPO

- 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.

AfNotifMethod:

description: Represents the notification methods that can be subscribed for an event.

anyOf:

- type: string

enum:

- EVENT\_DETECTION

- ONE\_TIME

- PERIODIC

- 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.

QosNotifType:

anyOf:

- type: string

enum:

- GUARANTEED

- NOT\_GUARANTEED

- NOT\_GUARANTEED\_DL

- NOT\_GUARANTEED\_UL

- 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: |

Indicates the notification type for QoS Notification Control.

Possible values are:

- GUARANTEED: The QoS targets of one or more SDFs are guaranteed. When ExtQoS\_v2 feature

is enabled, The QoS targets of one or more SDFs are guaranteed again in both DL and UL

directions.

- NOT\_GUARANTEED: The QoS targets of one or more SDFs are not being guaranteed. When

ExtQoS\_v2 feature is enabled, The QoS targets of one or more SDFs are not being

guaranteed in both DL and UL directions.

- NOT\_GUARANTEED\_DL: The QoS targets of one or more SDFs are not being guaranteed in DL

directions.

- NOT\_GUARANTEED\_UL: The QoS targets of one or more SDFs are not being guaranteed in DL

directions.

TerminationCause:

description: >

Indicates the cause behind requesting the deletion of the Individual Application Session

Context resource.

anyOf:

- type: string

enum:

- ALL\_SDF\_DEACTIVATION

- PDU\_SESSION\_TERMINATION

- PS\_TO\_CS\_HO

- INSUFFICIENT\_SERVER\_RESOURCES

- INSUFFICIENT\_QOS\_FLOW\_RESOURCES

- SPONSORED\_DATA\_CONNECTIVITY\_DISALLOWED

- REQUEST\_QOS\_NOT\_SUPPORTED\_IN\_PLMN

- UE\_ADDR\_RELEASE

- 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.

MediaComponentResourcesStatus:

description: Indicates whether the media component is active or inactive.

anyOf:

- type: string

enum:

- ACTIVE

- INACTIVE

- 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.

FlowUsage:

description: Describes the flow usage of the flows described by a media subcomponent.

anyOf:

- type: string

enum:

- NO\_INFO

- RTCP

- AF\_SIGNALLING

- 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.

FlowStatus:

description: Describes whether the IP flow(s) are enabled or disabled.

anyOf:

- type: string

enum:

- ENABLED-UPLINK

- ENABLED-DOWNLINK

- ENABLED

- DISABLED

- REMOVED

- 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.

RequiredAccessInfo:

description: Indicates the access network information required for an AF session.

anyOf:

- type: string

enum:

- USER\_LOCATION

- UE\_TIME\_ZONE

- UE\_SAT\_INFO

- 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.

SipForkingIndication:

description: >

Indicates whether several SIP dialogues are related to an "Individual Application Session

Context" resource.

anyOf:

- type: string

enum:

- SINGLE\_DIALOGUE

- SEVERAL\_DIALOGUES

- 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.

AfRequestedData:

description: Represents the information that the AF requested to be exposed.

anyOf:

- type: string

enum:

- UE\_IDENTITY

- 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.

ServiceInfoStatus:

description: Represents the preliminary or final service information status.

anyOf:

- type: string

enum:

- FINAL

- PRELIMINARY

- 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.

PreemptionControlInformation:

description: Represents Pre-emption control information.

anyOf:

- type: string

enum:

- MOST\_RECENT

- LEAST\_RECENT

- HIGHEST\_BW

- 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.

PrioritySharingIndicator:

description: Represents the Priority sharing indicator.

anyOf:

- type: string

enum:

- ENABLED

- DISABLED

- 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.

PreemptionControlInformationRm:

description: >

This data type is defined in the same way as the PreemptionControlInformation data type, but

with the OpenAPI nullable property set to true.

anyOf:

- $ref: '#/components/schemas/PreemptionControlInformation'

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

AppDetectionNotifType:

description: Indicates the notification type for Application Detection Control.

anyOf:

- type: string

enum:

- APP\_START

- APP\_STOP

- 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.

PduSessionStatus:

description: Indicates whether the PDU session is established or terminated.

anyOf:

- type: string

enum:

- ESTABLISHED

- TERMINATED

- 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.

UplinkDownlinkSupport:

description: >

Represents whether an indication or capability is supported for the UL, the DL or both,

UL and DL.

anyOf:

- type: string

enum:

- UL

- DL

- UL\_DL

- 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.

L4sNotifType:

description: Indicates the notification type for ECN marking for L4S support in 5GS.

anyOf:

- type: string

enum:

- AVAILABLE

- NOT\_AVAILABLE

- 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.

NotifCap:

description: Indicates whether the notified capability is supported or not supported.

anyOf:

- type: string

enum:

- SUPPORTED

- NOT\_SUPPORTED

- 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.

HeaderHandlingAction:

anyOf:

- type: string

enum:

- DETECT

- REMOVE

- REPLACE

- INSERT

- 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 type of header handling actions.

Possible values are:

- DETECT: Indicates that the request is for the detection of a header field.

- REMOVE: Indicates that the request is for the removal of a header field.

- REPLACE: Indicates that the request is for the replacement of information in a header

field.

- INSERT: Indicates that the request is for the addition of a header field.

HeaderHandlingCond:

anyOf:

- type: string

enum:

- EVERY\_MATCH

- FIRST\_MATCH

- 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 condition to apply header handling actions.

Possible values are:

- EVERY\_MATCH: Indicates that the header handling action is applied to every match.

- FIRST\_MATCH: Indicates that the header handling action is applied only to the first

match.

OnPathN6Method:

anyOf:

- type: string

enum:

- CONNECT\_UDP

- 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 method of on-path N6 signaling.

Possible values are:

- CONNECT\_UDP: Indicates that the method connect UDP is supported for on-path N6 signaling

NotifCapType:

anyOf:

- type: string

enum:

- PACKET\_DELAY

- CONGESTION

- AVAILABLE\_BITRATE

- 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: |

Indicates which type of QoS Monitoring capability report is applied.

Possible values are:

- PACKET\_DELAY: Indication the Packet delay monitoring capability is monitored.

- CONGESTION: Indication the Congestion information monitoring capability is monitored.

- AVAILABLE\_BITRATE: Indication the Available bitrate monitoring capability is monitored.

\*\*\* End of Changes \*\*\*