**3GPP TSG-CT WG3 Meeting #134 *C3-242458***

**Changsha, China, 15 - 19 April, 2024**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.549** | **CR** | **0260** | **rev** | **1** | **Current version:** | **18.5.0** |  |
|  |
| *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)*.* |
|  |

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

|  |
| --- |
|  |
| ***Title:***  | Clarification for Exposure level requirements |
|  |  |
| ***Source to WG:*** | Lenovo |
| ***Source to TSG:*** | C3 |
|  |  |
| ***Work item code:*** | ADAES |  | ***Date:*** | 2024-03-29 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *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 canbe 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:*** | CR#0020 against TS 23.436 in document S6-240504 clarifies "Exposure level requirements" information element in clause 8.2.4.2 of TS 23.436, is indeed reporting requirement which can be adopted as partial information of ReportingInformation data type, defined in 3GPP TS 29.523. |
|  |  |
| ***Summary of change:*** | Defining ReportingInformation data type as re-used data type for SS\_ADAE\_VALPerformanceAnalytics API.Adding repReq attribute to AppPerfSub.Change of "repReqs" to "repReq" in SS\_ADAE\_Ue2UePerformanceAnalytics API.Removing EN for exposure level requirements in clause 7.10.1.4.2.2. |
|  |  |
| ***Consequences if not approved:*** | Stage 3 is is not in accordance with stage 2. |
|  |  |
| ***Clauses affected:*** | 7.10.1.4.1, 7.10.1.4.2.2, 7.10.3.4.1, A.15, A.17 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | This CR introduces a backwards compatible correction into the OpenAPI files of the SS\_ADAE\_VALPerformanceAnalytics API and SS\_ADAE\_Ue2UePerformanceAnalytics API. |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* First Change \* \* \* \*

##### 7.10.1.4.1 General

This clause specifies the application data model supported by the API. Data types listed in clause 6.2 apply to this API.

Table 7.10.1.4.1-1 specifies the data types defined specifically for the SS\_ADAE\_VALPerformanceAnalytics API service.

**Table 7.10.1.4.1-1\_SS\_ADAE\_VALPerformanceAnalytics API specific Data Types**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **Section defined** | **Description** | **Applicability** |
| AppPerfSub | 7.10.1.4.2.2 | Subscription to the VAL application performance analytics |  |
| AppPerfNotif | 7.10.1.4.2.3 | Notification information of the application performance analytics. |  |
| ProdProfileInfo | 7.10.1.4.2.4 | Information about the data producer's support data collection and its access to the produced data |  |
| AnalyticsCategory | 7.10.1.4.3.3 | Represents the category of analytics. |  |
| AnalyticsMode | 7.10.1.4.3.7 | Represents the mode of analytics. |  |
| AnalyticsType | 7.10.1.4.2.6 | Represents the type of analytics. |  |
| ProducerCap | 7.10.1.4.3.5 |  |  |
| ProducerType | 7.10.1.4.3.4 | Type of the data producer. |  |
| ProducerData | 7.10.1.4.3.5 | Type of the data produced by the data producer. |  |
| ProducerRole | 7.10.1.4.3.6 | The role of the data producer. |  |

Table 7.10.1.4.1-2 specifies data types re-used by the SS\_ADAE\_VALPerformanceAnalytics API service:

**Table 7.10.1.4.1-2: Re-used Data Types**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **Reference** | **Comments** | **Applicability** |
| BitRate | 3GPP TS 29.571 [21] | Represents a bit rate measurement value. |  |
| DateTime | 3GPP TS 29.571 [21] | Used to represent a date and time. |  |
| DurationSec | 3GPP TS 29.122 [3] | Represents a period of time in units of seconds. |  |
| LocationArea5G | 3GPP TS 29.122 [3] | Represents location information. |  |
| ReportingInformation | 3GPP TS 29.523 [20] | Used to indicate the reporting requirement, only the following information are applicable for SEAL:- immRep- notifMethod- maxReportNbr- monDur- repPeriod |  |
| ScheduledCommunicationTime | 3GPP TS 29.122 [3] | Used to define the time frame for message filters.  |  |
| SupportedFeatures | 3GPP TS 29.571 [21] | Represents the supported features. |  |
| TimeWindow | 3GPP TS 29.122 [3] | Represents a time window. |  |
| Uinteger | 3GPP TS 29.571 [21] | Represents an unsigned integer. |  |
| Uri | 3GPP TS 29.122 [3] | Represents a URI. |  |
| ValTargetUe | Clause 7.3.1.4.2.3 | Used to indicate either VAL User ID or VAL UE ID. |  |

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

###### 7.10.1.4.2.2 Type: AppPerfSub

**Table 7.10.1.4.2.2-1: Definition of type AppPerfSub**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| notifUri | Uri | M | 1 | Represents the notification URI. |  |
| analyticsType | AnalyticsType | M | 1 | Identifies the type of the VAL application performance analytics. Only the "category" attribute is applicable here. |  |
| valServiceId | string | M | 1 | The identifier of the VAL service, to which the performance analytics subscription is applied. |  |
| valUeIds | array(ValTargetUe) | O | 1..N | A list of identities of one or more VAL UEs, whose performance analytics are subscribed to. |  |
| valServerId | string | O | 0..1 | If the consumer is different from the VAL server, this identifier represents the VAL server to which the VAL performance analytics subscription is applied. |  |
| dataProdProfile | ProdProfileInfo | O | 0..1 | Characteristics of the data producer to be used. |  |
| confLevel | Uinteger | O | 0..1 | Indicates the preferred confidence level of the prediction.Minimum = 0. Maximum = 100. |  |
| area | LocationArea5G | O | 0..1 | The geographical or service area to which the VAL performance analytics subscription is applied. |  |
| timeValidity | TimeWindow | O | 0..1 | The time validity of the subscription. |  |
| repReq | ReportingInformation | O | 0..1 | Represents the reporting requirement of the VAL performance analytics subscription. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Used to negotiate the supported features of the API as defined in clause 7.10.1.6.This attribute shall be provided in the HTTP POST response of successful subscription creation if it was provided in the request. |  |
|  |

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

##### 7.10.3.4.1 General

This clause specifies the application data model supported by the API. Data types listed in clause 6.2 apply to this API.

Table 7.10.3.4.1-1 specifies the data types defined specifically for the SS\_ADAE\_Ue2UePerformanceAnalytics API service.

Table 7.10.3.4.1-1\_SS\_ADAE\_Ue2UePerformanceAnalytics API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| U2UAnalytics | 7.4.2.4.3.1 | Represents the UE-to-UE analytics types. |  |
| U2UAnalyticsData | 7.10.3.4.2.6 | Represents the UE-to-UE analytics data. |  |
| U2UPair | 7.10.3.4.2.7 | Represents the UE-to-UE pair. |  |
| U2UPerfNotif | 7.10.3.4.2.3 | Represents the UE-to-UE session performance analytics notification. |  |
| U2UPerfSub | 7.10.3.4.2.2 | Represents the UE-to-UE session performance analytics subscription. |  |
| U2UReportingRequirements | 7.10.3.4.2.4 | Represents the UE-to-UE session performance analytics reporting requirements. |  |
| U2UReportingGranularity | 7.4.2.4.3.2 | Represents the UE-to-UE reporting granularity. |  |
| U2UThreshold | 7.10.3.4.2.5 | Represents the threshold for UE-to-UE session performance analytics. |  |

Table 7.10.3.4.1-2 specifies data types re-used by the SS\_ADAE\_Ue2UePerformanceAnalytics API service:

Table 7.10.3.4.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| AnalyticsType | Clause 7.10.1.4.2.6 | Type of analytics for the event of the VAL application performance analytics. |  |
| DurationSec | 3GPP TS 29.122 [3] | Represents a period of time in units of seconds. |  |
| LocationArea5G | 3GPP TS 29.122 [3] | Represents location information. |  |
| MatchingDirection | 3GPP TS 29.520 [33] | Used to indicate a threshold matching direction. |  |
| NotificationMethod | 3GPP TS 29.508 [32] | Used to indicate the reporting mode. |  |
| PacketErrRate | 3GPP TS 29.571 [21] | Used to represent packet error rate. |  |
| ReportingInformation | 3GPP TS 29.523 [20] | Used to indicate the reporting requirement, only the following information are applicable for SEAL:- immRep- notifMethod- maxReportNbr- monDur- repPeriod |  |
| SupportedFeatures | 3GPP TS 29.571 [21] | Used to negotiate the supported optional features of the API. |  |
| TimeWindow | 3GPP TS 29.122 [3] | Used to indicate the time window. |  |
| Uinteger | 3GPP TS 29.571 [21] | Used to represent integer attributes. |  |
| Uri | 3GPP TS 29.122 [3] | Used to indicate the notification URI. |  |
| ValTargetUe | Clause 7.3.1.4.2.3 | Used to indicate either VAL User ID or VAL UE ID. |  |

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

# A.15 SS\_ADAE\_VALPerformanceAnalytics API

openapi: 3.0.0

info:

 title: SS\_ADAE\_VALPerformanceAnalytics

 description: |

 API for ADAE VAL performance analytics service.

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 version: "1.0.0-alpha.1"

externalDocs:

 description: >

 3GPP TS 29.549 V18.5.0 Service Enabler Architecture Layer for Verticals (SEAL);

 Application Programming Interface (API) specification; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.549/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/ss-adae-pa/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.5 of 3GPP TS 29.549

paths:

 /application-performance:

 post:

 description: Creates a new individual VAL performance event subscription.

 operationId: CreateIndValPerfEventSubsc

 tags:

 - VAL performance event subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 callbacks:

 paNotification:

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

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content (successful notification)

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 responses:

 '201':

 description: VAL performance event subscription resource created successfully.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: Contains the URI of the newly created resource.

 required: true

 schema:

 type: string

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 /application-performance/{appPerfId}:

 get:

 description: Retrieves an individual VAL performance event subscription.

 operationId: ReadIndValPerfEventSubsc

 tags:

 - Individual VAL performance event subscription (Document)

 parameters:

 - name: appPerfId

 in: path

 description: Identifier of an individual VAL performance event subscription.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: >

 The individual VAL performance subscription matching the appPerfId is retrieved.

 content:

 application/json:

 schema:

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

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 delete:

 description: Deletes an individual VAL performance event subscription.

 operationId: DeleteIndValPerfEventSubsc

 tags:

 - Individual VAL performance event subscription (Document)

 parameters:

 - name: appPerfId

 in: path

 description: Identifier of an individual VAL performance event subscription.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: >

 The individual VAL performance subscription matching the appPerfId is deleted.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 AppPerfSub:

 description: Represents an individual VAL performance event subscription resource.

 type: object

 properties:

 notifUri:

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

 analyticsType:

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

 valServiceId:

 type: string

 valUeIds:

 type: array

 items:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 minItems: 1

 description: >

 One or more VAL UE IDs whose analytics or data collection are subject to subcription.

 valServerId:

 type: string

 description: Identity of the VAL server

 dataProdProfile:

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

 confLevel:

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

 area:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 timeValidity:

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

 repReq:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 suppFeat:

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

 required:

 - notifUri

 - analyticsType

 - valServiceId

 AppPerfNotif:

 description: Represents notification of the VAL performance event.

 type: object

 properties:

 output:

 type: string

 description: Provided output for analytics.

 valServerId:

 type: string

 description: VAL Server identifier.

 valUeIds:

 type: array

 items:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 minItems: 1

 description: List of VAL UE identifiers.

 analyticsType:

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

 confLevel:

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

 timeHorizon:

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

 required:

 - output

 - valServerId

 ProdProfileInfo:

 description: Represents capability of the data producer.

 type: object

 properties:

 prodId:

 type: string

 description: Identity of the data producer.

 prodType:

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

 dataType:

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

 prodRole:

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

 origProdIds:

 type: array

 items:

 type: string

 minItems: 1

 description: >

 Identifies the identity of the original data producers.

 dataFresh:

 type: integer

 description: Duration of elapsed time in seconds.

 producerCap:

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

 required:

 - prodId

 - prodType

 - dataType

 ProducerCap:

 description: Represents capability of the data producer.

 type: object

 properties:

 durationTime:

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

 anonymization:

 type: boolean

 description: >

 Set to true if anonymization is supported.

 Set to false or omitted otherwise.

 dataRate:

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

 schedule:

 $ref: 'TS29122\_CpProvisioning.yaml#/components/schemas/ScheduledCommunicationTime'

 AnalyticsType:

 description: Represents type of requested analytics.

 type: object

 properties:

 category:

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

 mode:

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

 mlEnabled:

 type: boolean

 description: >

 Set to true if the provided analytics are ML-enabled.

 Set to false if the provided analytics are not ML-enabled.

 Omitted if the provided analytics lack onfo for being ML-enabled or not.

# Simple data types and Enumerations

 AnalyticsCategory:

 anyOf:

 - type: string

 enum:

 - PREDICTIVE

 - STATISTICS

 - 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 the analytics with the values:

 - PREDICTIVE: The event for the analytics is for predictive analytics.

 - STATISTICS: The event for analytics is for statistics analytics.

 AnalyticsMode:

 anyOf:

 - type: string

 enum:

 - OFFLINE

 - ONLINE

 - 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 mode of the analytics with the values:

 - OFFLINE: Represents offline analytics.

 - ONLINE: Represents online analytics.

 ProducerType:

 anyOf:

 - type: string

 enum:

 - ADAE\_CLIENT

 - A\_DCCF

 - VAL\_SERVER

 - SEAL\_SERVER

 - SEAL\_CLIENT

 - EES

 - EAS

 - 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 the data producer with the values:

 - ADAE\_CLIENT: The data producer is ADAE client.

 - A\_DCCF: The data producer is A-DCCF.

 - VAL\_SERVER: The data producer is VAL server.

 - SEAL\_SERVER: The data producer is SEAL server.

 - SEAL\_CLIENT: The data producer is SEAL client.

 - EES: The data producer is EES.

 - EAS: The data producer is EAS.

 ProducerData:

 anyOf:

 - type: string

 enum:

 - PERFORMANCE\_INDICATOR

 - REPRODUCER\_USAGE\_DATA

 - SERVER\_LOAD\_DATA

 - APPLICATION\_PERFORMANCE

 - EDGE\_LOAD

 - 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 data type of the data producer with the values:

 - PERFORMANCE\_INDICATOR: The data type of the data producer is

 performance indictor.

 - REPRODUCER\_USAGE\_DATA: The data type of the data producer is

 reproducer usage data.

 - REPRODUCER\_USAGE\_DATA: The data type of the data producer is

 reproducer usage data.

 - SERVER\_LOAD\_DATA: The data type of the data producer is

 server load data.

 - APPLICATION\_PERFORMANCE: The data type of the data producer is

 application performance.

 - EDGE\_LOAD: The data type of the data producer is

 edge load.

 ProducerRole:

 anyOf:

 - type: string

 enum:

 - GENERATING\_ENTITY

 - ORIGINAL\_PRODUCER

 - RESPOSITORY

 - 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 role of the data producer with the values:

 - GENERATING\_ENTITY: The role of the data producer is generating entity.

 - ORIGINAL\_PRODUCER: The role of the data producer is origina producer.

 - RESPOSITORY: The role of the data producer is repository.

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

# A.17 SS\_ADAE\_Ue2UePerformanceAnalytics API

openapi: 3.0.0

info:

 title: SS\_ADAE\_Ue2UePerformanceAnalytics

 description: |

 API for SEAL VAL Service Area Configuration Service.

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 version: "1.0.0-alpha.1"

externalDocs:

 description: >

 3GPP TS 29.549 V18.5.0 Service Enabler Architecture Layer for Verticals (SEAL);

 Application Programming Interface (API) specification; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.549/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/ss-adae-uupa/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.5 of 3GPP TS 29.549

paths:

 /ue2ue-session-performance:

 post:

 summary: Create an individual UE-to-UE session performance analytics event subscription.

 operationId: SubscribeUe2UePerfAnalytics

 tags:

 - UE-to-UE Performance Subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/U2UPerfSub'

 responses:

 '201':

 description: >

 Subscription to the UE-to-UE session performance analytics is created.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/U2UPerfSub'

 headers:

 Location:

 description: Contains the URI of the newly created individual resource.

 required: true

 schema:

 type: string

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 callbacks:

 NotifyU2USessionEvent:

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

 post:

 summary: Notify the UE-to-UE session performance analytics.

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/U2UPerfNotif'

 responses:

 '204':

 description: The notification is successfully received.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 /ue2ue-session-performance/{u2uPerfId}:

 get:

 summary: Read the individual UE-to-UE session performance analytics event subscription.

 operationId: ReadU2UPerfSubscription

 tags:

 - Individual UE-to-UE Performance Subscription (Document)

 parameters:

 - name: u2uPerfId

 in: path

 description: >

 Represents the identifier of an individual UE-to-UE session performance

 analytics subscription.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: >

 The requested individual UE-to-UE session performance event subscription is returned.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/U2UPerfSub'

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 delete:

 summary: Remove the individual UE-to-UE session performance analytics event subscription.

 operationId: RemoveU2UPerfSubscription

 tags:

 - Individual UE-to-UE Performance Subscription (Document)

 parameters:

 - name: u2uPerfId

 in: path

 description: >

 Represents the identifier of an individual UE-to-UE session performance

 analytics subscription.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: >

 The individual UE-to-UE session performance event subscription matching

 the u2uPerfId is deleted.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 U2UPerfSub:

 description: >

 Represents the UE-to-UE session performance analytics subscription.

 type: object

 properties:

 analyticsType:

 $ref: 'TS29549\_SS\_ADAE\_VALPerformanceAnalytics.yaml#/components/schemas/AnalyticsType'

 valUeIds:

 type: array

 description: >

 Represent the list of VAL UEs, whose UE-to-UE session analytics are subscribed to.

 items:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 minItems: 1

 valServiceId:

 description: Represents the VAL service for which the subscription applies.

 type: string

 confLevel:

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

 area:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 repReq:

 $ref: '#/components/schemas/U2UReportingRequirements'

 expReqs:

 type: array

 description: >

 Represents the exposure level requirements for the analytics to be exposed.

 items:

 $ref: '#/components/schemas/U2UThreshold'

 minItems: 1

 notifUri:

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

 timeInterval:

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

 suppFeat:

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

 required:

 - analyticsType

 - valUeIds

 - notifUri

 U2UPerfNotif:

 description: >

 Represents the threshold for UE-to-UE session performance analytics.

 type: object

 properties:

 analyticsOutput:

 type: array

 description: >

 Represents the exposure level requirements for the analytics to be exposed.

 items:

 $ref: '#/components/schemas/U2UAnalyticsData'

 minItems: 1

 analyticsType:

 $ref: 'TS29549\_SS\_ADAE\_VALPerformanceAnalytics.yaml#/components/schemas/AnalyticsType'

 confLevel:

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

 required:

 - analyticsOutput

 U2UReportingRequirements:

 description: >

 Represents the UE-to-UE session performance analytics reporting requirements.

 type: object

 properties:

 repMode:

 $ref: 'TS29508\_Nsmf\_EventExposure.yaml#/components/schemas/NotificationMethod'

 reportingPeriod:

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

 reportingInds:

 type: array

 description: >

 Indicates the list of the requested analytics.

 items:

 $ref: '#/components/schemas/U2UAnalytics'

 minItems: 1

 reportingThrs:

 type: array

 description: >

 Identifies reporting threshold corresponding to the application QoS index(es).

 items:

 $ref: '#/components/schemas/U2UThreshold'

 minItems: 1

 reportingGrn:

 $ref: '#/components/schemas/U2UReportingGranularity'

 required:

 - repMode

 - reportingInds

 - reportingGrn

 U2UThreshold:

 description: >

 Represents the threshold for UE-to-UE session performance analytics.

 type: object

 properties:

 value:

 $ref: '#/components/schemas/U2UAnalyticsData'

 thrDirect:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/MatchingDirection'

 required:

 - value

 - thrDirect

 U2UAnalyticsData:

 description: >

 Represents the UE-to-UE analytics data.

 type: object

 properties:

 valUes:

 $ref: '#/components/schemas/U2UPair'

 avgLatency:

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

 avgPer:

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

 avgDataRate:

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

 jitter:

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

 U2UPair:

 description: >

 Represents the UE-to-UE pair.

 type: object

 properties:

 valUeA:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 valUeB:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

# Simple data types and Enumerations

 U2UAnalytics:

 anyOf:

 - type: string

 enum:

 - AVG\_LATENCY

 - AVG\_PER

 - AVG\_DATA\_RATE

 - JITTER

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration and is not used to encode

 content defined in the present version of this API.

 description: |

 Represents the UE-to-UE analytics types.

 Possible values are:

 - AVG\_LATENCY: The indication for requesting the average latency analytics.

 - AVG\_PER: The indication for requesting the average packet error rate analytics.

 - AVG\_DATA\_RATE: The indication for requesting the average data rate analytics.

 - JITTER: The indication for requesting the jitter analytics.

 U2UReportingGranularity:

 anyOf:

 - type: string

 enum:

 - GROUP

 - INDIVIDUAL

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration and is not used to encode

 content defined in the present version of this API.

 description: |

 Represents the UE-to-UE reporting granularity.

 Possible values are:

 - GROUP: The indication for requesting the analytics for all

 VAL UE-to-UE application sessions.

 - INDIVIDUAL: The indication for requesting the analytics for individual

 VAL UE-to-UE application sessions.

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