**3GPP TSG CT WG3 Meeting #132e *C3-240105\_R3***

**Electronic, 22 - 24 January, 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.549** | **CR** | **0227** | **rev** | **-** | **Current version:** | **18.4.0** |  |
|  | | | | | | | | |
| *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:*** | Implementation of the OpenAPI file for the SS\_ADAE\_Ue2UePerformanceAnalytics API | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | ADAES | | | | |  | ***Date:*** | | | 2023-12-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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 can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The Editor's Notes in the SS\_ADAE\_Ue2UePerformanceAnalytics API shall be resolved and Stage 3 shall be aligned with Stage 2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | This CR introduces the OpenAPI file for the SS\_ADAE\_Ue2UePerformanceAnalytics API | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The definition of the SS\_ADAE\_Ue2UePerformanceAnalytics API cannot be completed in the stage 3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.10.3.1, A.X | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 new SS\_ADAE\_Ue2UePerformanceAnalytics OpenAPI file. | | | | | | | | |
| ***()*** | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

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

#### 7.10.3.1 API URI

The SS\_ADAE\_Ue2UePerformanceAnalytics service shall use the SS\_ADAE\_Ue2UePerformanceAnalytics API.

The request URIs used in HTTP requests from the VAL server towards the ADAE server shall have the Resource URI structure as defined in clause 6.5 with the following clarifications:

- The <apiName>shall be "ss-adae-u2upa".

- The <apiVersion> shall be "v1".

- The <apiSpecificSuffixes> shall be set as described in clause 7.10.3.2.

Editor's Note: Definitions of service operations descriptions for this API is FFS.

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

# A.X 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'

repReqs:

$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'

reportingThrs:

type: array

description: >

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

items:

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

minItems: 1

required:

- repMode

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 \* \* \* \*