**3GPP TSG-CT WG3 Meeting #134 *C3-242461***

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.549** | **CR** | **0266** | **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:*** | Add new attributes to SrvApiSub | | | | | | | | | |
|  |  | | | | | | | | | |
| ***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 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:*** | | Clause 7.10.5 contains some editorial errors which should be corrected.  CR#0024 against TS 23.436 in document S6-240561 adds new information elements to and removes some from service API event subscription request in clause 8.6.3.2 of TS 23.436.  No information regarding service API analytics notification in clause 8.6.3.6 of TS 23.436, has been modified. Thus the detailed definition is as is. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Removal of residuals of ENs and extra lines.  Adding analyticsType, eventCriteria, and repReq SrvApiSub and removal of the related EN.  Removal of EN for detailed definition of type SrvApiNotif. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Stage 3 is not in accordance to stage 2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.10.5.1, 7.10.5.2.1 7.10.5.4.1, 7.10.5.4.2.1, 7.10.5.4.2.2, 7.10.5.4.3.2, A.19 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 file of the SS\_ADAE\_ServiceApiAnalytics API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

#### 7.10.5.1 API URI

The SS\_ADAE\_ServiceApiAnalytics service shall use the SS\_ADAE\_ServiceApiAnalytics 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-sa".

- The <apiVersion> shall be "v1".

- The <apiSpecificSuffixes> shall be set as described in clause 7.10.5.2.

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

##### 7.10.5.2.1 Overview

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

Figure 7.10.5.2.1-1 depicts the resource URIs structure for the SS\_ADAE\_ServiceApiAnalytics API.

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**Figure 7.10.5.2.1-1: Resource URI structure of the SS\_ADAE\_ServiceApiAnalytics API**

Table 7.10.5.2.1-1 provides an overview of the resources and applicable HTTP methods.

**Table 7.10.5.2.1-1: Resources and methods overview**

|  |  |  |  |
| --- | --- | --- | --- |
| **Resource name** | **Resource URI** | **HTTP method** | **Description** |
| Service API event subscription | /service-api | POST | Subscription to the event of the service API analytics |
| Individual service API event subscription | /service-api/{srvApiId} | GET | Request the retrieval of an existing "Individual subscription to the event of the service API analytics" resource. |
|  |  |
|  |  |
| DELETE | Request the deletion of an existing "Individual subscription to the event of the service API analytics" resource. |

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

##### 7.10.5.4.1 General

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

Table 7.10.5.4.1-1 specifies the data types defined specifically for the SS\_ADAE\_ServiceApiAnalytics API service.

**Table 7.10.5.4.1-1\_SS\_ADAE\_ServiceApiAnalytics API specific Data Types**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **Section defined** | **Description** | **Applicability** |
| SrvApiSub | 7.10.5.4.2.2 | Subscription to the service API analytics event |  |
| SrvApiNotif | 7.10.5.4.2.3 | Notification information of the service API analytics event. |  |
| SrvApiIdType | 7.10.5.4.3.3 | Type of service API |  |

Table 7.10.5.4.1-2 specifies data types re-used by the SS\_ADAE\_ServiceApiAnalytics API service:

**Table 7.10.5.4.1-2: Re-used Data Types**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **Reference** | **Comments** | **Applicability** |
| AnalyticsType | 7.10.1.4.2.6 | Type of analytics for the event of the VAL application performance analytics. |  |
| 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 |  |
| 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. |  |

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

###### 7.10.5.4.2.1 Introduction

This clause defines the data structures to be used in resource representations of this service.

###### 7.10.5.4.2.2 Type: SrvApiSub

**Table 7.10.5.4.2.2-1: Definition of type SrvApiSub**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 service API analytics. Only the attributes "category" and "mode" are applicable here. |  |
| eventCriteria | string | M | 1 | Criteria matching the service API analytics event. |  |
| serviceApiName | string | C | 0..1 | The Service API name. (NOTE) |  |
| serviceApiType | string | C | 0..1 | The Service API type. (NOTE) |  |
| area | LocationArea5G | O | 0..1 | The geographical or service area to which the service API analytics subscription is applied. |  |
| timeValidity | TimeWindow | O | 0..1 | The time validity of the service API analytics subscription. |  |
| timeHorizon | TimeWindow | O | 0..1 | Time horizon for the predictions. |  |
| repReq | ReportingInformation | O | 0..1 | Represents the reporting requirement of the service API analytics subscription. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Used to negotiate the supported features of the API as defined in clause 7.10.5.6.  This attribute shall be provided in the HTTP POST response of successful subscription creation if it was provided in the request. |  |
| NOTE: Only one of these attributes shall be provided. | | | | | |

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

###### 7.10.5.4.3.2 Simple data types

None.

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

# A.19 SS\_ADAE\_ServiceApiAnalytics API

openapi: 3.0.0

info:

title: SS\_ADAE\_ServiceApiAnalytics

description: |

API for ADAE service API 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-sspa/v1'

variables:

apiRoot:

default: https://example.com

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

paths:

/service-api:

post:

description: >

Creates a new individual service API event subscription.

operationId: SrvApiSubs

tags:

- Service API event subscriptions (Collection)

requestBody:

required: true

content:

application/json:

schema:

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

callbacks:

saaNotification:

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

post:

requestBody: # contents of the callback message

required: true

content:

application/json:

schema:

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

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: Service API event subscription resource created successfully.

content:

application/json:

schema:

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

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'

/service-api/{srvApiId}:

get:

description: Retrieves an individual service API event subscription.

operationId: ReadIndSrvApiEventSubsc

tags:

- Individual service API event subscription (Document)

parameters:

- name: srvApiId

in: path

description: >

Identifier of an individual service API event subscription.

required: true

schema:

type: string

responses:

'200':

description: >

The individual service API event subscription matching the srvApiId is retrieved.

content:

application/json:

schema:

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

'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 service API event subscription.

operationId: DeleteIndSrvApiEventSubsc

tags:

- Individual service API event subscription (Document)

parameters:

- name: srvApiId

in: path

description: >

Identifier of an individual service API event subscription.

required: true

schema:

type: string

responses:

'204':

description: >

The individual service API subscription matching the srvApiId 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:

SrvApiSub:

description: Represents an individual service API event subscription.

type: object

properties:

notifUri:

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

analyticsType:

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

eventCriteria:

type: string

description: Criteria matching service API analytics event.

serviceApiName:

type: string

description: Service API name.

serviceApiType:

type: string

description: Service API type.

area:

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

timeValidity:

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

timeHorizon:

$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:

- analyticsType

- notifUri

oneOf:

- required: [serviceApiName]

- required: [serviceApiType]

SrvApiNotif:

description: Represents notification of the service API event.

type: object

properties:

requestorId:

type: string

description: Identifier of the requestor of the analytics.

output:

type: string

description: Output for analytics.

area:

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

confLevel:

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

required:

- requestorId

- output

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