**3GPP TSG-CT WG3 Meeting #134 *C3-242460***

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.549** | **CR** | **0264** | **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)*.* | | | | | | | | |
|  | | | | | | | | |

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

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Add reporting requirements to LocAccurSub | | | | | | | | | |
|  |  | | | | | | | | | |
| ***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:*** | | CR#0023 against TS 23.436 in document S6-240507 adds "Reporting requirements " information element to location accuracy analytics subscription request in clause 8.5.3.2 of TS 23.436. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding repReq attribute to LocAccurSub. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Stage 3 is not in accordance to stage 2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.10.4.4.1, 7.10.4.4.2.2, A.18 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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\_LocationAccuracyAnalytics API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

##### 7.10.4.4.1 General

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

Table 7.10.4.4.1-1 specifies the data types defined specifically for the SS\_ADAE\_LocationAccuracyAnalytics API service.

**Table 7.10.4.4.1-1\_SS\_ADAE\_LocationAccuracyAnalytics API specific Data Types**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **Section defined** | **Description** | **Applicability** |
| LocAccurSub | 7.10.4.4.2.2 | Subscription to the location accuracy analytics event |  |
| LocAccurNotif | 7.10.4.4.2.3 | Notification information of the location accuracy analytics event |  |

Table 7.10.4.4.1-2 specifies data types re-used by the SS\_ADAE\_LocationAccuracyAnalytics API service:

**Table 7.10.4.4.1-2: Re-used Data Types**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **Reference** | **Comments** | **Applicability** |
| Accuracy | 3GPP TS 29.122 [3] | Represent the desired level of accuracy of the requested location information. |  |
| AnalyticsType | Clause 7.10.1.4.2.6 | Represents the type of 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. |  |
| UeMobility | 3GPP TS 29.520 [33] | Represents UE Mobility and route information |  |
| 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 | Indicate either VAL User ID or VAL UE ID. |  |

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

###### 7.10.4.4.2.2 Type: LocAccurSub

**Table 7.10.4.4.2.2-1: Definition of type LocAccurSub**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 location accuracy analytics. Only the attributes "category" and "mode" are applicable here. |  |
| valUeIds | array(ValTargetUe) | M | 1..N | A list of identities of one or more VAL UEs whose location accuracy analytics are subscribed to. |  |
| accuracy | Accuracy | M | 1 | Represents the desired level of accuracy of the requested location information. |  |
| valServiceId | string | O | 0..1 | The identifier of the VAL service for which location accuracy analytics is requested. |  |
| 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 location accuracy analytics subscription is applied. |  |
| timeValidity | TimeWindow | O | 0..1 | The time validity of the location accuracy analytics subscription. |  |
| ueMobs | array(UeMobility) | O | 1..N | Mobility and route information of the one or more target VAL UE. |  |
| repReq | ReportingInformation | O | 0..1 | Represents the reporting requirement of the location accuracy analytics subscription. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Used to negotiate the supported features of the API as defined in clause 7.10.4.6.  This attribute shall be provided in the HTTP POST response of successful subscription creation if it was provided in the request. |  |

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

# A.18 SS\_ADAE\_LocationAccuracyAnalytics API

openapi: 3.0.0

info:

title: SS\_ADAE\_LocationAccuracyAnalytics

description: |

API for ADAE location accuracy 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-laa/v1'

variables:

apiRoot:

default: https://example.com

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

paths:

/location-accuracy:

post:

description: >

Creates a new individual location accuracy performance event subscription.

operationId: LocAccurSubs

tags:

- Location accuracy performance event subscriptions (Collection)

requestBody:

required: true

content:

application/json:

schema:

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

callbacks:

laaNotification:

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

post:

requestBody: # contents of the callback message

required: true

content:

application/json:

schema:

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

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: Location accuracy subscription resource created successfully.

content:

application/json:

schema:

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

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'

/location-accuracy/{locAccId}:

get:

description: Retrieves an individual location accuracy performance event subscription.

operationId: ReadIndLocAccurPerfEventSubsc

tags:

- Individual location accuracy performance event subscription (Document)

parameters:

- name: locAccId

in: path

description: >

Identifier of an individual location accuracy performance event subscription.

required: true

schema:

type: string

responses:

'200':

description: >

The individual location accuracy subscription matching the locAccId is retrieved.

content:

application/json:

schema:

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

'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 location accuracy performance event subscription.

operationId: DeleteIndLocAccurPerfEventSubsc

tags:

- Individual location accuracy performance event subscription (Document)

parameters:

- name: locAccId

in: path

description: >

Identifier of an individual location accuracy performance event subscription.

required: true

schema:

type: string

responses:

'204':

description: >

The individual location accuracy performance subscription matching the locAccId

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:

LocAccurSub:

description: >

Represents an individual location accuracy performance event subscription resource.

type: object

properties:

notifUri:

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

analyticsType:

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

valUeIds:

type: array

items:

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

minItems: 1

description: >

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

accuracy:

$ref: 'TS29122\_MonitoringEvent.yaml#/components/schemas/Accuracy'

valServiceId:

type: string

description: >

Identifier of the VAL service for which location accuracy analytics is requested.

confLevel:

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

area:

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

timeValidity:

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

ueMobs:

type: array

items:

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

minItems: 1

description: Mobility and route information of the target VAL UEs.

repReq:

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

suppFeat:

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

required:

- analyticsType

- valUeIds

- accuracy

- notifUri

LocAccurNotif:

description: Represents notification of the location accuracy performance event.

type: object

properties:

output:

type: string

description: Event output data.

analyticsType:

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

confLevel:

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

required:

- output

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