**3GPP TSG-CT WG3 Meeting #142 *C3-253588***

**Gothenburg, SE, 25 - 29 August 2025 (Revision of C3-253093)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **0430** | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | Digital Asset Profile management OpenAPI | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | C3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | Metaverse\_App | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | As per TS 23.438 clause 8.2 explains SS\_DAProfileManagement, API.  As per TS 22.156 clause 3.1,  **digital asset**: digitally stored information that is uniquely identifiable and can be used to realize value according to their licensing conditions and applicable regulations. Examples of digital assets include digital representation (avatar), software licenses, gift certificates, tokens and files (e.g., music files) that have been purchased. This is not an exhaustive list of examples.  The corresponding OpenAPI definition updates has to be done in stage 3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Digital Asset profile services OpenAPI definition are updated. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The new Digital asset profile API definition is missing in stage 3.  Stage 3 is not inline with Stage 2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | A.32 <new> | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 OpenAPI descriptions of the following API:  TS29549\_SS\_DAProfileManagement.yaml | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

# A.32 SS\_DAProfileManagement API

openapi: 3.0.0

info:

title: SS\_DAProfileManagement

version: 1.0.0-alpha.1

description: |

SS\_DAProfileManagement service to manage digital asset profile on a DA server.

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externalDocs:

description: >

3GPP TS 29.549 V19.4.0 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-da-pm/v1'

variables:

apiRoot:

default: https://example.com

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

paths:

/profile:

post:

description: Creates a new Individual DA profile.

operationId: CreateDAProfile

tags:

- SEAL DA profile (Collection)

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Digital Asset Profile resource is created sucessfully.

content:

application/json:

schema:

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

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'

/profile/{daId}:

get:

description: Retrieves an individual SEAL DA profile.

operationId: RetrieveDAProfile

tags:

- Individual SEAL DA Profile(Document)

parameters:

- name: daId

in: path

description: String identifying an individual DA profile resource.

required: true

schema:

type: string

responses:

'200':

description: Successful case. The requested "Individual DA profile” is retrieved.

content:

application/json:

schema:

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

'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'

put:

description: Updates an individual SEAL DA Profile.

operationId: UpdateDAProfile

tags:

- Individual SEAL DA Profile(Document)

parameters:

- name: daId

in: path

description: String identifying an individual configuration resource.

required: true

schema:

type: string

requestBody:

description: Configuration information to be updated in DA server.

required: true

content:

application/json:

schema:

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

responses:

'200':

description: The configuration is updated successfully.

content:

application/json:

schema:

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

'204':

description: No Content

'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'

patch:

description: Modify an existing SEAL DA Profile.

operationId: ModifyDAProfile

tags:

- Individual SEAL DA Profile(Document)

parameters:

- name: daId

in: path

description: Identifier of an individual SEAL DA Profile.

required: true

schema:

type: string

requestBody:

required: true

content:

application/merge-patch+json:

schema:

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

responses:

'200':

description: >

The individual SEAL DA Profile is modified successfully and

a representation of the updated SEAL DA Profile is returned

in the request body.

content:

application/json:

schema:

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

'204':

description: >

No Content. The individual SEAL DA Profile is

modified successfully.

'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'

delete:

description: Deletes an individual SEAL DA Profile.

operationId: DeleteDAProfile

tags:

- Individual SEAL DA Profile(Document)

parameters:

- name: daId

in: path

description: String identifying an individual DA profile resource.

required: true

schema:

type: string

responses:

'204':

description: The individual configuration matching daId 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:

DigitalAssetProfile:

description: Represents the DA Profile information.

type: object

properties:

accCtrlLists:

type: array

minItems: 1

items:

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

description: >

Represents the list of tuples indicating the requestors allowed to perform operations

with this digital asset and the allowed operation types.

accessories:

type: array

minItems: 1

items:

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

description: >

Represents the list of digital asset identifiers which are accessories (e.g. Hat, watch,

shoes) purchased for this digital asset profile

appIds:

type: array

items:

type: string

minItems: 1

daId:

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

daOwnerIds:

type: array

minItems: 1

items:

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

description: >

Represents the list of identifier(s) for the digital asset owner.

daType:

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

daUri:

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

expTime:

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

spatialCondts:

type: array

minItems: 1

items:

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

description: >

Represents the list of spatial conditions (e.g. locations) where this digital asset

profile is allowed to be accessed.

srvProviderIds:

type: array

minItems: 1

items:

type: string

description: >

Represents the list of service providers for the digital asset.

suppFeat:

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

valServerId:

type: string

DigitalAssetProfilePatch:

description: Represents the DA Profile information patch.

type: object

properties:

accCtrlLists:

type: array

minItems: 1

items:

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

description: >

Represents the list of tuples indicating the requestors allowed to perform operations

with this digital asset and the allowed operation types.

accessories:

type: array

minItems: 1

items:

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

description: >

Represents the list of digital asset identifiers which are accessories (e.g. Hat, watch,

shoes) purchased for this digital asset profile

appIds:

type: array

items:

type: string

minItems: 1

daOwnerIds:

type: array

minItems: 1

items:

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

description: >

Represents the list of identifier(s) for the digital asset owner.

daType:

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

expTime:

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

spatialCondts:

type: array

minItems: 1

items:

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

description: >

Represents the list of spatial conditions (e.g. locations) where this digital asset

profile is allowed to be accessed.

srvProviderIds:

type: array

minItems: 1

items:

type: string

description: >

Represents the list of service providers for the digital asset.

AccessControlList:

description: >

Represents the list of tuples indicating the requestors allowed to perform

operations with this digital asset and the allowed operation types

type: object

properties:

allowedUsers:

type: array

items:

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

description: >

Represents the list of users allowed to access this digital asset.

minItems: 1

AllowedUser:

description: Represents the user allowed to access this digital asset.

type: object

properties:

user:

type: string

allowedOperations:

type: array

items:

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

description: >

Represents the list of operations allowed by the user.

minItems: 1

predModels:

type: array

items:

type: string

description: >

Represents the list of one or more predictive model for the user.

minItems: 1

required:

- user

SpatialCondition:

description: Represents the location where DA profile is allowed to be accessed.

type: object

properties:

currLoc:

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

# Simple data types and Enumerations

DigitalAssetOwnerId:

description: Represents the identity of the digital asset owner

type: string

DaId:

description: Represents the identity of the digital asset name

type: string

DigitalAssetType:

anyOf:

- type: string

enum:

- ACCESSORY

- AVATAR

- GIFT\_CERTIFICATES

- SOFTWARE\_LICENSE

- TOKENS\_AND\_FILES

- WALLET

- 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 different type of digital assets e.g. avatar, wallet

Possible values are:

- ACCESSORY: Represents the accessory.

- AVATAR: Represents the avatar

- GIFT\_CERTIFICATES: Represents the gift certificates.

- SOFTWARE\_LICENSE: Represents the software license

- TOKENS\_AND\_FILES: Represents the tokens and files.

- WALLET: Represents the Digital wallet

Operations:

anyOf:

- type: string

enum:

- DISCOVERY

- RETRIEVE

- CREATE

- UDPATE

- DELETE

- UPLOAD

- DOWNLOAD

- 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 a desired condition of the requested location change.

Possible values are:

- DISCOVERY: Indicates that the operation is discovery.

- RETRIEVE: Indicates that the operation is retrieve.

- CREATE: Indicates that the operation is CREATE.

- UDPATE: Indicates that the operation is UPDATE.

- DELETE: Indicates that the operation is DELETE.

- UPLOAD: Indicates that the Digital asset media operation is UPLOAD.

- DOWNLOAD: Indicates that the Digital asset media operation is DOWNLOAD.

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