**TSG-CT WG3 Meeting #109-e *C3-202xyz***

**E-Meeting, 16th – 24th April 2020 (Revision of C3-202165)**

**Source: Huawei, Samsung**

**Title: Pseudo-CR on SEAL API names**

**Spec: 3GPP TS 29.549 1.1.0**

**Agenda item: 16.27**

**Document for: Agreement**

**1. Introduction**

<Introduction part (optional)>

**2. Reason for Change**

It’s proposed to use SEAL specific API names in resource URI, e.g. ss-group-management, to distinguish with other API which owns similar functionality but specified in different architecture.

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.549 1.1.0.

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

##### 5.3.1.1.1 Overview

The SS\_GroupManagement API, as defined 3GPP TS 23.434 [2], allows VAL server via GM-S reference point to create, fetch, update and delete VAL group membership and configuration information.

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

#### 7.2.1.1 API URI

The request URI used in each HTTP request from the VAL server towards the Group management server shall have the structure as defined in clause 6.5 with the following clarifications:

- The {apiName}shall be "ss-group-management".

- The {apiVersion} shall be "v1".

- The {apiSpecificSuffixes} shall be set as described in clause 7.2.1.2

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

##### 7.2.1.2.1 Overview



Figure 7.2.1.2.1-1: Resource URI structure of the SS\_GroupManagement API

Table 7.2.1.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 7.2.1.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| All VAL Group Documents | {apiRoot}/ss-group-management/{apiVersion}/group-documents | POST | Creates a new VAL group document.  |
| Individual VAL Group Document | {apiRoot}/ss-group-management/{apiVersion}/group-documents//{groupDocId} | GET | Retrieve an individual VAL group’s membership and configuration information according to query parameter on the resource identified by {groupDocId}. If there are no query parameters, fetch the whole VAL group document resource identified by {groupDocId}. |
| PUT | Updates an individual VAL group’s membership and configuration information identified by {groupDocId}. |

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

###### 7.2.1.2.2.2 Resource Definition

Resource URI: **{apiRoot}/ss-group-management/{apiVersion}/group-documents**

This resource shall support the resource URI variables defined in the table 7.2.1.2.2.2-1.

Table 7.2.1.2.2.2-1: Resource URI variables for this resource

|  |  |
| --- | --- |
| Name | Definition |
| apiRoot | See clause 6.5 |
| apiVersion | See clause 7.2.1.1 |

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

###### 7.2.1.2.3.2 Resource Definition

Resource URI: **{apiRoot}/ss-group-management/{apiVersion}/group-documents/{groupDocId}**

This resource shall support the resource URI variables defined in the table 7.2.1.2.3.2-1.

Table 7.2.1.2.3.2-1: Resource URI variables for this resource

|  |  |
| --- | --- |
| Name | Definition |
| apiRoot | See clause 6.5 |
| apiVersion | See clause 7.2.1.1 |
| groupDocId | String representing an individual group document resource. |

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

#### 7.3.1.1 API URI

The request URI used in each HTTP request from the VAL server towards the Configuration management server shall have the structure as defined in clause 6.5 with the following clarifications:

- The {apiName}shall be "ss-userprofileretrieval".

- The {apiVersion} shall be "v1".

- The {apiSpecificSuffixes} shall be set as described in clause 7.3.1.2.

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

##### 7.3.1.2.1 Overview



Figure 7.3.1.2.1-1: Resource URI structure of the SS\_UserProfileRetrieval API

Table 7.3.1.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 7.3.1.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| Individual VAL service | {apiRoot}/ss-userprofileretrieval/{apiVersion}//{valServiceId} | GET | Retrieve a VAL User or VAL UE’s profile information belonging to a VAL service, according to query parameter (VAL User ID / VAL UE ID) on the resource identified by {valServiceId}.  |

Editor’s note: It is FFS, whether the current Resource URI fits into the requirement and how the VAL server is aware of valServiceId in advance.

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

###### 7.3.1.2.2.2 Resource Definition

Resource URI: **{apiRoot}/ss-userprofileretrieval/{apiVersion}/{valServiceId}**

This resource shall support the resource URI variables defined in the table 7.3.1.2.2.2-1.

Table 7.3.1.2.2.2-1: Resource URI variables for this resource

|  |  |
| --- | --- |
| Name | Definition |
| apiRoot | See clause 6.5 |
| apiVersion | See clause 7.3.1.1 |
| valServiceId | String representing an individual VAL service resource. |

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

##### 7.5.1.2.1 Overview



Figure 7.5.1.2.1-1: Resource URI structure of the SS\_Events API

Table 7.5.1.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 7.5.1.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| SEAL Events Subscriptions | {apiRoot}/ss-events/{apiVersion}/subscriptions | POST | Creates a new individual SEAL Event Subscription.  |
| Individual SEAL Events Subscription | {apiRoot}/ss-events/{apiVersion}/subscriptions/{subscriptionId} | DELETE | Deletes an individual SEAL Event Subscription identified by the subscriptionId. |

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

###### 7.5.1.2.2.2 Resource Definition

Resource URI: **{apiRoot}/ss-events/{apiVersion}/subscriptions**

This resource shall support the resource URI variables defined in the table 7.5.1.2.2.2-1.

Table 7.5.1.2.2.2-1: Resource URI variables for this resource

|  |  |
| --- | --- |
| Name | Definition |
| apiRoot | See clause 6.5 |
| apiVersion | See clause 7.5.1.1 |

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

###### 7.5.1.2.3.2 Resource Definition

Resource URI: **{apiRoot}/ss-events/{apiVersion}/subscriptions/{subscriptionId}**

This resource shall support the resource URI variables defined in the table 7.5.1.2.3.2-1.

Table 7.5.1.2.3.2-1: Resource URI variables for this resource

|  |  |
| --- | --- |
| Name | Definition |
| apiRoot | See clause 6.5 |
| apiVersion | See clause 7.5.1.1 |
| SubscriptionId | String identifying an Individual Events Subscription |

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

## A.2 SS\_GroupManagement API

openapi: 3.0.0

info:

 title: SS\_GroupManagement

 description: |

 API for SEAL Group management.

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 version: "1.0.0.alpha-1"

externalDocs:

 description: 3GPP TS 29.549 V1.1.0 Service Enabler Architecture Layer for Verticals (SEAL); Application Programming Interface (API) specification; Stage 3.

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

servers:

 - url: '{apiRoot}/ss-group-management/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /group-documents:

 post:

 description: Creates a new VAL group document.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: VAL group created sucessfully.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/ss-group-management/v1/group-documents/{groupDocId}'

 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'

 /group-documents/{groupDocId}:

 get:

 description: Retrieves VAL group information satisfying filter criteria

 parameters:

 - name: groupDocId

 in: path

 description: String identifying an individual VAL group document resource

 required: true

 schema:

 type: string

 - name: group-members

 in: query

 description: When set to true indicates the group management server to send the members list information of the VAL group.

 schema:

 type: boolean

 - name: group-configuration

 in: query

 description: When set to true indicates the group management server to send the group configuration information of the VAL group.

 schema:

 type: boolean

 responses:

 '200':

 description: The VAL group information based on the request from the VAL server. Includes VAL group members list if group-members flag is set to true in the request, VAL group configuration information if the group-configuration flag is set to true in the request, VAL group identifier, whole VAL group document resource if both group-members and group-configuration flags are omitted/set to false in the request.

 content:

 application/json:

 schema:

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

 '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/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'

 put:

 description: Updates an individual VAL group document.

 parameters:

 - name: groupDocId

 in: path

 description: String identifying an individual VAL group document resource

 required: true

 schema:

 type: string

 requestBody:

 description: VAL group document to be updated in Group management server.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: VAL group document updated successfully

 content:

 application/json:

 schema:

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

 '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 a VAL Group.

 parameters:

 - name: groupDocId

 in: path

 description: String identifying an individual VAL group document resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The individual VAL group matching groupDocId was deleted.

 '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:

 schemas:

 VALGroupDocument:

 type: object

 properties:

 valGroupId:

 type: string

 description: The VAL group idenitity.

 grpDesc:

 type: string

 description: The text description of the VAL group.

 membersList:

 type: array

 description: The list of VAL User IDs and VAL UE IDs, which are members of the VAL group.

 items:

 type: string

 minItems: 1

 valGrpConf:

 type: string

 description: Configuration data for the VAL group.

 valServiceIds:

 type: array

 description: The list of VAL services enabled on the group.

 items:

 type: string

 minItems: 1

 suppFeat:

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

 required:

 - valGroupId

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

## A.3 SS\_UserProfileRetrieval API

openapi: 3.0.0

info:

 title: SS\_UserProfileRetrieval

 description: |

 API for SEAL User Profile Retrieval.

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 version: "1.0.0.alpha-1"

externalDocs:

 description: 3GPP TS 29.549 V1.1.0 Service Enabler Architecture Layer for Verticals (SEAL); Application Programming Interface (API) specification; Stage 3.

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

servers:

 - url: '{apiRoot}/ss-userprofileretrieval/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{valServiceId}:

 get:

 description: Retrieve a VAL User or VAL UE's profile information belonging to a VAL service.

 parameters:

 - name: valServiceId

 in: path

 description: String identifying an individual VAL service resource

 required: true

 schema:

 type: string

 - name: valUserId

 in: query

 description: String identifying a VAL User. Shall be present if valUEId query parameter is not present.

 schema:

 type: string

 - name: valUEId

 in: query

 description: String identifying a VAL UE. Shall be present if valUserId query parameter is not present.

 schema:

 type: string

 responses:

 '200':

 description: The Profile information of the VAL User or VAL UE corresponding to the identifier in the request.

 content:

 application/json:

 schema:

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

 '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/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:

 schemas:

 ProfileDoc:

 type: object

 properties:

 profileInformation:

 type: string

 description: Profile information associated with the valUserId or valUEId.

 valUserId:

 type: string

 description: Unique identifier of a VAL user.

 valUEId:

 type: string

 description: Unique identifuer of a VAL UE.

 required:

 - profileInformation

 oneOf:

 - required: [valUserId]

 - required: [valUEId]

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