**3GPP TSG-CT WG3 Meeting #109eC3-202342**

**E-Meeting, 16th – 24th April 2020**  (Revision of C3-202238)

**Source: Samsung**

**Title: Pseudo-CR on Group create event**

**Spec: 3GPP TS 29.549 v1.1.0**

**Agenda item: 16.27**

**Document for: Decision**

**1. Introduction**

As per Clause 10.3.3 of TS 23.434, the group management server notifies the VAL server regarding the group creation with the information of the group. This event is missing in TS 29.549.

**2. Reason for Change**

Missing Group creation event. This pCR proposes new event “GM\_GROUP\_CREATE” to SEAL events.

**3. Conclusions**

None.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.549 v1.1.0.

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

###### 7.2.1.4.2.2 Type: VALGroupDocument

Table 7.2.1.4.2.2-1: Definition of type VALGroupDocument

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| valGroupId | string | M | 1 | This is VAL group identity (VAL group ID) as per TS 23.434 [2], which is a unique identifier within the VAL service that represents a VAL group, set of VAL users or VAL UEs according to the VAL service. |  |
| grpDesc | string | O | 0..1 | Text description of the VAL group. |  |
| membersList | array(string) | O | 1..N | List of VAL User IDs and VAL UE IDs, which are members of the VAL group. |  |
| valGrpConf | string | O | 0..1 | Configuration data for the VAL group.  Shall be present in HTTP POST request message from VAL server to Group Management server. |  |
| valServiceIds | array(string) | O | 1..N | List of VAL services whose communications enabled on the group. |  |
| suppFeat | SupportedFeatures | O | 0..1 | Used to negotiate the supported optional features of the API as described in clause 6.8.  This attribute shall be provided in the HTTP POST request and in the response of successful resource creation. |  |
| resUri | Uri | O | 0..1 | The URI for individual VAL group document resource. (NOTE) |  |
| NOTE:      The “resUri” attribute is not modifiable by the VAL server. | | | | | |

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

###### 7.5.1.4.2.5 SEALEventDetail

Table 7.5.1.4.2.5-1: Definition of type SEALEventDetail

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| eventId | SEALEvent | M | 1 | Event that is notified |  |
| valGroupDocuments | array(VALGroupDocument) | C | 1..N | Newly created VAL group documents or the VAL groups documents with modified membership and configuration information. This parameter shall be present only if the event in event notification is “GM\_GROUP\_INFO\_CHANGE” or “GM\_GROUP\_CREATE”. | GM\_GroupCreate |
| profileDocs | array(ProfileDoc) | C | 1..N | Updated profile information associated with VAL Users or VAL UEs.  This parameter shall be present only if the event in event notification is “CM\_USER\_PROFILE\_CHANGE”. |  |

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

###### 7.5.1.4.3.3 Enumeration: SEALEvent

Table 7.5.1.4.3.3-1: Enumeration SEALEvent

|  |  |  |
| --- | --- | --- |
| Enumeration value | Description | Applicability |
| LM\_LOCATION\_INFO | Events related to the location information of VAL Users or VAL UEs from the Location Management Server. |  |
| GM\_GROUP\_INFO\_CHANGE | Events related to the modification of VAL group membership and configuration information from the Group Management Server. |  |
| CM\_USER\_PROFILE\_CHANGE | Events related to update of user profile information from the Configuration Management Server. |  |
| GM\_GROUP\_CREATE | Events related to creation of new VAL groups from the Group Management Server. | GM\_GroupCreate |

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

#### 7.5.1.6 Feature Negotiation

General feature negotiation procedures are defined in clause 6.8. Table 7.5.1.6-1 lists the supported features for SS\_Events API.

Table 7.5.1.6-1: Supported Features

|  |  |  |
| --- | --- | --- |
| **Feature number** | **Feature Name** | **Description** |
| 1 | Notification\_test\_event | Testing of notification connection is supported according to clause 6.6. |
| 2 | Notification\_websocket | The delivery of notifications over Websocket is supported according to clause 6.6. This feature requires that the Notification\_test\_event feature is also supported. |
| A | GM\_GroupCreate | This feature supports the group creation event. |

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

## A.5 SS\_Events API

openapi: 3.0.0

info:

title: SS\_Events

description: |

API for SEAL Events management.

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version: "1.0.0.alpha-1"

externalDocs:

description: 3GPP TS 29.549 V1.2.0 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-events/v1'

variables:

apiRoot:

default: https://example.com

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

paths:

/subscriptions:

post:

description: Creates a new individual SEAL Event Subscription.

requestBody:

required: true

content:

application/json:

schema:

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

callbacks:

notificationDestination:

'{request.body#/notificationDestination}':

post:

requestBody: # contents of the callback message

required: true

content:

application/json:

schema:

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

responses:

'204':

description: No Content (successful notification)

'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: SEAL Events subscription resource created successfully.

content:

application/json:

schema:

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

headers:

Location:

description: 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/ss-events/v1/subscriptions/{subscriptionId}'

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'

/subscriptions/{subscriptionId}:

delete:

description: Deletes an individual SEAL Event Subscription.

parameters:

- name: subscriptionId

in: path

description: Identifier of an individual Events Subscription

required: true

schema:

type: string

responses:

'204':

description: The individual SEAL Events Subscription matching the subscriptionId is 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:

SEALEventSubscription:

type: object

properties:

subscriberId:

type: string

description: String identifying the subscriber of the event.

eventSubs:

type: array

items:

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

minItems: 1

description: Subscribed events.

eventReq:

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

notificationDestination:

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

requestTestNotification:

type: boolean

description: Set to true by Subscriber to request the SEAL server to send a test notification as defined in in clause 6.6. Set to false or omitted otherwise.

websockNotifConfig:

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

suppFeat:

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

required:

- subscriberId

- eventSubs

- eventReq

- notificationDestination

SEALEventNotification:

type: object

properties:

subscriptionId:

type: string

description: Identifier of the subscription resource to which the notification is related – SEAL resource identifier

eventDetails:

type: array

items:

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

minItems: 1

description: Detailed notifications of individual events.

required:

- subscriptionId

- eventDetails

EventSubscription:

type: object

properties:

eventId:

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

valGroups:

type: array

items:

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

minItems: 1

description: Each element of the array represents the VAL group identifier(s) of a VAL service that the subscriber wants to know in the interested event. This parameter shall be present only if the event subscribed is “GM\_GROUP\_INFO\_CHANGE”.

identities:

type: array

items:

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

minItems: 1

description: Each element of the array represents the VAL User / UE IDs of a VAL service that the event subscriber wants to know in the interested event. This parameter shall be present only if the event subscribed is “CM\_USER\_PROFILE\_CHANGE”.

required:

- eventId

SEALEventDetail:

type: object

properties:

eventId:

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

valGroupDocuments:

type: array

items:

$ref: 'TS29549\_SS\_GroupManagement.yaml#/components/schemas/VALGroupDocument'

minItems: 1

description: Newly created VAL group documents or the VAL groups documents with modified membership and configuration information.This parameter shall be present only if the event in event notification is “GM\_GROUP\_INFO\_CHANGE” or “GM\_GROUP\_CREATE”.

profileDocs:

type: array

items:

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

minItems: 1

description: Updated profile information associated with VAL Users or VAL UEs. This parameter shall be present only if the event in event notification is “CM\_USER\_PROFILE\_CHANGE”.

required:

- eventId

VALGroupFilter:

type: object

properties:

valSvcId:

type: string

description: Identity of the VAL service

valGrpIds:

type: array

items:

type: string

minItems: 1

description: VAL group identifiers that event subscriber wants to know in the interested event.

required:

- valGrpIds

IdentityFilter:

type: object

properties:

valSvcId:

type: string

description: Identity of the VAL service

valUserIds:

type: array

items:

type: string

minItems: 1

description: VAL User IDs that the event subscriber wants to know in the interested event.

valUEIds:

type: array

items:

type: string

minItems: 1

description: VAL UE IDs that the event subscriber wants to know in the interested event.

oneOf:

- required: [valUserIds]

- required: [valUEIds]

SEALEvent:

anyOf:

- type: string

enum:

- LM\_LOCATION\_INFO

- GM\_GROUP\_INFO\_CHANGE

- CM\_USER\_PROFILE\_CHANGE

- GM\_GROUP\_CREATE

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration but is not used to encode

content defined in the present version of this API.

description: >

Possible values are

- LM\_LOCATION\_INFO: Events related to the location information of VAL Users or VAL UEs from the Location Management Server.

- GM\_GROUP\_INFO\_CHANGE: Events related to the modification of VAL group membership and configuration information from the Group Management Server.

- CM\_USER\_PROFILE\_CHANGE: Events related to update of user profile information from the Configuration Management Server.

- GM\_GROUP\_CREATE: Events related to creation of new VAL groups from the Group Mananagement Server.

\* \* \* 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 V1.2.0 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}/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}/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'

resUri:

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

required:

- valGroupId

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