**3GPP TSG-CT WG1 Meeting #141eC1-232466**

**Online 17– 21 April 2023**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.558** | **CR** | **0039** | **rev** | **-** | **Current version:** | **18.0.0** |  |
|  | | | | | | | | |
| *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 | **x** | Radio Access Network |  | Core Network | **X** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Eecs\_ServiceProvisioning API: "operationId" fields | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NBI18 | | | | |  | ***Date:*** | | | 2023-03-27 |
|  |  | | | |  | |  | | |  |
| ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In accordance with TS 29.122, clause 5.2.9.13 an "operationId" field should be assigned to each specified service operation.  Two white spaces used to indicate that line breaks need to be kept in the output formatting (see clause 5.3.19 of TS 29.501), need to be added in the end of first two lines of a description field of the info object.  Furthermore, clause 5.2.9.2 of TS 29.122 specifies that trailing whitespaces (i.e. spaces and tabs located at the end of line, without any other character following it) should not be used in OpenAPI specification files. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The "operationId" field added to each service operation.  Description field of the info object updated in accordance with TS 29.501, clause 5.3.19.  Trailing whitespaces removed.  **Backward compatibility analysis:**  This CR introduces backward correction to the Eecs\_ServiceProvisioning API since it adds missing "operationId" fields. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The OpenAPI file of Eees\_EASDiscovery API not aligned with requirements specified in with TS 29.122, clause 5.2.9.13 and TS 29.501, clause 5.3.19. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | B.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 backward compatible correction to the OpenAPI file of Eecs\_ServiceProvisioning API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

# B.1 Eecs\_ServiceProvisioning

openapi: 3.0.0

info:

title: Eecs\_ServiceProvisioning

version: "1.1.0-alpha.1"

description: |

API for ECS Service Provisioning.

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externalDocs:

description: 3GPP TS 24.558 V18.0.0 Enabling Edge Applications; Protocol specification.

url: https://www.3gpp.org/ftp/Specs/archive/24\_series/24.558/

security:

- {}

- oAuth2ClientCredentials: []

servers:

- url: '{apiRoot}/eecs-serviceprovisioning/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558

paths:

/subscriptions:

post:

description: >

Creates a new subscription in ECS in order to be notified of provisioning data

changes of interest.

operationId: CreateServProvSub

tags:

- Service Provisioning Subscriptions (Collection)

requestBody:

required: true

content:

application/json:

schema:

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

callbacks:

notificationDestination:

'{request.body#/notificationDestination}':

post:

requestBody: # contents of the callback message

required: true

content:

application/json:

schema:

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

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: >

Individual ECS Service Provisioning Subscription resource created successfully.

content:

application/json:

schema:

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

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'

/subscriptions/{subscriptionId}:

put:

description: >

Updates an existing individual service provisioning subscription identified

by the subscriptionId.

operationId: UpdateIndServProvSub

tags:

- Individual Service Provisioning Subscription (Document)

parameters:

- name: subscriptionId

in: path

description: Identifies an individual service provisioning subscription.

required: true

schema:

type: string

requestBody:

description: Parameters to replace the existing subscription.

required: true

content:

application/json:

schema:

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

responses:

'200':

description: >

OK (The individual service provisioning subscription matching the subscriptionId

was modified successfully).

content:

application/json:

schema:

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

'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 existing individual service provisioning subscription identified by

the subscriptionId.

operationId: DeleteIndServProvSub

tags:

- Individual Service Provisioning Subscription (Document)

parameters:

- name: subscriptionId

in: path

description: Identifies an individual service provisioning subscription.

required: true

schema:

type: string

responses:

'204':

description: >

The individual service provisioning subscription matching the subscriptionId 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'

patch:

description: >

Partially updates an existing individual service provisioning subscription identified

by the subscriptionId.

operationId: ModifyIndServProvSub

tags:

- Individual Service Provisioning Subscription (Document)

parameters:

- name: subscriptionId

in: path

description: Identifies an individual service provisioning subscription.

required: true

schema:

type: string

requestBody:

description: Parameters to replace the existing subscription.

required: true

content:

application/json:

schema:

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

responses:

'200':

description: >

OK (The individual service provisioning subscription matching the subscriptionId

was modified successfully).

content:

application/json:

schema:

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

'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'

/request:

post:

summary: Request service provisioning information.

operationId: RequestServProv

tags:

- Request Service Provisioning

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'200':

description: >

OK (The requested service provisioning information was returned successfully).

content:

application/json:

schema:

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

'204':

description: >

No Content (The requested service provisioning information does not exist).

'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'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

ECSServProvReq:

description: ECS service provisioning request information.

type: object

properties:

eecId:

type: string

description: Represents a unique identifier of the EEC.

ueId:

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

acProfs:

type: array

items:

$ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

description: Information about services the EEC wants to connect to.

eecSvcContSupp:

type: array

items:

$ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

description: >

Indicates if the EEC supports service continuity or not, also indicates which

ACR scenarios are supported by the EEC.

connInfo:

type: array

items:

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

description: List of connectivity information for the UE.

locInf:

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

suppFeat:

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

required:

- eecId

ECSServProvResp:

description: ECS service provisioning response information.

type: object

properties:

ednCnfgInfo:

type: array

items:

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

minItems: 1

description: List of EDN configuration information.

required:

- ednCnfgInfo

ECSServProvSubscription:

description: Represents an individual service provisioning subscription resource.

type: object

properties:

eecId:

type: string

description: Represents a unique identifier of the EEC.

ueId:

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

acProfs:

type: array

items:

$ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

description: Information about services the EEC wants to connect to.

expTime:

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

eecSvcContSupp:

type: array

items:

$ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

description: >

Indicates if the EEC supports service continuity or not, also indicates which

ACR scenarios are supported by the EEC.

connInfo:

type: array

items:

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

description: List of connectivity information for the UE.

notificationDestination:

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

requestTestNotification:

type: boolean

description: >

Set to true by Subscriber to request the ECS to send a test notification. Set to

false or omitted otherwise.

websockNotifConfig:

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

suppFeat:

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

required:

- eecId

ServProvNotification:

description: Represents notification information of a service provisioning Event.

type: object

properties:

subId:

type: string

description: >

Identifier of the individual service provisioning subscription for which the service

provisioning notification is delivered.

ednCnfgInfo:

type: array

items:

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

minItems: 1

description: List of EDN configuration information.

required:

- subId

- ednCnfgInfo

ConnectivityInfo:

description: Represents the connectivity information for the UE.

type: object

properties:

plmnId:

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

ssId:

type: string

description: Identifies the SSID of the access point to which the UE is attached.

EDNConfigInfo:

description: Represents the EDN configuration information.

type: object

properties:

ednConInfo:

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

eess:

type: array

items:

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

minItems: 1

description: Contains the list of EESs of the EDN.

lifeTime:

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

required:

- ednConInfo

- eess

EDNConInfo:

description: Represents an EDN connection information.

type: object

properties:

dnn:

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

snssai:

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

ednTopoSrvArea:

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

EESInfo:

description: Represents EES information.

type: object

properties:

eesId:

type: string

description: Identity of the EES.

endPt:

$ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

easIds:

type: array

items:

type: string

description: >

Application identities of the Edge Application Servers registered

with the EES.

ecspInfo:

type: string

description: Represents an ECSP Information.

svcArea:

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

dnais:

type: array

items:

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

description: Represents list of Data network access identifiers.

eesSvcContSupp:

type: array

items:

$ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

description: >

Indicates if the EES supports service continuity or not, also indicates which ACR

scenarios are supported by the EES.

eecRegConf:

type: boolean

description: >

Indicates whether the EEC is required to register on the EES to use edge services

or not.

required:

- eesId

- eecRegConf

ECSServProvSubscriptionPatch:

description: >

Represents modifications to an individual service provisioning subscription resource.

type: object

properties:

acProfs:

type: array

items:

$ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

description: Information about services the EEC wants to connect to.

expTime:

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

eecSvcContSupp:

type: array

items:

$ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

description: >

Indicates if the EEC supports service continuity or not, also indicates which ACR

scenarios are supported by the EEC.

connInfo:

type: array

items:

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

description: List of connectivity information for the UE.

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