**3GPP TSG-CT WG3 Meeting #134 *C3-242282***

**Changsha, China, 15 - 19 April, 2024 *(Revision of C3-242xxx)***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.522** | **CR** | **1243** | **rev** | **-** | **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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Removal of the Editor’s note about support feature | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NBI18 | | | | |  | ***Date:*** | | | 2024-03-30 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | Following EN exists in clause 5.21.4.3.2:  *Editor’s note: The description of "suppFeat" attribute is FFS.*  It is proposed to simply remove it.  In addition, the description field of some attributes by using "string" or "array" data type in the OpenAPI file are missing, they should be updated to align with the guidelines of clause 5.3.9 of TS 29.501. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Remove the EN in clause 4.2.2.25. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Editor’s Notes remain in the specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.21.4.3.2, A.19 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 backwards compatible corrections to the EASDeployment API defined in this specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

##### 5.21.4.3.2 Type: EasDeployInfo

Table 5.21.4.3.2-1: Definition of type EasDeployInfo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| self | Link | C | 0..1 | Identifies the individual EAS Deployment information resource.  Shall be present in the HTTP GET response when reading all the configurations for an AF. |  |
| afServiceId | string | O | 0..1 | Identifies a service on behalf of which the AF is issuing the request. |  |
| fqdnPatternList | array(FqdnPatternMatchingRule) | M | 1..N | Contains the supported FQDN pattern(s) for application(s) deployed in the Local part of the DN where each FQDN pattern is described by a FQDN Pattern Matching Rule. |  |
| appId | string | O | 0..1 | Identifies the application for which the EAS Deployment Information corresponds to. |  |
| dnn | Dnn | O | 0..1 | Contains the DNN for the EAS Deployment Information. |  |
| snssai | Snssai | O | 0..1 | Contains the S-NSSAI for the EAS Deployment Information. |  |
| exterGroupId | ExternalGroupId | O | 0..1 | Contains the external Group ID for the EAS Deployment Information. |  |
| dnaiInfos | map(DnaiInformation) | O | 1..N | Contains the list of DNS server identifier (consisting of IP address and port) and/or IP address(s) of the EAS in the local DN for each DNAI. The key of map is the DNAI. |  |
| targetAfId | string | O | 0..1 | Identifier of the AF that is responsible for the EAS associated with this EAS deployment information. | EasRelocationEnh |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of Supported features used as described in clause 5.21.5. |  |

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

# A.19 EASDeployment API

openapi: 3.0.0

info:

title: 3gpp-eas-deployment

version: 1.1.0-alpha.3

description: |

API for AF provisioned EAS Deployment.

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externalDocs:

description: >

3GPP TS 29.522 V18.4.0; 5G System; Network Exposure Function Northbound APIs.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

- {}

- oAuth2ClientCredentials: []

servers:

- url: '{apiRoot}/3gpp-eas-deployment/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122.

paths:

/{afId}/eas-deployment-info:

get:

summary: Read all EAS Deployment information for a given AF

operationId: ReadAllDeployment

tags:

- EAS Deployment Information (Collection)

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

responses:

'200':

description: OK (Successful get all of the EAS Deployment information for the AF)

content:

application/json:

schema:

type: array

items:

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

minItems: 0

'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'

post:

summary: Create a new Individual EAS Deployment information resource.

operationId: CreateAnDeployment

tags:

- EAS Deployment Information (Collection)

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

requestBody:

description: new resource creation

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Created (Successful creation)

content:

application/json:

schema:

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

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'

/{afId}/eas-deployment-info/{easDeployInfoId}:

get:

summary: Read an active Individual EAS Deployment Information resource for the AF

operationId: ReadAnDeployment

tags:

- Individual EAS Deployment Information

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

- name: easDeployInfoId

in: path

description: Identifier of an EAS Deployment Information.

required: true

schema:

type: string

responses:

'200':

description: OK (Successful get the active resource)

content:

application/json:

schema:

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

'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:

summary: Fully updates/replaces an existing resource

operationId: FullyUpdateAnDeployment

tags:

- Individual EAS Deployment Information

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

- name: easDeployInfoId

in: path

description: Identifier of the EAS Deployment information resource

required: true

schema:

type: string

requestBody:

description: Parameters to update/replace the existing resource

required: true

content:

application/json:

schema:

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

responses:

'200':

description: OK (Successful update of the existing resource)

content:

application/json:

schema:

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

'204':

description: >

Successful case. The resource has been successfully updated and no additional content is

sent in the response message.

'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:

summary: Deletes an already existing EAS Deployment information resource

operationId: DeleteAnDeployment

tags:

- Individual EAS Deployment Information

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

- name: easDeployInfoId

in: path

description: Identifier of the EAS Deployment information resource

required: true

schema:

type: string

responses:

'204':

description: No Content (Successful deletion of the existing resource)

'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'

/remove-edis:

post:

summary: Remove EAS Deployment Information based on given criteria.

operationId: DeleteEDIs

tags:

- EAS Deployment Information removal

requestBody:

description: Criteria to be used for deleting EAS Deployment Information that match them.

content:

application/json:

schema:

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

required: true

responses:

'204':

description: >

No Content. The EDIs matching the provided criteria have been successfully deleted.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

EasDeployInfo:

description: Represents EAS Deployment Information.

type: object

properties:

self:

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

afServiceId:

type: string

description: >

Contains a service on behalf of which the AF is issuing the request.

fqdnPatternList:

type: array

items:

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

description: >

Contains the Supported FQDN pattern(s) for application(s) deployed in the Local

part of the DN where each FQDN pattern is described by a FQDN Pattern Matching Rule.

minItems: 1

appId:

type: string

description: >

Contains the application for which the EAS Deployment Information corresponds to.

dnn:

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

snssai:

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

externalGroupId:

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

dnaiInfos:

type: object

additionalProperties:

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

minProperties: 1

description: >

list of DNS server identifier (consisting of IP address and port) and/or IP address(s)

of the EAS in the local DN for each DNAI. The key of map is the DNAI.

targetAfId:

type: string

description: >

Identifier of the AF that is responsible for the EAS associated with this EAS

deployment information.

suppFeat:

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

required:

- fqdnPatternList

DnaiInformation:

description: Represents DNAI information.

type: object

properties:

dnai:

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

dnsServIds:

type: array

items:

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

description: >

Contains the list of DNS server identifier for each DNAI.

minItems: 1

easIpAddrs:

type: array

items:

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

description: >

Contains the IP address(s) of the EASs in the local DN for each DNAI.

minItems: 1

required:

- dnai

anyOf:

- required: [dnsServIds]

- required: [easIpAddrs]

DnsServerIdentifier:

description: Represents DNS server identifier (consisting of IP address and port).

type: object

properties:

dnsServIpAddr:

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

portNumber:

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

required:

- dnsServIpAddr

- portNumber

EdiDeleteCriteria:

description: >

Contains criteria to be used for deleting EAS Deployment Information entries that match

them.

type: object

properties:

afId:

$ref: 'TS29522\_AKMA.yaml#/components/schemas/AfId'

dnnSnssai:

$ref: 'TS29522\_AMInfluence.yaml#/components/schemas/DnnSnssaiInformation'

anyOf:

- required: [afId]

- required: [dnnSnssai]

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