**3GPP TSG-CT WG4 Meeting #103-eC4-212abc**

**E-Meeting, 14th – 23rd April 2021 *was* C4-212328**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.503** | **CR** | **0636** | **rev** | **1** | **Current version:** | **16.7.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | MTC Provider Info in 5G-VN-Group deletion | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2021-04-06 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Authorizing MTC Provider information for MTC provider or authorizing AF ID for AF were introduced during requesting 5G-VN-Group deletion service operation of Nudm\_ParameterProvision Service (see 29.503 clause 5.6.2.4.2), but there is no MTC Provider information and/or AF ID carried in the request of 5G-VN-Group deletion service operation.  The Resource URI: in clause 6.5.3.3.2 is inconsistent with the one in OpenAPI, the Resource URI variable name is not right in the text. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1.Added the MTC Provider information and/or AF ID as Resource URI variables of the request of 5G-VN-Group deletion service operation.  2.Corrected Resource URI in clause 6.5.3.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | MTC Provider information and/or AF ID are missing in Table 6.5.3.3.3.2-1 and authorisation to MTC Provider information and/or AF ID can not be executed during consuming 5G-VN-Group deletion service operation of Nudm\_ParameterProvision Service. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.5.3.3.2, 6.5.3.3.3.2, A.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 corrections in the OpenAPI specification file of TS29505\_Nudm\_PP OpenAPI. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev1:   1. Corrected the ***Reason for change:*** and ***Consequences if not approved:*** 2. Corrected the discription in Table 6.5.3.3.3.2-1: | | | | | | | | |

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

#### 6.5.3.3 Resource: 5GVnGroupConfiguration

##### 6.5.3.3.1 Description

This resource is used to represent 5G VN Group Configuration.

##### 6.5.3.3.2 Resource Definition

Resource URI: {apiRoot}/nudm-pp/<apiVersion>/5g-vn-groups/{extGroupId}

This resource shall support the resource URI variables defined in table 6.5.3.3.2-1.

Table 6.5.3.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 6.5.1 |
| extGroupId | ExtGroupId | Represents the external Identifier of the 5G VN group  pattern: "^extgroupid-[^@]+@[^@]+$" |

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

###### 6.5.3.3.3.2 DELETE

This method shall support the URI query parameters specified in table 6.5.3.3.3.1-1.

Table 6.5.3.3.3.2-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| mtc-provider-info | MtcProviderInformation | O | 0..1 | The mtc-provider-info contains the MTC Provider information that originates 5G-VN-Group deletion, it is used by the UDM to check whether the MTC Provider is allowed to perform this operation for the UE if the MTC provider authorization is required. |
| af-id | string | O | 0..1 | The af-Id contains the AF ID that originates 5G-VN-Group deletion, it is used by the UDM to check whether the AF is allowed to perform this operation for the UE if the AF authorization is required.  It is formatted as described in the definition of type MonitoringConfiguration. |

This method shall support the request data structures specified in table 6.5.3.3.3.1-2 and the response data structures and response codes specified in table 6.5.3.3.3.1-3.

Table 6.5.3.3.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 6.5.3.3.3.2-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Upon success, an empty response body shall be returned |
| ProblemDetails | O | 0..1 | 404 Not Found | The "cause" attribute may be used to indicate one of the following application errors:  - GROUP\_IDENTIFIER\_NOT\_FOUND |
| ProblemDetails | O | 0..1 | 403 Forbidden | The "cause" attribute may be used to indicate one of the following application errors:  - AF\_NOT\_ALLOWED  - MTC\_PROVIDER\_NOT\_ALLOWED |
| NOTE: In addition common data structures as listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] are supported. | | | | |

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

## A.6 Nudm\_PP API

openapi: 3.0.0

\*\*\*\*\*\*\*\*skipped for clarity\*\*\*\*\*\*\*\*\*\*\*\*

/5g-vn-groups/{extGroupId}:

put:

summary: create a 5G VN Group

operationId: Create 5G VN Group

tags:

- 5G VN Group Creation

parameters:

- name: extGroupId

in: path

description: External Identifier of the Group

required: true

schema:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/ExtGroupId'

requestBody:

content:

application/json:

schema:

$ref: '#/components/schemas/5GVnGroupConfiguration'

required: true

responses:

'201':

description: Expected response to a valid request

'400':

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

'403':

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

'404':

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

'500':

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

'503':

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

default:

description: Unexpected error

delete:

summary: delete a 5G VN Group

operationId: Delete 5G VN Group

tags:

- 5G VN Group Deletion

parameters:

- name: extGroupId

in: path

description: External Identifier of the Group

required: true

schema:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/ExtGroupId'

- name: mtc-provider-info

in: query

description: MTC Provider Information that originated the service operation

schema:

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

- name: af-id

in: query

description: AF ID that originated the service operation

schema:

type: string responses:

'204':

description: Expected response to a valid request

'400':

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

'403':

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

'404':

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

'500':

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

'503':

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

default:

description: Unexpected error

patch:

summary: modify a 5G VN Group

operationId: Modify 5G VN Group

tags:

- 5G VN Group Modification

parameters:

- name: extGroupId

in: path

description: External Identifier of the group

required: true

schema:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/ExtGroupId'

- name: supported-features

in: query

description: Features required to be supported by the target NF

schema:

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

requestBody:

content:

application/merge-patch+json:

schema:

$ref: '#/components/schemas/5GVnGroupConfiguration'

required: true

responses:

'204':

description: Expected response to a valid request

'200':

description: Expected response to a valid request

content:

application/json:

schema:

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

'400':

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

'403':

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

'404':

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

'500':

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

'503':

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

default:

description: Unexpected error

get:

summary: get 5G VN Group

operationId: Get 5G VN Group

tags:

- 5G VN Group Modification

parameters:

- name: extGroupId

in: path

description: External Identifier of the group

required: true

schema:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/ExtGroupId'

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

$ref: '#/components/schemas/5GVnGroupConfiguration'

'400':

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

'403':

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

'404':

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

'500':

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

'503':

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

default:

description: Unexpected error

\*\*\*\*\*\*\*\*skipped for clarity\*\*\*\*\*\*\*\*\*\*\*\*

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