**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:*** | | | | | | | | |

\* \* \* 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 and/or the AF is allowed to perform this operation for the UE if the MTC provider and/or AF 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 MTC Provider and/or the AF is allowed to perform this operation for the UE if the MTC provider and/or 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 \* \* \* \*