**3GPP TSG-CT WG4 Meeting #101eC4-205338**

**E-Meeting, 03rd – 13th November 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.503** | **CR** | **0529** | **rev** | **-** | **Current version:** | **16.5.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Parameter Provisioning Get operation for 5G VN Group | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | Vertical\_LAN | | | | |  | ***Date:*** | | | 2020-10-25 |
|  |  | | | |  | |  | | |  |
| ***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 [AM](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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | There is a misalignment between stage 2 (23.501 and 23.502) and stage 3 (29.503) in relation to the support of GET operation in Nudm\_ParameterProvisioning.  This CR is solving this misalignment in relation to the retrieval of 5G VN Group info | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Get operation for 5G VN Group resource is included in Nudm\_ParameterProvisioning service. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Nudm\_PP API is not complete and not aligned with the stage-2 requirements. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.6.2.1, 5.6.2.x (new), 6.5.3.3.3.x (new), 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 backwards compatible corrections, with impacts on the following APIs:  - TS29503\_Nudm\_PP.yaml | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

### 5.6.2 Service Operations

#### 5.6.2.1 Introduction

For the Nudm\_ParameterProvision service the following service operations are defined:

- Update

- Create

- Delete

- Get

The Nudm\_ParameterProvision service is used by consumer NFs (e.g. NEF) to update a UE's or a group of UEs' subscription data by means of the Update service operation.

For details see 3GPP TS 23.502 [3] clause 4.15.6.2.

The Nudm\_ParameterProvision service can also be used by a NF Service Consumer (e.g. SOR-AF) to send updated Steering of Roaming Information for a UE to the UDM at any time, as specified in Annex C.3 of 3GPP TS 23.122 [20].

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

#### 5.6.2.x Get

##### 5.6.2.x.1 General

The following procedures using the Get service operation are supported:

- 5G-VN-Group get

##### 5.6.2.x.2 5G-VN-Group get

Figure 5.6.2.x.2-1 shows a scenario where the NF service consumer sends a request to the UDM to get 5G VN Group. The request contains the group's external identifier.



Figure 5.6.2.x4.2-1: NF service consumer gets 5G-VN-Group

1. The NF service consumer sends a GET request to the resource .../5g-vn-groups/{extGroupId}, to get the 5G VN Group identified by the external group id.

2a. On success, the UDM responds with "200 Ok" with the VPN Group Information

2b. If the external group id does not exist in the UDM, HTTP status code "404 Not Found" shall be returned including additional error information in the response body (in the "ProblemDetails" element).

2c. If the original AF is not allowed to get this information, HTTP status code "403 Forbidden" shall be returned including additional error information in the response body (in the "ProblemDetails" element).

On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the GET response body.

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

###### 6.5.3.3.3.x GET

This method shall support the URI query parameters specified in table 6.5.3.3.3.x-1.

Table 6.5.3.3.3.x-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| N/A |  |  |  |  |

This method shall support the response data structures and response codes specified in table 6.5.3.3.3.x-2.

Table 6.5.3.3.3.x-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| N/A |  |  |  |

Table 6.5.3.3.3.x-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| 5GVnGroupConfiguration |  |  | 200 OK |  |
| 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 |

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

## A.6 Nudm\_PP API

*(... text not shown for clarity ...)*

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

*(... text not shown for clarity ...)*

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