**3GPP TSG-CT3 Meeting #127eC3-231206**

**E-meeting, 17th – 21st April 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.576** | **CR** | **0046** | **rev** | **-** | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *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:*** | Corrections to the dummy POST based operation of the Nmfaf\_3caDataManagement API | | | | | | | | |
|  |  | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | |
|  |  | | | | | | | | |
| ***Work item code:*** | SBIProtoc18 | | | | |  | ***Date:*** | | 2023-04-10 |
|  |  | | | |  | |  | |  |
| ***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:*** | | As per the agreed C4-225307 (CR#0132), the OpenAPI definition for dummy subscription operations needed to defined standalone notifications is specified in clause 5.3.7 of TS 29.501. The OpenAPI definition of the Nmfaf\_3caDataManagement API needs hence to be updated to fully align with the provisions of clause 5.3.7 of TS 29.501.  In addition, there is no need to define this dummy subscription operation in the API definition in the main body of the TS, as it is in reality never used and not relevant for this API and this issues is only related to how standalone notifications are documented in OpenAPI. This is a pure OpenAPI limitation. | | | | | | | |
|  | |  | | | | | | | |
| ***Summary of change:*** | | This CR proposes to:   * Update the OpenAPI definition of the Nmfaf\_3caDataManagement API to fully align with the provisions of clause 5.3.7 of TS 29.501. * Remove the definition of the dummy subscription operation in the API definition in the main body of the TS. | | | | | | | |
|  | |  | | | | | | | |
| ***Consequences if not approved:*** | | * The guidelines of clause 5.3.7 of TS 29.501 are not fully followed. * Keeping the definition of the dummy subscription operation in the API definition in the main body of the TS may lead to confusion/misunderstanding as the issue is purely OpenAPI related. | | | | | | | |
|  | | |  | | | | | | |
| ***Clauses affected:*** | | | 5.2.3, 5.2.4, A.3 | | | | | | |
|  | | |  | | | | | | |
|  | | | **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 a backwards compatible correction to the OpenAPI description of the Nmfaf\_3caDataManagement API defined in this specification. | | | | | | |
|  | | |  | | | | | | |
| ***This CR's revision history:*** | | |  | | | | | | |

\* \* \* \* Start of changes \* \* \* \*

### 5.2.3 Resources

There are no resources defined for this API in this release of the specification.



















\* \* \* \* Next changes \* \* \* \*

### 5.2.4 Custom Operations without associated resources

There are no custom operations without associated resources defined for this API in this release of the specification.

\* \* \* \* Next changes \* \* \* \*

# A.3 Nmfaf\_3caDataManagement API

openapi: 3.0.0

info:

version: 1.1.0-alpha.1

title: Nmfaf\_3caDataManagement

description: |

MFAF 3GPP Consumer Adaptor (3CA) Data Management Service.

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externalDocs:

description: 3GPP TS 29.576 V18.0.0; 5G System; Messaging Framework Adaptor Services; Stage 3.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.576/'

servers:

- url: '{apiRoot}/nmfaf-3cadatamanagement/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 4.4 of 3GPP TS 29.501.

security:

- oAuth2ClientCredentials:

- nmfaf-3cadatamanagement

- {}

paths:

/mfaf-data-analytics:

post:

# This is a pseudo operation, clients shall NOT invoke this method!

requestBody:

required: true

content:

application/json:

# Unspecified schema for the JSON body, since this is used by neither the NF service consumer nor the MFAF.

schema: {}

responses:

default:

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

callbacks:

Notification:

'{notificationURI}':

# The URI in {notificationURI} is obtained out of band by the MFAF, i.e. it is provided via the Nmfaf-3daDataManagement API during the configuration for mapping data or analytics.

post:

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the Notification is acknowledged.

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

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

default:

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

callbacks:

Fetch:

'{request.body#/fetchInstruction/fetchUri}':

post:

requestBody:

required: true

content:

application/json:

schema:

type: array

items:

type: string

minItems: 1

description: Indicate the fetch correlation identifier.

responses:

'200':

description: Expected response to a valid request.

content:

application/json:

schema:

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

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'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'

'502':

$ref: 'TS29571\_CommonData.yaml#/components/responses/502'

'503':

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

default:

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

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{nrfApiRoot}/oauth2/token'

scopes:

nmfaf-3cadatamanagement: Access to the nmfaf-3cadatamanagement API

schemas:

NmfafDataRetrievalNotification:

description: >

Represents the data or analytics or notification of availability of data or analytics

to notification endpoints.

type: object

required:

- correId

oneOf:

- required: [dataAnaNotif]

- required: [fetchInstruction]

properties:

correId:

type: string

description: >

Represents the Analytics Consumer Notification Correlation ID

or Data Consumer Notification Correlation ID. It shall be set to the same

value as the "correId" attribute of MessageConfiguration data type.

dataAnaNotif:

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

fetchInstruction:

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

FetchInstruction:

description: >

The fetch instructions indicate whether the data or analytics are to be fetched by the

consumer.

type: object

required:

- fetchUri

- fetchCorrIds

properties:

fetchUri:

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

fetchCorrIds:

type: array

items:

type: string

minItems: 1

description: The fetch correlation identifier(s) of the MFAF Data or Analytics.

expiry:

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

NmfafDataAnaNotification:

description: MFAF data or analytics.

type: object

oneOf:

- required: [anaNotifications]

- required: [dataNotif]

properties:

anaNotifications:

type: array

items:

$ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/NnwdafEventsSubscriptionNotification'

minItems: 1

description: List of analytics subscription notifications.

dataNotif:

$ref: 'TS29575\_Nadrf\_DataManagement.yaml#/components/schemas/DataNotification'

\* \* \* \* End of changes \* \* \* \*