**3GPP TSG- Meeting #**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** |  | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | C3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | TS 23.288 clause 6.1B has specified how to perform transfer of analytics subscriptions, with the respective functionality added via a new service operation (Nnwdaf\_AnalyticsSubscription\_Transfer, see TS 23.288 clause 7.2.5). This needs to be implemented by extending the Nnwdaf\_EventsSubscription API accordingly. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Implemented the required resources to enable analytics subscriptions transfer. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Stage 2 requirements not fulfilled. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.1.3.1, 5.1.3.Y (new subclause), 5.1.3.Z (new subclause) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 has no impact on any OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* First change \* \* \* \*

#### 5.1.3.1 Resource Structure



Figure 5.1.3.1-1: Resource URI structure of the Nnwdaf\_EventsSubscription API

Table 5.1.3.1-1 provides an overview of the resources and applicable HTTP methods.

Table 5.1.3.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| NWDAF Events Subscriptions | /subscriptions | POST | Creates a new Individual NWDAF Event Subscription resource. |
| Individual NWDAF Event Subscription | /subscriptions/{subscriptionId} | DELETE | Deletes an Individual NWDAF Event Subscription identified by subresource {subscriptionId}. |
| PUT | Modifies an existing Individual Event Subscription subresource. |
| NWDAF Event Subscription Transfers | /transfers | POST | Provides information about the requested analytics subscription transfer(s), potentially creating a new Individual NWDAF Event Subscription Transfer resource. |
| Individual NWDAF Event Subscription Transfer | /transfers/{transferId} | DELETE | Deletes an Individual NWDAF Event Subscription Transfer resource identified by subresource {transferId}. |
| PUT | Modifies an existing Individual NWDAF Event Subscription Transfer resource. |

\* \* \* \* Next change \* \* \* \*

#### 5.1.3.Y Resource: NWDAF Event Subscription Transfers

##### 5.1.3.Y.1 Description

The NWDAF Event Subscription Transfers resource represents all requests to transfer subscription(s) of the Nnwdaf\_EventsSubscription Service at a given NWDAF. The resource allows an NF service consumer to provide information about analytics subscriptions that are requested to be transferred, potentially creating a new Individual NWDAF Event Subscription Transfer resource.

##### 5.1.3.Y.2 Resource definition

Resource URI: **{apiRoot}/nnwdaf-eventssubscription/v1/transfers**

This resource shall support the resource URI variables defined in table 5.1.3.Y.2-1.

Table 5.1.3.Y.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See subclause 5.1.1 |

##### 5.1.3.Y.3 Resource Standard Methods

###### 5.1.3.Y.3.1 POST

This method shall support the URI query parameters specified in table 5.1.3.Y.3.1-1.

Table 5.1.3.Y.3.1-1: URI query parameters supported by the POST method on this resource

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

This method shall support the request data structures specified in table 5.1.3.Y.3.1-2 and the response data structures and response codes specified in table 5.1.3.Y.3.1-3.

Table 5.1.3.Y.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| AnalyticsSubscriptionsTransfer | M | 1 | Information about analytics subscription(s) that are requested to be transferred, potentially creating a new Individual NWDAF Event Subscription Transfer resource. |

Table 5.1.3.Y.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 201 Created | The creation of an Individual NWDAF Event Subscription resource is confirmed and a representation of that resource is returned. |
| n/a |  |  | 204 No Content | The receipt of the information about analytics subscription(s) that are requested to be transferred and the ability to handle this information is confirmed. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [6] also apply. | | | | |

Table 5.1.3.Y.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | C | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/nnwdaf-eventssubscription/v1/transfers/{transferId}. It shall be provided if the response code is "201 Created". |

##### 5.1.3.Y.4 Resource Custom Operations

None in this release of the specification.

\* \* \* \* Next change \* \* \* \*

#### 5.1.3.Z Resource: Individual NWDAF Event Subscription Transfer

##### 5.1.3.Z.1 Description

The Individual NWDAF Event Subscription Transfer resource represents a single request to transfer subscription(s) of the Nnwdaf\_EventsSubscription Service at a given NWDAF.

##### 5.1.3.Z.2 Resource definition

Resource URI: {apiRoot}/nnwdaf-eventssubscription/v1/transfers/{transferId}

This resource shall support the resource URI variables defined in table 5.1.3.Z.2-1.

Table 5.1.3.Z.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See subclause 5.1.1 |
| transferId | string | Identifies a request to transfer subscription(s) of the Nnwdaf\_EventsSubscription Service |

##### 5.1.3.Z.3 Resource Standard Methods

###### 5.1.3.Z.3.1 DELETE

This method shall support the URI query parameters specified in table 5.1.3.Z.3.1-1.

Table 5.1.3.Z.3.1-1: URI query parameters supported by the DELETE method on this resource

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

This method shall support the request data structures specified in table 5.1.3.Z.3.1-2 and the response data structures and response codes specified in table 5.1.3.Z.3.1-3.

Table 5.1.3.Z.3.1-2: Data structures supported by the DELETE Request Body on this resource

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

Table 5.1.3.Z.3.1-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case: The Individual NWDAF Event Subscription Transfer resource matching the transferId was deleted. |
| RedirectResponse | O | 0..1 | 307 Temporary Redirect | Temporary redirection, during Individual NWDAF Event Subscription Transfer deletion. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NWDAF (service) instance.  Applicable if the feature "ES3XX" is supported. |
| RedirectResponse | O | 0..1 | 308 Permanent Redirect | Permanent redirection, during Individual NWDAF Event Subscription Transfer deletion. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NWDAF (service) instance.  Applicable if the feature "ES3XX" is supported. |
| NOTE 1: The mandatory HTTP error status codes for the DELETE method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [6] also apply. | | | | |

Table 5.1.3.Z.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NWDAF (service) instance. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF (service) instance towards which the request is redirected. |

Table 5.1.3.Z.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NWDAF (service) instance. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF (service) instance towards which the request is redirected. |

###### 5.1.3.Z.3.2 PUT

This method shall support the URI query parameters specified in table 5.1.3.Z.3.2-1.

Table 5.1.3.Z.3.2-1: URI query parameters supported by the PUT method on this resource

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

This method shall support the request data structures specified in table 5.1.3.Z.3.2-2 and the response data structures and response codes specified in table 5.1.3.Z.3.2-3.

Table 5.1.3.Z.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| AnalyticsSubscriptionsTransfer | M | 1 | Parameters to replace in an Individual NWDAF Event Subscription Transfer resource. |

Table 5.1.3.Z.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The Individual NWDAF Event Subscription Transfer resource was modified successfully. |
| RedirectResponse | O | 0..1 | 307 Temporary Redirect | Temporary redirection, during Individual NWDAF Event Subscription Transfer modification. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NWDAF (service) instance.  Applicable if the feature "ES3XX" is supported. |
| RedirectResponse | O | 0..1 | 308 Permanent Redirect | Permanent redirection, during Individual NWDAF Event Subscription Transfer modification. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NWDAF (service) instance.  Applicable if the feature "ES3XX" is supported. |
| NOTE 1: The mandatory HTTP error status codes for the PUT method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [6] also apply. | | | | |

Table 5.1.3.Z.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NWDAF (service) instance. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF (service) instance towards which the request is redirected. |

Table 5.1.3.Z.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NWDAF (service) instance. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF (service) instance towards which the request is redirected. |

##### 5.1.3.Z.4 Resource Custom Operations

None in this release of the specification.

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