**3GPP TSG-CT3 Meeting #134C3-242xxx**

**Changsha, China, 15th – 19st April 2024 was C3-242367**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.522** | **CR** | **1258** | **rev** | **1** | **Current version:** | **18.5.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | |
| ***Title:*** | Various corrections to the definition of the UeAddress API | | | | | | | | |
|  |  | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | |
|  |  | | | | | | | | |
| ***Work item code:*** | eNetAE | | | | |  | ***Date:*** | | 2024-04-18 |
|  |  | | | |  | |  | |  |
| ***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:*** | | | The definition of the UeAddress API needs various corrections and alignments with the drafting rules and NBI TS skeleton. | | | | | | |
|  | | |  | | | | | | |
| ***Summary of change:*** | | | This CR proposes to:   * Correct the above-detailed issues. | | | | | | |
|  | | |  | | | | | | |
| ***Consequences if not approved:*** | | | * The provisions related to the definition of the UeAddress API continue to contain errors and misalignments with the drafting rules and NBI TS skeleton. | | | | | | |
|  | |  | | | | | | | |
| ***Clauses affected:*** | | 5.35.1, 5.35.3.1, 5.35.3.2.1, 5.35.3.2.2, 5.35.5.1, 5.35.5.2.2, 5.35.5.4 (new clause), 5.35.6, 5.35.7.1, 5.35.7.3 | | | | | | | |
|  | |  | | | | | | | |
|  | | **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 does not impact the OpenAPI descriptions of the APIs defined in this specification. | | | | | | | |
|  | |  | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | |

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

### 5.35.1 Introduction

The Nnef\_UeAddress service shall use the UeAddress API.

The API URI of UeAddress API shall be:

**{apiRoot}/<apiName>/<apiVersion>**

The request URIs used in HTTP requests shall have the Resource URI structure defined in clause 5.2.4 of 3GPP TS 29.122 [4], i.e.:

**{apiRoot}/<apiName>/<apiVersion>/<apiSpecificSuffixes>**

with the following components:

- "apiRoot" is set as described in clause 5.2.4 in 3GPP TS 29.122 [4].

- "apiName" shall be set to "3gpp-ue-address".

- "apiVersion" shall be set to "v1" for the current version defined in the present document.

- The <apiSpecificSuffixes> shall be set as described in clause 5.2.4 of 3GPP TS 29.122 [4].

All resource URIs in the clauses below are defined relative to the above API URI.

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

#### 5.35.3.1 Overview

The structure of the custom operation URIs of the UeAddress API is shown in Figure 5.35.3.1-1.



Figure 5.35.3.1-1: Custom operation URI structure of the UeAddress API

Table 5.35.3.1-1 provides an overview of the custom operations and applicable HTTP methods defined for the UeAddress API.

Table 5.35.3.1-1: Custom operations without associated resources

|  |  |  |  |
| --- | --- | --- | --- |
| Custom operation name | Custom operation URI | Mapped HTTP method | Description |
| Retrieve | /retrieve | POST | Request to retrieve UE Address information. |

The custom operations shall support the URI variables defined in table 5.35.3.1-2.

Table 5.35.3.1-2: URI variables for this custom operation

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 5.35.1. |

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

##### 5.35.3.2.1 Description

The custom operation allows to retrieve UE Address information via the NEF.

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

##### 5.35.3.2.2 Operation Definition

This operation shall support the request and response data structures and response codes specified in table 5.35.3.2.2-1 and table 5.35.3.2.2-2.

Table 5.35.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| UeAddressReq | M | 1 | Contains the parameters to request to retrieve UE Address information. |

Table 5.35.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| UeAddressInfo | M | 1 | 200 OK | Successful case. The UE Address information request is successfully processed, and UE address information is returned in the response body. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection.  The response shall include a Location header field containing an alternative target URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection.  The response shall include a Location header field containing an alternative target URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4] |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.35.3.2.2-3: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative target URI of the resource located in an alternative NEF. |

Table 5.35.3.2.2-4: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative target URI of the resource located in an alternative NEF. |

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

#### 5.35.5.1 General

This clause specifies the application data model supported by the UeAddress API. Table 5.35.5.1-1 specifies the data types defined for the UeAddress API.

Table 5.35.5.1-1: UeAddress service specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Clause defined | Description | Applicability |
| UeAddressReq | 5.35.5.2.2 | Represents the parameters to request UE Address information. |  |
| UeAddressInfo | 5.35.5.2.3 | Represents UE Address information. |  |

Table 5.35.5.1-2 specifies data types re-used by the UeAddress API from other specifications, including a reference to their respective specifications, and when needed, a short description of their use within the UeAddress API.

Table 5.35.5.1-2: Re-used Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Reference | Comments |
| Gpsi | 3GPP TS 29.571 [8] | Represents a GPSI. |
| IpAddr | 3GPP TS 29.571 [8] | Represents an IP address. |
| SupportedFeatures | 3GPP TS 29.571 [8] | Represents the list of supported feature(s) and is used to negotiate the applicability of the optional features. |

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

##### 5.35.5.2.2 Type: UeAddressReq

Table 5.35.5.2.2-1: Definition of type UeAddressReq

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| afId | string | M | 1 | Represents the identifier of the AF that is sending the request. |  |
| gpsi | Gpsi | M | 1 | Contains the target GPSI. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Contains the list of supported features used as defined in clause 5.35.6.  This attribute shall be present only when feature negotiation needs to take place. |  |

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

#### 5.35.5.4 Data types describing alternative data types or combinations of data types

There are no data types describing alternative data types or combinations of data types defined for this API in this release of the specification.

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

### 5.35.6 Used Features

The optional features listed in table 5.35.6-1 are defined for the UeAddress API. They shall be negotiated using the extensibility mechanism defined in clause 5.2.7 of 3GPP TS 29.122 [4].

Table 5.35.6-1: Features used by UeAddress API

|  |  |  |
| --- | --- | --- |
| Feature number | Feature Name | Description |
|  |  |  |

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

#### 5.35.7.1 General

For the UeAddress API, HTTP error responses shall be supported as specified in clause 5.2.6 of 3GPP TS 29.122 [4]. Protocol errors and application errors specified in clause 5.2.6 of 3GPP TS 29.122 [4] shall be supported for the HTTP status codes specified in table 5.2.6-1 of 3GPP TS 29.122 [4].

In addition, the requirements in the following clauses are applicable for the UeAddress API.

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

#### 5.35.7.3 Application Errors

The application errors defined for the UeAddress API are listed in table 5.35.7.3-1.

Table 5.35.7.3-1: Application errors

|  |  |  |  |
| --- | --- | --- | --- |
| Application Error | HTTP status code | Description | Applicability |
|  |  |  |  |

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