**3GPP TSG-CT3 Meeting #116e C3-213071\_r1**

**E-Meeting, 19th – 28th May 2021**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.222** | **CR** | **0204** | **rev** | **1** | **Current version:** | **17.0.0** |  |
|  | | | | | | | | |
| *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:*** | Miscellaneous corrections to the CAPIF\_Discover\_Service\_API | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NBI17 | | | | |  | ***Date:*** | | | 2021-05-xx |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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:*** | | * The are some editorial issues and misalignments with the drafting rules still remaining in the description of the CAPIF\_Discover\_Service\_API in clause 8.1, in addition to some description text that is not clear enough. * There is a missing data type (i.e. SupportedFeatures) in Table 8.1.4.1-2. * There are some data types (e.g. DataFormat) that are already listed in clause 7.2 and are applicable to all CAPIF APIs that are listed again in Table 8.1.4.1-2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | This CR proposes to:   * Enhance the quality of the text of some clauses under clause 8.1 and correct the various remaining editorial issues and misalignments with the drafting rules. * Add the missing data type to Table 8.1.4.1-2. * Remove the data types already listed in clause 7.2 from Table 8.1.4.1-2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | * Some clauses under clause 8.1 remain not clear enough and not aligned with the drafting rules. * The quality of the specification is not improved. * Missing data type in Table 8.1.4.1-2. * Re-used data types listed twice in the specifications. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.1.1, 8.1.2.2.3.1, 8.1.4.1, 8.1.4.2.1, 8.1.4.2.2, 8.1.4.2.3, 8.1.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not impact OpenAPI specification files. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev 1: Update the description of the SupportedFeatures data type in Table 8.1.4.1-2. | | | | | | | | |

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

### 8.1.1 API URI

The CAPIF\_Discover\_Service\_API service shall use the CAPIF\_Discover\_Service\_API.

The request URIs used in HTTP requests from the API invoker towards the CAPIF core function shall have the Resource URI structure defined in subclause 7.5 with the following clarifications:

- The <apiName>shall be "service-apis".

- The <apiVersion> shall be "v1".

- The <apiSpecificSuffixes> shall be set as described in subclause 8.1.2.

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

###### 8.1.2.2.3.1 GET

This operation enables to retrieve a list of APIs currently registered in the CAPIF core function, satisfying a number of filter criteria.

Table 8.1.2.2.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description | Applicability |
| api-invoker-id | string | M | 1 | String identifying the API invoker assigned by the CAPIF core function. It also represents the CCF identifier in the CAPIF-6/6e reference point. |  |
| api-name | string | O | 0..1 | Contains the API name as {apiName} part of the URI structure as defined in subclause 4.4 of 3GPP TS 29.501 [18]. |  |
| api-version | string | O | 0..1 | Contains the API major version conveyed in the URI (e.g. v1). |  |
| comm-type | CommunicationType | O | 0..1 | Communication type used by the API (e.g.REQUEST\_RESPONSE). |  |
| protocol | Protocol | O | 0..1 | Protocol used by the API. |  |
| aef-id | string | O | 0..1 | AEF identifier. |  |
| data-format | DataFormat | O | 0..1 | Data format used by the API (e.g. serialization protocol JSON). |  |
| api-cat | string | O | 0..1 | The service API category to which the service API belongs. |  |
| supported-features | SupportedFeatures | O | 0..1 | To filter irrelevant responses related to unsupported features. |  |
| api-supported-features | SupportedFeatures | C | 0..1 | Features supported by the discovered service API indicated by api-name parameter. This may only be present if the api-name query parameter is present. | ApiSupportedFeatureQuery |

This method shall support the request data structures specified in table 8.1.2.2.3.1-2 and the response data structures and response codes specified in table 8.1.2.2.3.1-3.

Table 8.1.2.2.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 8.1.2.2.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| DiscoveredAPIs | M | 1 | 200 OK | The response body contains the result of the search over the list of registered APIs. |
| ProblemDetails | O | 0..1 | 414 URI Too Long | Indicates that the server refuses to process the request because the request-target is too long. |

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

#### 8.1.4.1 General

This subclause specifies the application data model supported by the API. Data types listed in subclause 7.2 also apply to this API.

Table 8.1.4.1-1 specifies the data types defined specifically for the CAPIF\_Discover\_Service\_API service.

Table 8.1.4.1-1: CAPIF\_Discover\_Service\_API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| DiscoveredAPIs | Subclause 8.1.4.2.2 | Definition of the service API |  |

Table 8.1.4.1-2 specifies data types re-used by the CAPIF\_Discover\_Service\_API service.

Table 8.1.4.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| CommunicationType | Subclause 8.2.4.3.5 | Communication type used by the API. |  |
| ProblemDetails | 3GPP TS 29.122 [14] | Represents additional information and details on an error response. |  |
| SupportedFeatures | 3GPP TS 29.571 [19] | Contains the supported features. |  |

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

##### 8.1.4.2.1 Introduction

This subclause defines the structured data types to be used in resource representations of the CAPIF\_Discover\_Service\_API.

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

##### 8.1.4.2.2 Type: DiscoveredAPIs

Table 8.1.4.2.2-1: Definition of type DiscoveredAPIs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| serviceAPIDescriptions | array(ServiceAPIDescription) | O | 1..N | Description of the service API as published by the service. (NOTE) |  |
| NOTE: For the CAPIF\_Discover\_Service\_API, the supportedFeatures attribute of the ServiceAPIDescription data type shall be provided in the HTTP GET response of a successful query. In addition, the supportedFeatures attribute may include one or more supported feature(s) as defined in subclause 8.1.6. | | | | | |

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

##### 8.1.4.2.3 Void

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

### 8.1.6 Feature negotiation

General feature negotiation procedures are defined in subclause 7.8.

Table 8.1.6-1: Supported Features

|  |  |  |
| --- | --- | --- |
| **Feature number** | **Feature Name** | **Description** |
| 1 | ApiSupportedFeatureQuery | Indicates the support of the query filter indicating the supported feature(s) of a service API. |

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