**3GPP TSG-CT WG3 Meeting #111eC3-204326**

**E-Meeting, 19th – 28th August 2020** *(Revision of C3-204046)*

|  |
| --- |
| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **29.222** | **CR** | **0151** | **rev** | **1** | **Current version:** | **16.3.0** |  |
|  |
| *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:***  |  Missing and inconsistent “apiVersion” notations and Location header |
|  |  |
| ***Source to WG:*** | Samsung |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | eCAPIF |  | ***Date:*** |  2020-08-12 |
|  |  |  |  |  |
| ***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 canbe 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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)* |
|  |  |
| ***Reason for change:*** |  During CT3#110e meeting, it was agreed to * update the notation of “apiVersion” resource variable from “{apiVerison}” to “<apiVersion>.
* The data type for resource variables was updated in resource definition.
* Location header information in 201 response was added in the API definition where ever applicable.

 However, in many places there agreed conventions are missing and inconsistent. |
|  |  |
| ***Summary of change:*** | - Replace all existing instances of "{apiVersion}" with "<apiVersion>".- Define the data type for “apiVersion” variable where ever missing.- Define data type for resource variables in CAPIF\_API\_Invoker\_Management\_API- Add new location hedear information in CAPIF\_API\_Invoker\_Management\_API POST operation. |
|  |  |
| ***Consequences if not approved:*** | Missing and inconsistent definition of “apiVersion” data type and incosistent notation of the resource URI variable. Location header details missing for CAPIF\_API\_Invoker\_Management\_API POST operations, though it is included in the Open API. |
|  |  |
| ***Clauses affected:*** | 8.1.2.1, 8.1.2.2.2, 8.2.2.1, 8.2.2.2.2, 8.2.2.2.3.1, 8.2.2.3.2, 8.3.2.1, 8.3.2.2.2, 8.3.2.2.3.1, 8.3.2.3.2, 8.4.2.1, 8.4.2.2.2, 8.4.2.2.3.1, 8.4.2.3.2, 8.5.2.1, 8.5.2.2.2, 8.5.2.3.2, 8.5.2.3.4.1, 8.6.2.1, 8.6.2.2.2, 8.7.2.1, 8.7.2.2.2, 8.7.2.2.3.1, 8.8.2.1, 8.8.2.2.2, 8.9.2.1, 8.9.2.2.2, 8.9.2.2.3.1, 8.9.2.3.2, 9.1.2a.1 |
|  |  |
|  | **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 introduce any Open API changes. No Open API impacts. |
|  |  |
| ***This CR's revision history:*** |  |

\*\*\* Start of Change \*\*\*

#### 8.1.2.1 Overview



Figure 8.1.2.1-1: Resource URI structure of the CAPIF\_Discover\_Service\_API

Table 8.1.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.1.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| All published service APIs (Store) | {apiRoot}/service-apis/<apiVersion>/allServiceApis | GET | Discover published service APIs and retrieve a collection of APIs according to certain filter criteria. |

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

##### 8.1.2.2.2 Resource Definition

Resource URI: **{apiRoot}/service-apis/<apiVersion>/allServiceApis**

This resource shall support the resource URI variables defined in table 8.1.2.2.2-1.

Table 8.1.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.1.1 |

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

#### 8.2.2.1 Overview



Figure 8.2.2.1-1: Resource URI structure of the CAPIF\_Publish\_Service\_API

Table 8.2.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.2.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| APF published APIs  | {apiRoot}/published-apis/<apiVersion>/{apfId}/service-apis | POST | Publish a new API |
| GET | Retrieve all published service APIs |
| Individual APF published API | {apiRoot}/published-apis /<apiVersion>/{apfId}/service-apis/{serviceApiId} | GET | Retrieve a published service API |
| PUT | Update a published service API |
| DELETE | Unpublish a published service API |

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

##### 8.2.2.2.2 Resource Definition

Resource URI: **{apiRoot}/published-apis/<apiVersion>/{apfId}/service-apis**

This resource shall support the resource URI variables defined in table 8.2.2.2.2-1.

Table 8.2.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.2.1 |
| apfId | string | Identifies the API publishing function; for CAPIF interconnection case, this string also identifies the CCF which is publishing the service API. |

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

###### 8.2.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.2.2.2.3.1-1.

Table 8.2.2.2.3.1-1: 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 8.2.2.2.3.1-2 and the response data structures and response codes specified in table 8.2.2.2.3.1-3.

Table 8.2.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServiceAPIDescription | M | 1 | Definition of the service API being published |

Table 8.2.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServiceAPIDescription | M | 1 | 201 Created |  Service API published successfully.The URI of the created resource shall be returned in the "Location" HTTP header |

Table 8.2.2.2.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/published-apis/<apiVersion>/{apfId}/service-apis/{serviceApiId} |

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

##### 8.2.2.3.2 Resource Definition

Resource URI: **{apiRoot}/published-apis/<apiVersion>/{apfId}/service-apis/{serviceApiId}**

This resource shall support the resource URI variables defined in table 8.2.2.3.2-1.

Table 8.2.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.2.1 |
| apfId | string | Identifies the API publishing function |
| serviceApiId | string | Identifies an individual published service API |

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

#### 8.3.2.1 Overview



Figure 8.3.2.1-1: Resource URI structure of the CAPIF\_Events\_API

Table 8.3.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.3.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| CAPIF Events Subscriptions | {apiRoot}/capif-events/<apiVersion>/{subscriberId}/subscriptions | POST | Creates a new individual CAPIF Event Subscription |
| Individual CAPIF Events Subscription | {apiRoot}/capif-events/<apiVersion>/{subscriberId}/subscriptions/{subscriptionId} | DELETE | Deletes an individual CAPIF Event Subscription identified by the subscriptionId |

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

##### 8.3.2.2.2 Resource Definition

Resource URI: **{apiRoot}/capif-events/<apiVersion>/{subscriberId}/subscriptions**

This resource shall support the resource URI variables defined in table 8.3.2.2.2-1.

Table 8.3.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.3.1 |
| subscriberId | string | ID of the Subscriber |

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

###### 8.3.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.3.2.2.3.1-1.

Table 8.3.2.2.3.1-1: 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 8.3.2.2.3.1-2 and the response data structures and response codes specified in table 8.3.2.2.3.1-3.

Table 8.3.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| EventSubscription | M | 1 | Create a new individual CAPIF Events Subscription resource. |

Table 8.3.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| EventSubscription | M | 1 | 201 Created | CAPIF Events Subscription resource created successfully.The URI of the created resource shall be returned in the "Location" HTTP header |

Table 8.3.2.2.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/capif-events/<apiVersion>/{subscriberId}/subscriptions/{subscriptionId} |

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

##### 8.3.2.3.2 Resource Definition

Resource URI: **{apiRoot}/capif-events/<apiVersion>/{subscriberId}/subscriptions/{subscriptionId}**

This resource shall support the resource URI variables defined in table 8.3.2.3.2-1.

Table 8.3.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.3.1 |
| subscriberId | string | ID of the Subscriber |
| subscriptionId | string | Identifies an individual Events Subscription |

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

#### 8.4.2.1 Overview



Figure 8.4.2.1-1: Resource URI structure of the CAPIF\_API\_Invoker\_Management\_API

Table 8.4.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.4.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| On-boarded API Invokers | {apiRoot}/api-invoker-management/<apiVersion>/onboardedInvokers | POST | On-boards a new API invoker by creating a API invoker profile |
| Individual On-boarded API Invoker | {apiRoot}/api-invoker-management/<apiVersion>/onboardedInvokers/{onboardingId} | DELETE | Off-boards an individual API invoker by deleting the API invoker profile identified by {onboardingId} |
| PUT | Updates the API invoker details of an individual API invoker identified by the {onboardingId} |

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

##### 8.4.2.2.2 Resource Definition

Resource URI: **{apiRoot}/api-invoker-management/<apiVersion>/onboardedInvokers**

This resource shall support the resource URI variables defined in table 8.4.2.2.2-1.

Table 8.4.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.4.1 |

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

###### 8.4.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.4.2.2.3.1-1.

Table 8.4.2.2.3.1-1: 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 8.4.2.2.3.1-2 and the response data structures and response codes specified in table 8.4.2.2.3.1-3.

Table 8.4.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| APIInvokerEnrolmentDetails | M | 1 | Enrolment details of the API invoker including notification destination URI for any on-boarding related notifications and an optional list of APIs the API invoker intends to invoke while on-board. |

Table 8.4.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| APIInvokerEnrolmentDetails | M  | 1 | 201 Created | API invoker on-boarded successfully The URI of the created resource shall be returned in the "Location" HTTP header. A list of APIs the API invoker is allowed to invoke while on-board may also be included as part of the APIInvokerEnrolmentDetails which is provided in the response body, if requested in the POST request. |
| n/a |  |  | 202 Accepted | The CAPIF core has accepted the Onboarding request and is processing it. When processing is completed, the CAPIF core function will send a Notify\_Onboarding\_Completion notification to the requesting API invoker. See subclause 8.4.3.2. |

Table 8.4.2.2.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/api-invoker-management/<apiVersion>/onboardedInvokers/{onboardingId} |

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

##### 8.4.2.3.2 Resource Definition

Resource URI: **{apiRoot}/api-invoker-management/<apiVersion>/onboardedInvokers/{onboardingId}**

This resource shall support the resource URI variables defined in table 8.4.2.3.2-1.

Table 8.4.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.4.1 |
| onboardingId | string | String identifying an individual on-boarded API invoker resource |

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

#### 8.5.2.1 Overview



Figure 8.5.2.1-1: Resource URI structure of the CAPIF\_Security\_API

Table 8.5.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.5.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| Trusted API invokers | {apiRoot}/capif-security/<apiVersion>/trustedInvokers | n/a |  |
| Individual trusted API invoker | {apiRoot}/capif-security/<apiVersion>/trustedInvokers/{apiInvokerId} | GET | Retrieve authentication information of an API invoker |
| PUT | Create a security context for individual API invoker |
| DELETE | Revoke the authorization of the API invoker |
| {apiRoot}/trustedInvokers/<apiVersion>/{apiInvokerId}/update | update (POST) | Update the security context (e.g. re-negotiate the security methods). |
| {apiRoot}/trustedInvokers/<apiVersion>/{apiInvokerId}/delete | delete (POST) | Revoke the authorization of the API invoker for some APIs |
| {apiRoot}/capif-security/<apiVersion>/securities/{securityId}/token | token (POST) | Obtain the OAuth 2.0 authorization information |

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

##### 8.5.2.2.2 Resource Definition

Resource URI: **{apiRoot}/capif-security/<apiVersion>/trustedInvokers**

This resource shall support the resource URI variables defined in table 8.5.2.2.2-1.

Table 8.5.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.5.1 |

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

##### 8.5.2.3.2 Resource Definition

Resource URI: **{apiRoot}/capif-security/<apiVersion>/trustedInvokers/{apiInvokerId}**

This resource shall support the resource URI variables defined in table 8.5.2.3.2-1.

Table 8.5.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.5.1 |
| apiInvokerId | string | Identifies an individual API invoker |

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

###### 8.5.2.3.4.1 Overview

Table 8.5.2.3.4.1-1: Custom operations

|  |  |  |  |
| --- | --- | --- | --- |
| Operation name | Custom operation URI | Mapped HTTP method | Description |
| update | {apiRoot}/capif-security/<apiVersion>/securities/{securityId}/update | POST | Update the security instance (e.g. re-negotiate the security methods). |
| delete | {apiRoot}/capif-security/<apiVersion>/securities/{securityId}/delete | POST | Revoke the authorization of the API invoker for some APIs |

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

#### 8.6.2.1 Overview

This resource is created by the CAPIF administrator on the CAPIF core function.

NOTE: The details of the mechanisms used to create the Access Control Policy List resource on the CAPIF core function is out of the scope of the present document.



Figure 8.6.2.1-1: Resource URI structure of the CAPIF\_Access\_Control\_Policy\_API

Table 8.6.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.6.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| Access Control Policy List | {apiRoot}/access-control-policy/<apiVersion>/accessControlPolicyList/{serviceApiId} | GET | Retrieves the access control policy list for a published service API. |

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

##### 8.6.2.2.2 Resource Definition

Resource URI: **{apiRoot}/access-control-policy/<apiVersion>/accessControlPolicyList/{serviceApiId}**

This resource shall support the resource URI variables defined in table 8.6.2.2.2-1.

Table 8.6.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.6.1 |
| serviceApiId | string | Identifies an individual published service API |

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

#### 8.7.2.1 Overview



Figure 8.7.2.1-1: Resource URI structure of the CAPIF\_Logging\_API\_Invocation\_API

Table 8.7.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.7.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| Logs  | {apiRoot}/api-invocation-logs/<apiVersion>/{aefId}/logs | POST | Creates a new log entry for service API invocations |
| Individual log | {apiRoot}/api-invocation-logs/<apiVersion>/{aefId}/logs/{logId} | n/a | Individual log entry |

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

##### 8.7.2.2.2 Resource Definition

Resource URI: **{apiRoot}/api-invocation-logs/<apiVersion>/{aefId}/logs**

This resource shall support the resource URI variables defined in table 8.7.2.2.2-1.

Table 8.7.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.7.1 |
| aefId | string | Identifies of the API exposing function |

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

###### 8.7.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.7.2.2.3.1-1.

Table 8.7.2.2.3.1-1: 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 8.7.2.2.3.1-2 and the response data structures and response codes specified in table 8.7.2.2.3.1-3.

Table 8.7.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| InvocationLogs | M | 201 Created |  Log of service API invocations provided by API exposing function to store on the CAPIF core function. |

Table 8.7.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| InvocationLogs | M | 1 | 201 Created | Log of service API invocations provided by API exposing function successfully stored on the CAPIF core function.The URI of the created resource shall be returned in the "Location" HTTP header. |

Table 8.7.2.2.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/api-invocation-logs/<apiVersion>/{aefId}/logs/{logId} |

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

#### 8.8.2.1 Overview



Figure 8.8.2.1-1: Resource URI structure of the CAPIF\_Auditing\_API

Table 8.8.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.8.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| All service API invocation logs (Store) | {apiRoot}/logs/<apiVersion>/apiInvocationLogs | GET | Query and retrieve service API invocation logs stored on the CAPIF core function |

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

##### 8.8.2.2.2 Resource Definition

Resource URI: **{apiRoot}/logs/<apiVersion>/apiInvocationLogs**

This resource shall support the resource URI variables defined in table 8.8.2.2.2-1.

Table 8.8.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.8.1 |

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

#### 8.9.2.1 Overview



Figure 8.9.2.1-1: Resource URI structure of the CAPIF\_API\_Provider\_Management\_API

Table 8.9.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.9.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| All API Provider Domains Registrations | {apiRoot}/api-provider-management/<apiVersion>/registrations | POST | Registers new API provider domain by creating API provider domain with API provider domain functions profiles. |
| Individual API Provider Domain Registration | {apiRoot}/api-provider-management/<apiVersion>/registrations/{registrationId} | PUT | Updates an individual API provider domain identified by {registrationId} |
| DELETE | Deregisters API provider domain by deleting API provider domain and functions, identified by {registrationId}. |

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

##### 8.9.2.2.2 Resource Definition

Resource URI: **{apiRoot}/api-provider-management/<apiVersion>/registrations**

This resource shall support the resource URI variables defined in table 8.9.2.2.2-1.

Table 8.9.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.9.1 |

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

###### 8.9.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.9.2.2.3.1-1.

Table 8.9.2.2.3.1-1: 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 8.9.2.2.3.1-2 and the response data structures and response codes specified in table 8.9.2.2.3.1-3.

Table 8.9.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| APIProviderEnrolmentDetails | M | 1 | Enrolment details of the API provider domain including individual API provider domain function details. |

Table 8.9.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| APIProviderEnrolmentDetails | M  | 1 | 201 Created | API provider domain registered successfully The URI of the created resource shall be returned in the "Location" HTTP header. The list of successfully registered individual API provider domain functions, registration specific failure information of failed API provider domain function registrations, are included in APIProviderEnrolmentDetails which is provided in the response body. |

Table 8.9.2.2.3.1-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/api-provider-management/<apiVersion>/registrations/{registrationId} |

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

##### 8.9.2.3.2 Resource Definition

Resource URI: **{apiRoot}/api-provider-management/<apiVersion>/registrations/{registrationId}**

This resource shall support the resource URI variables defined in table 8.9.2.3.2-1.

Table 8.9.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.9.1 |
| registrationId | string | Identifies an individual registered API Provider domain resource |

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

#### 9.1.2a.1 Overview

Custom operations used for this API are summarized in table 9.1.2a.1-1. "{apiRoot}" and “<apiVersion>” are set as described in clause 7.5 and clause 9.1.1 respectively.

Table 9.1.2a.1-1: Custom operations without associated resources

|  |  |  |  |
| --- | --- | --- | --- |
| Operation name | Custom operation URI | Mapped HTTP method | Description |
| check-authentication | {apiRoot}/aef-security/<apiVersion>/check-authentication | POST | Check authentication request. |
| revoke-authentication | {apiRoot}/aef-security/<apiVersion>/revoke-authorization | POST | Revoke authorization for service APIs. |

\*\*\* End of Change \*\*\*