**3GPP TSG-CT3 Meeting #131 C3-235319**

**Chicago, United States, 13 - 17 November 2023 *(Revision of C3-234602)***

**Source: Huawei**

**Title: Pseudo-CR on support of 204 during modification procedure**

**Spec: 3GPP TS 29.583 V 0.2.0**

**Agenda item: 18.34**

**Document for: Agreement**

**1. Introduction**

During the PAS update registration information, both the "200 OK" status code and "204 No Content" status code can be provided as successful case, while the current specification only introduce the "200 OK" status. The "204 No Content" status code should be supported during the modification procedure.

**2. Reason for Change**

To support the "204 No Content" status code in the PIN\_ASRegistration\_Update operation and enhance the corresponding API service.

**3. Conclusions**

N/A

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.583-030.

\* \* \* First Change \* \* \* \*

##### 5.2.2.3.2 Updating an existing registration



Figure 5.2.2.3.2-1: Procedure for update of a registration

1. When the service consumer needs to update the registration information to the PIN server, the service consumer shall send the HTTP PUT/PATCH message to the PIN server targeting the "Individual PAS Registration" collection resource, with the request body including the PASRegistrationPatch data structure..

2a. Upon success, if the PAS is authorized, the PIN server shall respond with an HTTP PUT response including "200 OK" status code with the response body containing the fully updated PAS registration information of the resource within the PASRegistration data structure or HTTP PATCH response including "204 No Content" status code.

2b. On failure, the PIN server shall send the error response as specified in clause 6.1.7.

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

###### 6.1.3.3.3.2 PUT

This method updates the PAS registration information at the PIN server by completely replacing the existing registration data (except the value of "requestorId" attribute and the "secCred" attribute). This method shall support the URI query parameters specified in the table 6.1.3.3.3.2-1.

Table 6.1.3.3.3.2-1: 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 6.1.3.3.3.2-2 and the response data structures and response codes specified in table 6.1.3.3.3.2-3.

Table 6.1.3.3.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| PASRegistration | M | 1 | Details of the PAS registration information to be updated |

Table 6.1.3.3.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| PASRegistration | M | 1 | 200 OK | The Individual PAS registration information updated successfully and the updated PAS registration information is returned in the response. |
| n/a |  |  | 204 No Content | The Individual PAS registration information updated successfully. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| NOTE: The manadatory HTTP error status code for the PUT method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.1.3.3.3.2-4: 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 PIN server. |

Table 6.1.3.3.3.2-5: 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 PIN server. |

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

###### 6.1.3.3.3.4 PATCH

This method partially updates the PAS registration information at the PIN server (except the value of "requestorId" attribute and the "secCred" attribute). This method shall support the URI query parameters specified in the table 6.1.3.3.3.4-1.

Table 6.1.3.3.3.4-1: URI query parameters supported by the PATCH method on this resource

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

This method shall support the request data structures specified in table 6.1.3.3.3.4-2 and the response data structures and response codes specified in table 6.1.3.3.3.4-3.

Table 6.1.3.3.3.4-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| PASRegistrationPatch | M | 1 | Details of the PAS registration information to be updated |

Table 6.1.3.3.3.4-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| PASRegistration | M | 1 | 200 OK | The Individual PAS registration information was updated successfully and the updated PAS registration information is returned in the response. |
| n/a |  |  | 204 No Content | The Individual PAS registration information was updated successfully. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [2]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative PIN server.Redirection handling is described in clause 5.2.10 of TS 29.122 [6]. |
| NOTE: The mandatory HTTP error status code for the PUT method listed in Table 5.2.6-1 of 3GPP TS 29.122 [2] also apply. |

Table 6.1.3.3.3.4-4: 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 PIN server. |

Table 6.1.3.3.3.4-5: 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 PIN server. |

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

6.1.6.2.4 Type: PASRegistrationPatch

**Table 6.1.6.2.4-1: Definition of type PASRegistrationPatch**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| passId | string | O | 0..1 | Identifies the PIN service that provided by the PAS. |  |
| conInfo | ConnectivityInfo | O | 0..1 | Contains the connectivity information used to communicate with the PAS. |  |
| expTime | DateTimeRm | O | 0..1 | Identifies the expiration time for the PAS registration. If the expiration time is not present, then it indicates that the registration of PAS never expires. |  |
| NOTE: At least one of the attributes shall be provided. |

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

# A.2 PIN\_ASRegistration API

openapi: 3.0.0

info:

 title: PINServer PAS Registration\_API

 version: 1.0.0-alpha.1

 description: |

 API for PAS registration to PIN server.

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externalDocs:

 description: >

 3GPP TS 29.583; Application layer support for Personal IoT Network (PINAPP);

 Personal IoT Network (PIN) Server Services; Stage 3.

 url: 'http://www.3gpp.org/ftp/Specs/archive/29\_series/29.583/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/pin-as-registration/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.3 of 3GPP TS 29.583.

paths:

 /registrations:

 post:

 summary: Create a new PAS Registration

 operationId: CreatePASRegistration

 tags:

 - PAS Registrations (Collection)

 description: Register a new PAS at the PIN Server.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: PAS information is registered successfully at PIN server.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created resource'

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /registrations/{registrationId}:

 get:

 summary: Get an Individual PAS Registration

 operationId: GetIndPASReg

 tags:

 - Individual PAS Registration (Document)

 description: Retrieve an Individual PAS registration resource.

 parameters:

 - name: registrationId

 in: path

 description: Registration Id.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (The PAS registration information at the PIN Server).

 content:

 application/json:

 schema:

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

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 put:

 summary: Update an Individual PAS Registration

 operationId: UpdateIndPASReg

 tags:

 - Individual PAS Registration (Document)

 description: Fully replace an existing PAS Registration resource.

 parameters:

 - name: registrationId

 in: path

 description: PAS Registration Id.

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (The PAS registration information is updated successfully).

 content:

 application/json:

 schema:

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

 '204':

 description: No Content. The PAS registration information is updated successfully.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 patch:

 summary: Modify an Individual PAS Registration

 operationId: ModifyIndPASReg

 tags:

 - Individual PAS Registration (Document)

 description: Partially update an existing PAS Registration resource.

 parameters:

 - name: registrationId

 in: path

 description: PAS registration Id.

 required: true

 schema:

 type: string

 requestBody:

 description: Partial update an existing PAS registration resource.

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 The Individual PAS registration is successfully modified and

 the updated registration information is returned in the response.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content. The Individual PAS registration is successfully modified.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 delete:

 summary: Delete an Individual PAS Registration

 operationId: DeleteIndPASReg

 tags:

 - Individual PAS Registration (Document)

 description: Delete an existing PAS registration at PIN server.

 parameters:

 - name: registrationId

 in: path

 description: Registration Id.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The individual PAS registration is deleted.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 PASRegistration:

 type: object

 description: Represents an PAS registration information.

 properties:

 conInfo:

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

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 requestorId:

 type: string

 description: Indentify a PAS

 passId:

 type: string

 description: Indentify a PIN service

 required:

 - requestorId

 - conInfo

 - passId

 ConnectivityInfo:

 type: object

 description: Represents a connection information of PAS.

 properties:

 fqdn:

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

 ipv4Addrs:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv4Addr'

 ipv6Addrs:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv6Addr'

 uri:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 oneOf:

 - required: [uri]

 - required: [fqdn]

 - required: [ipv4Addrs]

 - required: [ipv6Addrs]

 PASRegistrationPatch:

 type: object

 description: Represents partial update request of individual PAS registration information.

 properties:

 conInfo:

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

 expTime:

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

 passId:

 type: string

 description: Identify a PIN service provided by PAS.

\* \* \* End of Changes \* \* \* \*