



PfdManagement

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OpenAPI

OpenAPI Version: 3.0.0

Info

Title: 3gpp-pfd-management
Version: "1.0.0"

Servers

URL: '{apiRoot}/3gpp-pfd-management/v1'

Variables:

API Root:

Default: https://example.com

Description: apiRoot as defined in subclause 5.2.4 of 3GPP TS 29.122.

Security

- {}
- oAuth2ClientCredentials: []

Paths

`{scsAsId}/transactions`

Parameters:

- **Name:** `scsAsId`
 - In:** `path`
 - Description:** Identifier of the SCS/AS as defined in subclause subclause 5.2.4 of 3GPP TS 29.122.
 - Required/Optional:** `true`
 - Schema:**
 - Type:** `string`
- get:**

Responses:

- '200':
 - Description:** OK. All transactions related to the request URI are returned.
 - Content:**
 - Application/JSON:**
 - Schema:**
 - Type:** `array`
 - Items:**
 - Reference:** `'#/components/schemas/PfdManagement'`
- '400':
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/400'`
- '401':
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/401'`
- '403':
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/403'`
- '404':
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/404'`
- '406':
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/406'`
- '429':
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/429'`
- '500':
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/500'`
- '503':
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/503'`
- Default:**
 - Reference:** `'TS29122_CommonData.yaml#/components/responses/default'`

Method: `Post`

Request Body:

- Required/Optional:** `true`
- Content:**
 - Application/JSON:**
 - Schema:**

Reference: '#/components/schemas/PfdManagement'

Description: Create a new transaction for PFD management.

Responses:

'201':

Description: Created. The transaction was created successfully. The SCEF shall return the created transaction in the response payload body. PfdReport may be included to provide detailed failure information for some applications.

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/PfdManagement'

Headers:

Location:

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

Required/Optional: true

Schema:

Type: string

'400':

Reference: 'TS29122_CommonData.yaml#/components/responses/400'

'401':

Reference: 'TS29122_CommonData.yaml#/components/responses/401'

'403':

Reference: 'TS29122_CommonData.yaml#/components/responses/403'

'404':

Reference: 'TS29122_CommonData.yaml#/components/responses/404'

'411':

Reference: 'TS29122_CommonData.yaml#/components/responses/411'

'413':

Reference: 'TS29122_CommonData.yaml#/components/responses/413'

'415':

Reference: 'TS29122_CommonData.yaml#/components/responses/415'

'429':

Reference: 'TS29122_CommonData.yaml#/components/responses/429'

'500':

Description: The PFDs for all applications were not created successfully. PfdReport is included with detailed information.

Content:

Application/JSON:

Schema:

Type: array

Items:

Reference: '#/components/schemas/PfdReport'

Min Items: 1

application/problem+json:

Schema:

Reference: 'TS29122_CommonData.yaml#/components/schemas/ProblemDetails'

'503':

Reference: 'TS29122_CommonData.yaml#/components/responses/503'

Default:

Reference: 'TS29122_CommonData.yaml#/components/responses/default'

/{scsAsId}/transactions/{transactionId}

Parameters:

- **Name:** scsAsId
In: path
Description: Identifier of the SCS/AS as defined in subclause subclause 5.2.4 of 3GPP TS 29.122.
Required/Optional: true
Schema:
Type: string
- **Name:** transactionId
In: path
Description: Transaction ID
Required/Optional: true
Schema:
Type: string

get:

Responses:

- '200':
Description: OK. The transaction information related to the request URI is returned.
Content:
Application/JSON:
Schema:
Reference: '#/components/schemas/PfdManagement'
- '400':
Reference: 'TS29122_CommonData.yaml#/components/responses/400'
- '401':
Reference: 'TS29122_CommonData.yaml#/components/responses/401'
- '403':
Reference: 'TS29122_CommonData.yaml#/components/responses/403'
- '404':
Reference: 'TS29122_CommonData.yaml#/components/responses/404'
- '406':
Reference: 'TS29122_CommonData.yaml#/components/responses/406'
- '429':
Reference: 'TS29122_CommonData.yaml#/components/responses/429'
- '500':
Reference: 'TS29122_CommonData.yaml#/components/responses/500'
- '503':
Reference: 'TS29122_CommonData.yaml#/components/responses/503'
- Default:**
Reference: 'TS29122_CommonData.yaml#/components/responses/default'

put:

- Request Body:**
Required/Optional: true
Content:
Application/JSON:
Schema:

Reference: '#/components/schemas/PfdManagement'

Description: Change information in PFD management transaction.

Responses:

'200':

Description: OK. The transaction was modified successfully. The SCEF shall return an updated transaction in the response payload body.

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/PfdManagement'

'400':

Reference: 'TS29122_CommonData.yaml#/components/responses/400'

'401':

Reference: 'TS29122_CommonData.yaml#/components/responses/401'

'403':

Reference: 'TS29122_CommonData.yaml#/components/responses/403'

'404':

Reference: 'TS29122_CommonData.yaml#/components/responses/404'

'411':

Reference: 'TS29122_CommonData.yaml#/components/responses/411'

'413':

Reference: 'TS29122_CommonData.yaml#/components/responses/413'

'415':

Reference: 'TS29122_CommonData.yaml#/components/responses/415'

'429':

Reference: 'TS29122_CommonData.yaml#/components/responses/429'

'500':

Description: The PFDs for all applications were not updated successfully. PfdReport is included with detailed information.

Content:

Application/JSON:

Schema:

Type: array

Items:

Reference: '#/components/schemas/PfdReport'

Min Items: 1

application/problem+json:

Schema:

Reference: 'TS29122_CommonData.yaml#/components/schemas/ProblemDetails'

'503':

Reference: 'TS29122_CommonData.yaml#/components/responses/503'

Default:

Reference: 'TS29122_CommonData.yaml#/components/responses/default'

delete:

Responses:

'204':

Description: No Content. The transaction was deleted successfully. The payload body shall be empty.

'400':

Reference: 'TS29122_CommonData.yaml#/components/responses/400'

{/scsAsId}/transactions/{transactionId}/applications/{appld}

```

'401':
  Reference: 'TS29122_CommonData.yaml#/components/responses/401'
'403':
  Reference: 'TS29122_CommonData.yaml#/components/responses/403'
'404':
  Reference: 'TS29122_CommonData.yaml#/components/responses/404'
'429':
  Reference: 'TS29122_CommonData.yaml#/components/responses/429'
'500':
  Reference: 'TS29122_CommonData.yaml#/components/responses/500'
'503':
  Reference: 'TS29122_CommonData.yaml#/components/responses/503'
Default:
  Reference: 'TS29122_CommonData.yaml#/components/responses/default'

```

{/scsAsId}/transactions/{transactionId}/applications/{appld}

Parameters:

```

- Name: scsAsId
  In: path
  Description: Identifier of the SCS/AS as defined in subclause subclause 5.2.4 of
3GPP TS 29.122.
  Required/Optional: true
  Schema:
    Type: string
- Name: transactionId
  In: path
  Description: Transaction ID
  Required/Optional: true
  Schema:
    Type: string
- Name: appId
  In: path
  Description: Identifier of the application
  Required/Optional: true
  Schema:
    Type: string

```

get:

Responses:

```

'200':
  Description: OK. The application information related to the request URI is
returned.
  Content:
    Application/JSON:
      Schema:
        Reference: '#/components/schemas/PfdData'
'400':
  Reference: 'TS29122_CommonData.yaml#/components/responses/400'
'401':

```

```

    Reference: 'TS29122_CommonData.yaml#/components/responses/401'
  '403':
    Reference: 'TS29122_CommonData.yaml#/components/responses/403'
  '404':
    Reference: 'TS29122_CommonData.yaml#/components/responses/404'
  '406':
    Reference: 'TS29122_CommonData.yaml#/components/responses/406'
  '429':
    Reference: 'TS29122_CommonData.yaml#/components/responses/429'
  '500':
    Reference: 'TS29122_CommonData.yaml#/components/responses/500'
  '503':
    Reference: 'TS29122_CommonData.yaml#/components/responses/503'
  Default:
    Reference: 'TS29122_CommonData.yaml#/components/responses/default'
put:
  Request Body:
    Required/Optional: true
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/PfdData'
        Description: Change information in application.

  Responses:
    '200':
      Description: OK. The application resource was modified successfully. The SCEF
shall return an updated application resource in the response payload body.
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/PfdData'
    '400':
      Reference: 'TS29122_CommonData.yaml#/components/responses/400'
    '401':
      Reference: 'TS29122_CommonData.yaml#/components/responses/401'
    '403':
      Description: The PFDs for the application were not updated successfully.
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/PfdReport'
        application/problem+json:
          Schema:
            Reference: 'TS29122_CommonData.yaml#/components/schemas/ProblemDetails'
    '404':
      Reference: 'TS29122_CommonData.yaml#/components/responses/404'
    '409':
      Description: The PFDs for the application were not updated successfully.
      Content:
        Application/JSON:
          Schema:

```

```

        Reference: '#/components/schemas/PfdReport'
    application/problem+json:
        Schema:
            Reference: 'TS29122_CommonData.yaml#/components/schemas/ProblemDetails'
    '411':
        Reference: 'TS29122_CommonData.yaml#/components/responses/411'
    '413':
        Reference: 'TS29122_CommonData.yaml#/components/responses/413'
    '415':
        Reference: 'TS29122_CommonData.yaml#/components/responses/415'
    '429':
        Reference: 'TS29122_CommonData.yaml#/components/responses/429'
    '500':
        Description: The PFDs for the application were not updated successfully.
        Content:
            Application/JSON:
                Schema:
                    Reference: '#/components/schemas/PfdReport'
            application/problem+json:
                Schema:
                    Reference: 'TS29122_CommonData.yaml#/components/schemas/ProblemDetails'
    '503':
        Reference: 'TS29122_CommonData.yaml#/components/responses/503'
    Default:
        Reference: 'TS29122_CommonData.yaml#/components/responses/default'
patch:
    Request Body:
        Required/Optional: true
        Content:
            application/merge-patch+json:
                Schema:
                    Reference: '#/components/schemas/PfdData'
        Description: Change information in PFD management transaction.

Responses:
    '200':
        Description: OK. The transaction was modified successfully. The SCEF shall return
        an updated transaction in the response payload body.
        Content:
            Application/JSON:
                Schema:
                    Reference: '#/components/schemas/PfdData'
    '400':
        Reference: 'TS29122_CommonData.yaml#/components/responses/400'
    '401':
        Reference: 'TS29122_CommonData.yaml#/components/responses/401'
    '403':
        Description: The PFDs for the application were not updated successfully.
        Content:
            Application/JSON:
                Schema:
                    Reference: '#/components/schemas/PfdReport'

```



```

    application/problem+json:
      Schema:
        Reference: 'TS29122_CommonData.yaml#/components/schemas/ProblemDetails'
'404':
  Reference: 'TS29122_CommonData.yaml#/components/responses/404'
'409':
  Description: The PFDs for the application were not updated successfully.
  Content:
    Application/JSON:
      Schema:
        Reference: '#/components/schemas/PfdReport'
    application/problem+json:
      Schema:
        Reference: 'TS29122_CommonData.yaml#/components/schemas/ProblemDetails'
'411':
  Reference: 'TS29122_CommonData.yaml#/components/responses/411'
'413':
  Reference: 'TS29122_CommonData.yaml#/components/responses/413'
'415':
  Reference: 'TS29122_CommonData.yaml#/components/responses/415'
'429':
  Reference: 'TS29122_CommonData.yaml#/components/responses/429'
'500':
  Description: The PFDs for the application were not updated successfully.
  Content:
    Application/JSON:
      Schema:
        Reference: '#/components/schemas/PfdReport'
    application/problem+json:
      Schema:
        Reference: 'TS29122_CommonData.yaml#/components/schemas/ProblemDetails'
'503':
  Reference: 'TS29122_CommonData.yaml#/components/responses/503'
Default:
  Reference: 'TS29122_CommonData.yaml#/components/responses/default'
delete:

Responses:
'204':
  Description: No Content. The application was deleted successfully. The payload
body shall be empty.
'400':
  Reference: 'TS29122_CommonData.yaml#/components/responses/400'
'401':
  Reference: 'TS29122_CommonData.yaml#/components/responses/401'
'403':
  Reference: 'TS29122_CommonData.yaml#/components/responses/403'
'404':
  Reference: 'TS29122_CommonData.yaml#/components/responses/404'
'429':
  Reference: 'TS29122_CommonData.yaml#/components/responses/429'
'500':

```

```

Reference: 'TS29122_CommonData.yaml#/components/responses/500'
503':
Reference: 'TS29122_CommonData.yaml#/components/responses/503'
Default:
Reference: 'TS29122_CommonData.yaml#/components/responses/default'

```

Components

```

securitySchemes:
  oAuth2ClientCredentials:
    Type: oauth2
    Flows:
      clientCredentials:
        tokenUrl: '{tokenUrl}'
        scopes: {}

schemas:
  PfdManagement:
    Type: object
    Properties:
      self:
        Reference: 'TS29122_CommonData.yaml#/components/schemas/Link'
      supportedFeatures:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
      pfDdatas:
        Type: object
        additionalProperties:
          Reference: '#/components/schemas/PfdData'
        minProperties: 1
        Description: Each element uniquely identifies the PFDs for an external application
        identifier. Each element is identified in the map via an external application identifier
        as key. The response shall include successfully provisioned PFD data of application(s).
      pfDreports:
        Type: object
        additionalProperties:
          Reference: '#/components/schemas/PfdReport'
        minProperties: 1
        Description: Supplied by the SCEF and contains the external application identifiers
        for which PFD(s) are not added or modified successfully. The failure reason is also included.
        Each element provides the related information for one or more external application
        identifier(s) and is identified in the map via the failure identifier as key.
        readOnly: true
    Required:
      - pfDdatas
  PfdData:
    Type: object
    Properties:
      externalAppId:
        Type: string
        Description: Each element uniquely external application identifier

```

```

self:
  Reference: 'TS29122_CommonData.yaml#/components/schemas/Link'
pfds:
  Type: object
  additionalProperties:
    Reference: '#/components/schemas/Pfd'
    Description: Contains the PFDs of the external application identifier. Each PFD
is identified in the map via a key containing the PFD identifier.
  allowedDelay:
    Reference: 'TS29122_CommonData.yaml#/components/schemas/DurationSecRm'
  cachingTime:
    Reference: 'TS29122_CommonData.yaml#/components/schemas/DurationSecRo'
Required:
- externalAppId
- pfds
Pfd:
Type: object
Properties:
  pfdId:
    Type: string
    Description: Identifies a PDF of an application identifier.
  flowDescriptions:
    Type: array
    Items:
      Type: string
    minItems: 1
    Description: Represents a 3-tuple with protocol, server ip and server port for
UL/DL application traffic. The content of the string has the same encoding as the IPFilterRule
AVP value as defined in IETF RFC 6733.
  urls:
    Type: array
    Items:
      Type: string
    minItems: 1
    Description: Indicates a URL or a regular expression which is used to match the
significant parts of the URL.
  domainNames:
    Type: array
    Items:
      Type: string
    minItems: 1
    Description: Indicates an FQDN or a regular expression as a domain name matching
criteria.
Required:
- pfdId
PfdReport:
Type: object
Properties:
  externalAppIds:
    Type: array
    Items:
      Type: string
    minItems: 1

```

Description: Identifies the external application identifier(s) which PFD(s) are not added or modified successfully

failureCode:

Reference: '#/components/schemas/FailureCode'

catchingTime:

Reference: 'TS29122_CommonData.yaml#/components/schemas/DurationSec'

Required:

- externalAppIds
- failureCode

FailureCode:

anyOf:

- type: string

enum:

- MALFUNCTION
- RESOURCE_LIMITATION
- SHORT_DELAY
- APP_ID_DUPLICATED
- OTHER_REASON

- type: string

Description:

This string provides forward-compatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API.

Description:

Possible values are

- MALFUNCTION: This value indicates that something functions wrongly in PFD provisioning or the PFD provisioning does not function at all.
- RESOURCE_LIMITATION: This value indicates there is resource limitation for PFD storage.
- SHORT_DELAY: This value indicates that the allowed delay is too short and PFD(s) are not stored.
- APP_ID_DUPLICATED: The received external application identifier(s) are already provisioned.
- OTHER_REASON: Other reason unspecified.