**3GPP TSG-SA5 Meeting #130e *S5-202232***

**e-meeting 20-28 April 2020**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v11.4* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.532** | **CR** | **0115** | **rev** | **-** | **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)*.* | | | | | | | | |
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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Update URI for performance data file reporting management service | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2020-04-02 |
|  |  | | | |  | |  | | |  |
| ***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 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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Some issues for the URI for performance data reporting management service, for example, clause 12.3.1.1.3.2.1.2, the URI is described as follows: Resource URI = {DN\_prefix\_authority\_part}/{DN\_prefix\_remainder}/PerfDataFileReportMnS/v1610/Files, and the definition for DN\_prefix\_authority\_part and DN\_prefix\_remainder refers to TS 32.158. However, there is no such definition in TS 32.158. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Update the URI for performance data reporting management service 2. Change the JSON schema to YAML file according to the agreement in 3GPP SA5#129 emeeting | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The incorrect URI and invalid reference are used. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 12.3.1.1.3.1,12.3.1.1.3.2.1.2,12.3.1.1.3.2.2.2,12.3.1.1.3.2.3.2, A.4.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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's revision history:*** |  |

|  |
| --- |
| **1st Change** |

##### 12.3.1.1.3 Resources

###### 12.3.1.1.3.1 Resource structure

Figure 12.3.1.1.3.1-1 shows the resource structure of the performance data file reporting service.

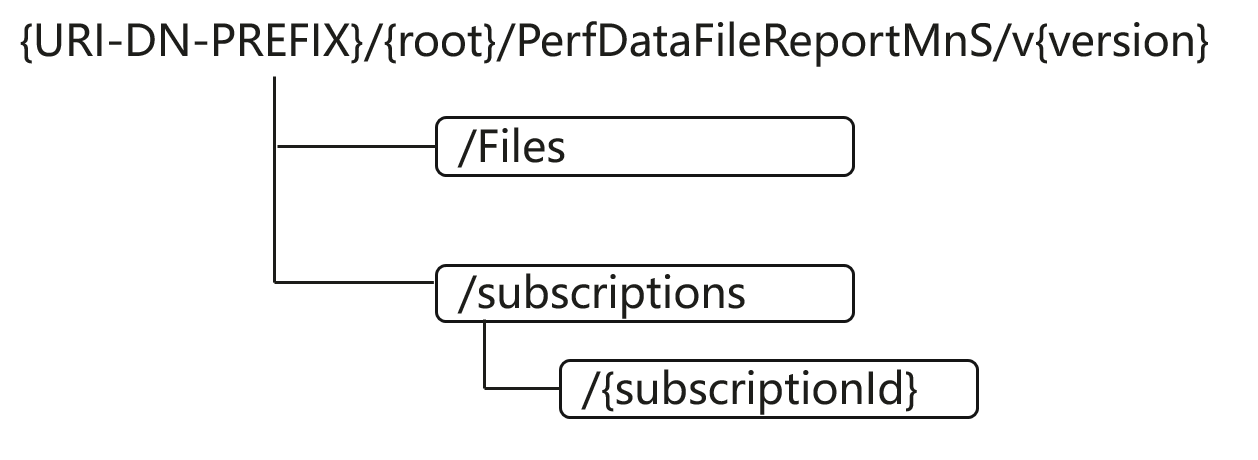


Figure 12.3.1.1.3.1-1: Resource URI structure of the performance data file reporting service

Table 12.3.1.1.3.1-1 provides an overview of the resources and applicable HTTP methods.

Table 12.3.1.1.3.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method | Description |
| Files | /Files | GET | Retrieve the information of the available files |
| subscriptions | /subscriptions | POST | Create a subscription |
| subscriptions | /subscriptions | DELETE | Delete all subscriptions made with a consumerReferenceId |
| subscription | /subscriptions/{subscriptionId} | DELETE | Delete a single subscription |
| notificationSink | /notificationSink | POST | Send notifications |

###### 12.3.1.1.3.2 Resource definitions

12.3.1.1.3.2.1 Resource “/Files”

12.3.1.1.3.2.1.1 Description

This resource represents the information about a collection of available files.

12.3.1.1.3.2.1.2 URI

Resource URI = {URI-DN-prefix}/{root}/PerfDataFileReportMnS/v1640/Files

The resource URI variables a defined in the following table.

Table 12.3.1.1.3.2.1.2-1: URI variables

|  |  |
| --- | --- |
| **Name** | **Definition** |
| URI-DN-prefix | See clause 4.4 of TS 32.158 [15] |
| root | See clause 4.4 of TS 32.158 [15] |

12.3.1.1.3.2.1.3 HTTP methods

12.3.1.1.3.2.1.3.1 HTTP GET

This method shall support the URI query parameters specified in the following table.

**Table 12.3.1.1.3.2.1.3.1-1: URI query parameters supported by the GET method on this resource**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Description** | **SQ** |
| managementDataType | managementDataType | To filter the available files based on the management data type. | M |
| beginTime | dateTime-Type | To filter the available files who became ready no later than this time stamp. | M |
| endTime | dateTime-Type | To filter the available files who became ready no earlier than this time stamp. | M |

This method shall support the request data structures, the response data structures and response codes specified in the following tables.

**Table 12.3.1.1.3.2.1.3.1-2: Data structures supported by the GET request body on this resource**

|  |  |  |
| --- | --- | --- |
| **Data type** | **Description** | **SQ** |
|  |  |  |

**Table 12.3.1.1.3.2.1.3.1-3: Data structures supported by the GET response body on this resource**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **Response**  **codes** | **Description** | **SQ** |
| fileInfoRetrieval-ResponseType | 200 OK | The resource representation of the infomraiton about the available files retrieved. | M |
| error-ResponseType | 4xx/5xx | Returned in case of an error | M |

12.3.1.1.3.2.2 Resource "/subscriptions"

12.3.1.1.3.2.2.1 Description

This resource is a container resource for individual subscriptions.

12.3.1.1.3.2.2.2 URI

The resource URI is:

Resource URI: {URI-DN-prefix }/{root}/PerfDataFileReportMnS/v1640/subscriptions

The resource URI variables a defined in the following table.

Table 12.3.1.1.3.2.2.2-1: URI variables

|  |  |
| --- | --- |
| **Name** | **Definition** |
| URI-DN-prefix | See clause 4.4 of TS 32.158 [15] |
| root | See clause 4.4 of TS 32.158 [15] |

12.3.1.1.3.2.2.3 HTTP methods

12.3.1.1.3.2.2.3.1 POST

This method shall support the URI query parameters specified in table 12.3.1.1.3.2.2.3.1-1.

Table 12.3.1.1.3.2.2.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Description | Qualifier |
| n/a | n/a | n/a | n/a |

This method shall support the request data structures specified in table 9.3.2.6.3.1-2 and the response data structures and response codes specified in table 9.3.2.6.3.1-3.

Table 12.3.1.1.3.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |
| --- | --- | --- |
| Data type | Description | SQ |
| subscription-RequestType | Details of the subscription to be created | M |

Table 12.3.1.1.3.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Response  codes | Description | SQ |
| subscription-ResponseType | 201 Created | In case of success the representation of the created subscription is returned. | M |
| error-ResponseType | 4xx/5xx | In case of failure the error object is returned. | M |

12.3.1.1.3.2.2.3.2 DELETE

This method shall support the URI query parameters specified in table 12.3.1.1.3.2.2.3.2-1.

Table 12.3.1.1.3.2.2.3.2-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Description | Qualifier |
| consumerReferenceId | consumerReferenceId-QueryType | Identifies the consumer whose subscriptions shall be deleted | M |

This method shall support the request data structures specified in table 12.3.1.1.3.2.2.3.2-2 and the response data structures and response codes specified in table 12.3.1.1.3.2.2.3.2-3.

Table 12.3.1.1.3.2.2.3.2-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |
| --- | --- | --- |
| Data type | Description | SQ |
| n/a | n/a | n/a |

Table 12.3.1.1.3.2.2.3.2-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Response  codes | Description | SQ |
| n/a | 204 No Content | In case of success no message body is returned | n/a |
| error-ResponseType | 4xx/5xx | In case of failure the error object is returned. | M |

12.3.1.1.3.2.3 Resource "/subscriptions/{subscriptionId}"

12.3.1.1.3.2.3.1 Description

This resource represents a subscription.

12.3.1.1.3.2.3.2 URI

The resource URI is:

Resource URI: {URI-DN-prefix }/{root}/PerfDataFileReportMnS/v1640/subscriptions/{subscriptionId}

Table 12.3.1.1.3.2.3.2-1: URI variables

|  |  |
| --- | --- |
| Name | Definition |
| URI-DN-prefix | See clause 4.4 of TS 32.158 [15] |
| root | See clause 4.4 of TS 32.158 [15] |
| subscriptionId | Subscription identifier |

12.3.1.1.3.2.3.3 HTTP methods

12.3.1.1.3.2.3.3.1 DELETE

This method shall support the URI query parameters specified in table 12.3.1.1.3.2.3.3-1.

Table 12.3.1.1.3.2.3.3-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Description | Qualifier |
| n/a | n/a | n/a | n/a |

This method shall support the request data structures specified in table 12.3.1.1.3.2.3.3-2 and the response data structures and response codes specified in table 12.3.1.1.3.2.3.3-3.

Table 12.3.1.1.3.2.3.3-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |
| --- | --- | --- |
| Data type | Description | SQ |
| n/a | n/a | n/a |

Table 12.3.1.1.3.2.3.3-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Response  codes | Description | SQ |
| n/a | 204 No Content | In case of success no message body is returned | M |
| error-ResponseType | 4xx/5xx | In case of failure the error object is returned. | M |

12.3.1.1.3.2.4 Resource "/notificationSink"

12.3.1.1.3.2.4.1 Description

This resource represents a resource to which notifications are sent to.

12.3.1.1.3.2.4.2 URI

The resource URI is provided by the notification subscriber when creating the subscription.

12.3.1.1.3.2.4.3 HTTP methods

12.3.1.1.3.2.4.3.1 POST

This method shall support the URI query parameters specified in table 12.3.1.1.3.2.4.3.1-1.

Table 12.3.1.1.3.2.4.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Description | Qualifier |
| n/a | n/a | n/a | n/a |

This method shall support the request data structures specified in table 12.3.1.1.3.2.4.3.1-2 and the response data structures and response codes specified in table 12.3.1.1.3.2.4.3.1-3.

Table 12.3.1.1.3.2.4.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Data type | | Description | | SQ | |
| notifyFileReady-NotifType | | Type in case a notifyFileReady notification is sent | | M | |
| notifyFilePreparationError-NotifType | | Type in case a notifyFilePreparationError notification is sent | | M | |

Table 12.3.1.1.3.2.4.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Response  codes | Description | SQ |
| n/a | 204 No Content | In case of success no message body is returned | M |
| error-ResponseType | 4xx/5xx | In case of failure the error object is returned. | M |

|  |
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| **3rd Change** |

## A.4.1 Performance data file reporting service

openapi: 3.0.1

info:

title: TS 28.532 Performance data file reporting Service

version: 16.4.0

description: >-

OAS 3.0.1 specification of the Performance data file reporting Management Service © 2020,

3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC). All

rights reserved.

externalDocs:

description: 3GPP TS 28.532 V16.4.0; Generic management services

url: 'http://www.3gpp.org/ftp/Specs/archive/28\_series/28.532/'

servers:

- url: 'http://{URI-DN-prefix}/{root}/PerfDataFileReportMnS/v1640'

variables:

URI-DN-prefix:

description: See subclause 4.4 of TS 32.158

default: example.com

root:

description: See subclause 4.4 of TS 32.158

default: 3GPPManagement

paths:

/Files:

get:

summary: Read resources of information of available files

description: 'With HTTP GET, resources of information of available files are read. The resources to be read are identified with the path component (base resource) and the query component (managementDataType, beginTime and endTime) of the URI. The fields query component allows to select the resource properties to be returned.'

parameters:

- name: managementDataType

in: query

description: This parameter identifies the type of management data that the file contains to select the resources from the collection resources identified with the path component of the URI.

required: true

$ref: '#/components/schemas/managementDataType-Type'

- name: beginTime

in: query

description: This parameter identifies the time stamp no later than which the file became available to select the resources from the collection resources identified with the path component of the URI.

required: true

$ref: '#/components/schemas/dateTime-Type'

- name: endTime

in: query

description: This parameter identifies the time stamp no earlier than which the file became available to select the resources from the collection resources identified with the path component of the URI.

required: true

$ref: '#/components/schemas/dateTime-Type'

responses:

'200':

description: 'Success case ("200 OK"). The resources identified in the request for retrieval are returned in the response message body. In case the fields query parameter is used, the selected resources are returned.'

content:

application/json:

schema:

$ref: '#/components/schemas/fileInfoRetrieval-ResponseType'

default:

description: Error case.

content:

application/json:

schema:

$ref: '#/components/schemas/error-ResponseType'

/subscriptions:

post:

summary: Create a subscription

description: To create a subscription the representation of the subscription is POSTed on the /subscriptions collection resource.

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/subscription-RequestType'

responses:

'201':

description: Success case ("201 Created"). The representation of the newly created subscription resource shall be returned.

content:

application/json:

schema:

$ref: '#/components/schemas/subscription-ResponseType'

default:

description: Error case.

content:

application/json:

schema:

$ref: '#/components/schemas/error-ResponseType'

callbacks:

notifyFileReady:

'{request.body#/consumerReference}':

post:

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/notifyFileReady-NotifType'

responses:

'204':

description: Success case ("204 No Content"). The notification is successfully delivered. The response message body is absent.

default:

description: Error case.

content:

application/json:

schema:

$ref: '#/components/schemas/error-ResponseType'

notifyFilePreparationError:

'{request.body#/consumerReference}':

post:

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/notifyFilePreparationError-NotifType'

responses:

'204':

description: Success case ("204 No Content"). The notification is successfully delivered. The response message body is absent.

default:

description: Error case.

content:

application/json:

schema:

$ref: '#/components/schemas/error-ResponseType'

delete:

summary: Delete all subscriptions made with a specific consumerReferenceId

description: The subscriptions are deleted by deleting the corresponding subscription resources. The resources to be deleted are identified with the path component of the URI pointing to the /subscription collection resource and filtering on the consumerReferenceId provided in the query part.

parameters:

- name: consumerReferenceId

in: query

description: Identifies the subscriptions to be deleted.

required: true

schema:

$ref: '#/components/schemas/consumerReferenceId-QueryType'

responses:

'204':

description: Success case ("204 No Content"). The subscription resources have been deleted. The response message body is absent.

default:

description: Error case.

content:

application/json:

schema:

$ref: '#/components/schemas/error-ResponseType'

'/subscriptions/{subscriptionId}':

delete:

summary: Delete a single subscription

description: The subscription is deleted by deleting the corresponding subscription resource. The resource to be deleted is identified with the path component of the URI.

parameters:

- name: subscriptionId

in: path

description: Identifies the subscription to be deleted.

required: true

schema:

$ref: '#/components/schemas/subscriptionId-PathType'

responses:

'204':

description: Success case ("204 No Content"). The subscription resource has been deleted. The response message body is absent.

default:

description: Error case.

content:

application/json:

schema:

$ref: '#/components/schemas/error-ResponseType'

components:

schemas:

dateTime-Type:

type: string

format: date-Time

uri-Type:

type: string

long-Type:

type: string

format: long

additionalText-Type:

type: string

reason-Type:

type: string

fileInfoRetrieval-ResponseType:

type: object

properties:

data:

type: array

items:

$ref: '#/components/schemas/fileInfo-Type'

fileInfo-Type:

type: object

properties:

fileLocation:

$ref: '#/components/schemas/uri-Type'

fileSize:

$ref: '#/components/schemas/long-Type'

fileReadyTime:

$ref: '#/components/schemas/dateTime-Type'

fileExpirationTime:

$ref: '#/components/schemas/dateTime-Type'

fileCompression:

type: string

fileFormat:

type: string

error-ResponseType:

type: object

properties:

error:

type: object

properties:

errorInfo:

type: string

managementDataType-Type:

type: string

enum:

- PM

header-Type:

description: Header used in notifications as notification header

type: object

properties:

uri:

$ref: '#/components/schemas/uri-Type'

notificationId:

$ref: '#/components/schemas/notificationId-Type'

notificationType:

$ref: '#/components/schemas/notificationType-Type'

eventTime:

$ref: '#/components/schemas/dateTime-Type'

subscriptionId-PathType:

type: string

filter-Type:

type: string

notificationId-Type:

$ref: '#/components/schemas/long-Type'

notificationType-Type:

type: string

enum:

- notifyFileReady

- notifyFilePreparationError

subscription-ResourceType:

type: object

properties:

consumerReference:

$ref: '#/components/schemas/uri-Type'

timeTick:

$ref: '#/components/schemas/long-Type'

filter:

$ref: '#/components/schemas/filter-Type'

subscription-RequestType:

type: object

properties:

data:

$ref: '#/components/schemas/subscription-ResourceType'

subscription-ResponseType:

type: object

properties:

data:

$ref: '#/components/schemas/subscription-ResourceType'

consumerReferenceId-QueryType:

$ref: '#/components/schemas/uri-Type'

notifyFileReady-NotifType:

type: object

properties:

header:

$ref: '#/components/schemas/header-Type'

body:

type: object

properties:

fileInfoList:

type: array

items:

$ref: '#/components/schemas/fileInfo-Type'

additionalText:

$ref: '#/components/schemas/additionalText-Type'

notifyFilePreparationError-NotifType:

type: object

properties:

header:

$ref: '#/components/schemas/header-Type'

body:

type: object

properties:

fileInfoList:

type: array

items:

$ref: '#/components/schemas/fileInfo-Type'

reason:

$ref: '#/components/schemas/reason-Type'

additionalText:

$ref: '#/components/schemas/additionalText-Type'

|  |
| --- |
| **End of Change** |