**3GPP TSG-CT WG3 Meeting #142 *C3-253480***

**, SE,**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | Notification URI in IMS Session Management API | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NG\_RTC\_Ph2 | | | | |  | ***Date:*** | | | 2025-08-13 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | SA2 in TS 23.502 is requesting to support Nnef\_IMSSessionManagement\_Notify operation and TS 29.522 in chapter 5.42.4.2 is already defining its content and the URI which shall be used for this type of notifications.  However, this URI is not included in ImsSession object structure, so it is not possible for a NEF service consumer to provide a notification URI in the IMS Session Management Creation procedure when it is requested by AF | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Include a Notifcation URI inside ImsSession object structure to allow NEF service consumers to provide a notification URI. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | It will not be possible for NEF to send IMSSessionManagement notifications to the subscribed AF when AF wants to be notified. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.42.5.1, 5.42.5.2.2, A.40 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 introduces backward compatible feature to the following APIs:  TS29522\_ImsSessionManagement.yaml | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\*\*\* 1st Change \*\*\*

#### 5.42.5.1 General

This clause specifies the application data model supported by the API.

Table 5.42.5.1-1 specifies the data types defined for the ImsSessionManagement service-based interface protocol.

Table 5.42.5.1-1: ImsSessionManagement specific Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Clause defined | Description |
| ImsSession | 5.42.5.2.2 | Represent an IMS Session. |
| ImsSessionPatch | 5.42.5.2.3 | Represents the requested modifications to an IMS Session. |

Table 5.42.5.1-2 specifies data types re-used by the ImsSessionManagement service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the ImsSessionManagement service based interface.

Table 5.42.5.1-2: ImsSessionManagement re-used Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Reference | Comments |
| ImsSessionInfo | 3GPP TS 29.175 [78] | Represents IMS Session related information. |
| ImsSessionNotif | 3GPP TS 29.175 [78] | Represents the IMS Session Notification. |
| Uri | 3GPP TS 29.122 [4] | Represents a URI. |

Editor’s Note: The data mdodel of ImsSessionManagement is FFS.

\*\*\* 2nd Change \*\*\*

##### 5.42.5.2.2 Type: ImsSession

Table 5.42.5.2.2-1: Definition of type ImsSession

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| afId | string | M | 1 | Contains the AF identifier that is sending the request. |  |
| imsSessionInfo | ImsSessionInfo | M | 1 | Contains the IMS session information and the media list used in the IMS session. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Contains the list of supported features among the ones defined in clause 5.42.6.  This attribute shall be present only when feature negotiation needs to take place. |  |
| notifUri | Uri | O | 1 | Contains the URI via which IMS Session notifications shall be delivered. |  |

\*\*\* 3rd Change \*\*\*

A.40 ImsSessionManagement API

openapi: 3.0.0

info:

title: 3gpp-ims-sm

version: 1.0.0-alpha.1

description: |

API for IMS Session Management.

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externalDocs:

description: >

3GPP TS 29.522 V19.3.0; 5G System; Network Exposure Function Northbound APIs.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

- {}

- oAuth2ClientCredentials: []

servers:

- url: '{apiRoot}/3gpp-ims-sm/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122.

paths:

/ims-sessions:

get:

summary: Request to retrieve all the active IMS Sessions managed by the NEF.

operationId: GetImsSessions

tags:

- IMS Sessions (Collection)

responses:

'200':

description: >

OK. All the active IMS Sessions resources managed by the NEF are returned.

content:

application/json:

schema:

type: array

items:

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

minItems: 0

'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'

post:

summary: Request to create a new IMS Session resource.

tags:

- IMS Session Creation (Collection)

operationId: CreateImsSession

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'201':

description: >

Created. Successful creation of a new Individual IMS Session resource.

content:

application/json:

schema:

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

headers:

Location:

description: >

Contains the URI of the newly created resource, according to the structure

{apiRoot}/3gpp-ims-sm/v1/ims-sessions/{sessionId}

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'

'409':

$ref: 'TS29122\_CommonData.yaml#/components/responses/409'

'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'

callbacks:

ImsSessionNotif:

'{$request.body#/notifUri}':

post:

requestBody:

required: true

content:

application/json:

schema:

$ref: 'TS29175\_Nimsas\_ImsSessionManagement.yaml#/components/schemas/ImsSessionEventNotification'

responses:

'204':

description: >

No Content. The IMS EE notification is successfully received and acknowledged.

'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'

/ims-sessions/{sessionId}:

parameters:

- name: sessionId

in: path

description: >

Represents the identifier of the Individual IMS Session resource.

required: true

schema:

type: string

get:

summary: Retrieve an existing Individual IMS Session resource.

operationId: GetIndImsSession

tags:

- Individual IMS Session (Document)

responses:

'200':

description: >

OK. The requested "Individual IMS Session" resource is successfully returned in the

response body.

content:

application/json:

schema:

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

'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 existing Individual IMS Session resource.

operationId: UpdateIndImsSession

tags:

- Individual IMS Session (Document)

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'200':

description: >

OK. The Individual IMS Session resource is successfully updated and a representation

of the updated resource is returned in the response body.

content:

application/json:

schema:

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

'204':

description: >

No Content. The Individual IMS Session Management resource is

successfully updated and no content is returned in the response body.

'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'

'409':

$ref: 'TS29122\_CommonData.yaml#/components/responses/409'

'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 existing Individual IMS Session resource.

operationId: DeleteIndImsSession

tags:

- Individual IMS Session (Document)

responses:

'204':

description: >

No Content. The Individual IMS Session resource is successfully 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'

'409':

$ref: 'TS29122\_CommonData.yaml#/components/responses/409'

'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:

#

# STRUCTURED DATA TYPES

#

ImsSession:

description: Represents the IMS Session Information.

type: object

properties:

afId:

type: string

imsSessionInfo:

$ref: 'TS29175\_Nimsas\_ImsSessionManagement.yaml#/components/schemas/ImsSessionInfo'

suppFeat:

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

notifUri:

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

required:

- afId

- imsSessionInfo

- notifUri

#

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

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