**3GPP TSG-CT WG3 Meeting #134 *C3-242286***

**Changsha, China, 15 - 19 April, 2024 *(Revision of C3-242xxx)***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** | **-** | **Current version:** | **18.0.0** |  |
|  | | | | | | | | |
| *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** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Definition of the OpenAPI file of the NSCE\_ServiceContinuity API | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Lenovo | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NSCALE | | | | |  | ***Date:*** | | | 2024-03-30 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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:*** | | As specified in clause 9.9 of TS 23.435, 5GS is required to provide suitable APIs to allow a trusted third-party to check whether the serving slice is available and can offer the same performance at the target EDN in edge based NSCE deployments. The NSCE\_ServiceContinuity Service API is being defined and has reached a level that enables the corresponding stage 3 work to start. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Definition of the OpenAPI file of the new NSCE\_ServiceContinuity API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Not fullfilled Stage 2 requirements. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | A.9(new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 a new OpenAPI file for the NSCE\_ServiceContinuity API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

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

# A.9 NSCE\_ServiceContinuity API

openapi: 3.0.0

info:

title: NSCE Server Edge Service Continuity Service

version: 1.0.0-alpha.3

description: |

NSCE Server Edge Service Continuity Service.

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externalDocs:

description: >

3GPP TS 29.435 V18.1.0; Service Enabler Architecture Layer for Verticals (SEAL);

Network Slice Capability Exposure (NSCE) Server Service(s); Stage 3.

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.435/

servers:

- url: '{apiRoot}/nsce-esc/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 6.5 of 3GPP TS 29.549.

security:

- {}

- oAuth2ClientCredentials: []

paths:

/request:

post:

summary: Enables to request Edge service continuity requirement.

operationId: EdgeSCRequirementReq

tags:

- Edge Service Continuity Requirement Request

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'204':

description: >

No Content. The Edge service continuity requirement request is successfully

received and processed.

'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'

callbacks:

EdgeSCRequirementNotif:

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

post:

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'204':

description: >

No Content. The Edge Service Continuity requirement Notification

is successfully received and processed.

'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'

/negotiate:

post:

summary: Enables to request Edge service continuity negotiation.

operationId: EdgeSCNegotiationReq

tags:

- Edge Service Continuity Negotiation Request

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'204':

description: >

No Content. The Edge service continuity Negotiation request is successfully

received and processed.

'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'

callbacks:

EdgeSCNegotiationNotif:

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

post:

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'204':

description: >

No Content. The Edge Service Continuity Negotiation Notification is

successfully received and processed.

'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'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

#

# STRUCTURED DATA TYPES

#

EdgeSCRequirementReq:

description: >

Represents the parameters to request Edge Service Continuity Requirement.

type: object

properties:

notifUri:

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

valServId:

type: string

description: >

The identifier of the VAL service for which the requirement request applies.

valUeIds:

type: array

items:

type: string

minItems: 1

description: >

The list of VAL UE IDs for which the requirement request applies.

netSliceId:

$ref: 'TS29435\_NSCE\_PolicyManagement.yaml#/components/schemas/NetSliceId'

servContReq:

$ref: 'TS29435\_NSCE\_InterPLMNContinuity.yaml#/components/schemas/ServContReq'

targetServArea:

$ref: 'TS29435\_NSCE\_NSInfoDelivery.yaml#/components/schemas/ServArea'

suppFeat:

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

required:

- valServId

- servContReq

- notifUri

EdgeSCRequirementNotif:

description: >

Represents an Edge Service Continuity Requirement Notification.

type: object

properties:

valServId:

type: string

description: >

The identifier of the VAL service for which the requirement request applies.

valUeIds:

type: array

items:

type: string

minItems: 1

description: >

The list of VAL UE IDs for which the requirement request applies.

netSliceId:

$ref: 'TS29435\_NSCE\_PolicyManagement.yaml#/components/schemas/NetSliceId'

tgtNsceServId:

type: string

description: >

Contains the identifier of the target NSCE Server.

tgtNsceAddr:

$ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

targetServArea:

$ref: 'TS29435\_NSCE\_NSInfoDelivery.yaml#/components/schemas/ServArea'

required:

- valServId

- netSliceId

- tgtNsceServId

- tgtNsceAddr

- targetServArea

EdgeSCNegotiationReq:

description: >

Represents the parameters to request Edge Service Continuity Negotiation.

type: object

properties:

notifUri:

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

valServId:

type: string

description: >

The identifier of the VAL service for which the negotiation request applies.

valUeIds:

type: array

items:

type: string

minItems: 1

description: >

The list of VAL UE IDs for which the Negotiation request applies.

netSliceId:

$ref: 'TS29435\_NSCE\_PolicyManagement.yaml#/components/schemas/NetSliceId'

servContReq:

$ref: 'TS29435\_NSCE\_InterPLMNContinuity.yaml#/components/schemas/ServContReq'

triggerAction:

$ref: 'TS29435\_NSCE\_PolicyManagement.yaml#/components/schemas/AppReqs'

appQoSReqs:

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

suppFeat:

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

required:

- valServId

- servContReq

- netSliceId

- notifUri

EdgeSCNegotiationNotif:

description: >

Represents an Edge Service Continuity Negotiation Notification.

type: object

properties:

valServId:

type: string

description: >

The identifier of the VAL service for which the negotiation request applies.

triggerAction:

$ref: 'TS29435\_NSCE\_PolicyManagement.yaml#/components/schemas/AppReqs'

required:

- valServId

- triggerAction

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

TriggerAction:

anyOf:

- type: string

enum:

- SLICE\_LIFECYCLE\_CHG

- type: string

description: >

This string provides forward-compatibility with future extensions to the enumeration

and is not used to encode content defined in the present version of this API.

description: |

Represents the trigger action.

Possible values are:

- SLICE\_LIFECYCLE\_CHG: Indicates that the trigger action is slice lifecycle change.

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