



Nnssf_NSSAIAvailability

This service updates the S-NSSAIs NF service consumer (for example, AMF) on a per TA basis on the NSSF and provides support to subscribe and notify any change in the status on a per TA basis of the SNSSAIs available per TA (unrestricted) and the restricted SNSSAIs per PLMN in that TA in the serving PLMN of the UE.

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OpenAPI

OpenAPI Version: 3.0.0

info

Version: '1.0.0'

Title: 'NSSF NSSAI Availability'

Description: 'NSSF NSSAI Availability Service'

externalDocs

Description: 3GPP TS 29.531 V15.2.0; 5G System; Network Slice Selection Services; Stage 3

URL: http://www.3gpp.org/ftp/Specs/archive/29_series/29.531/

security

- {}
- oAuth2Clientcredentials:
- nnssf-nssaiavailability

servers

URL: '{apiRoot}/nnssf-nssaiavailability/v1'

Variables:

API Root:

Default: https://example.com

Description: apiRoot as defined in subclause 4.4 of 3GPP TS 29.501

paths

/nssai-availability/{nflId}

put:

Summary: Updates/replaces the NSSF with the S-NSSAIs the NF service consumer (e.g AMF)supports per TA

Tags:

- NF Instance ID (Document)

Operation ID: NSSAIAvailabilityPut

Parameters:

- name: nflId

In: path

Description: Identifier of the NF service consumer instance

Required/Optional: true

Schema:

Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'

Request Body:

Description: Parameters to update/replace at the NSSF, the S-NSSAIs supported per TA

Required/Optional: true

Content:

Application/JSON:**Schema:****Reference:** '#/components/schemas/NssaiAvailabilityInfo'**Responses:**

'200' OK (Successful update of SNSSAI information per TA)

Content:**Application/JSON:****Schema:****Reference:** '#/components/schemas/AuthorizedNssaiAvailabilityInfo'

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'401': Reference 'TS29571_CommonData.yaml#/components/responses/401'

'403': Reference 'TS29571_CommonData.yaml#/components/responses/403'

'404': Reference 'TS29571_CommonData.yaml#/components/responses/404'

'411': Reference 'TS29571_CommonData.yaml#/components/responses/411'

'413': Reference 'TS29571_CommonData.yaml#/components/responses/413'

'415': Reference 'TS29571_CommonData.yaml#/components/responses/415'

'429': Reference 'TS29571_CommonData.yaml#/components/responses/429'

'500': Reference 'TS29571_CommonData.yaml#/components/responses/500'

'503': Reference 'TS29571_CommonData.yaml#/components/responses/503'

default:**Description:** Unexpected error**patch:****Summary:** Updates an already existing S-NSSAIs per TA provided by the NF service consumer (e.g AMF)**Tags:**

- NF Instance ID (Document)

Operation ID: NSSAIAvailabilityPatch**Parameters:**

- name: nfId

In: path**Description:** Identifier of the NF service consumer instance**Required/Optional:** true**Schema:****Type:** string**Request Body:**

Description: JSON Patch instructions to update at the NSSF, the S-NSSAIs supported per TA

Required/Optional: true

Content:

application/json-patch+json::

Schema:

Reference: '#/components/schemas/PatchDocument'

Responses:

'200': OK (Successful update of SNSSAI information per TA)

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/AuthorizedNssaiAvailabilityInfo'

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'401': Reference 'TS29571_CommonData.yaml#/components/responses/401'

'403': Reference 'TS29571_CommonData.yaml#/components/responses/403'

'404': Reference 'TS29571_CommonData.yaml#/components/responses/404'

'411': Reference 'TS29571_CommonData.yaml#/components/responses/411'

'413': Reference 'TS29571_CommonData.yaml#/components/responses/413'

'415': Reference 'TS29571_CommonData.yaml#/components/responses/415'

'429': Reference 'TS29571_CommonData.yaml#/components/responses/429'

'500': Reference 'TS29571_CommonData.yaml#/components/responses/500'

'503': Reference 'TS29571_CommonData.yaml#/components/responses/503'

default:

Description: Unexpected error

delete:

Summary: Deletes an already existing S-NSSAIs per TA provided by the NF service consumer (e.g AMF)

Tags:

- NF Instance ID (Document)

Operation ID: NSSAIAvailabilityDelete

Parameters:

- name: nfd

In: path

Description: Identifier of the NF service consumer instance

Required/Optional: true

Schema:**Type:** string**Responses:**

'204' No Content (Successful deletion of SNSSAI information per TA)

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'401': Reference 'TS29571_CommonData.yaml#/components/responses/401'

'404': Reference 'TS29571_CommonData.yaml#/components/responses/404'

'429': Reference 'TS29571_CommonData.yaml#/components/responses/429'

'500': Reference 'TS29571_CommonData.yaml#/components/responses/500'

'503': Reference 'TS29571_CommonData.yaml#/components/responses/503'

default:**Description:** Unexpected error

/nssai-availability/subscriptions

Method: Post**Summary:** Creates subscriptions for notification about updates to NSSAI availability information**Tags:**

- Subscriptions (Collection)

Operation ID: NSSAIAvailabilityPost**Request Body:****Description:** Subscription for notification about updates to NSSAI availability information**Required/Optional:** true**Content:****Application/JSON:****Schema:****Reference:** '#/components/schemas/NssfEventSubscriptionCreateData'**Callbacks:****nssaiAvailabilityNotification:**

'{request.body#/nfNssaiAvailabilityUri}':

Method: Post**Request Body:** # contents of the callback message**Required/Optional:** true**Content:****Application/JSON:**

Schema:**Reference:** '#/components/schemas/NssfEventNotification'**Responses:****'204'** No Content (successful notification)**'400'**: Reference 'TS29571_CommonData.yaml#/components/responses/400'**'411'**: Reference 'TS29571_CommonData.yaml#/components/responses/411'**'413'**: Reference 'TS29571_CommonData.yaml#/components/responses/413'**'415'**: Reference 'TS29571_CommonData.yaml#/components/responses/415'**'429'**: Reference 'TS29571_CommonData.yaml#/components/responses/429'**'500'**: Reference 'TS29571_CommonData.yaml#/components/responses/500'**'503'**: Reference 'TS29571_CommonData.yaml#/components/responses/503'**default:****Description:** Unexpected error**Responses:****'201'** Created (Successful creation of subscription for notification)**Content:****Application/JSON:****Schema:****Reference:** '#/components/schemas/NssfEventSubscriptionCreatedData'**Headers:****Location:****Description:** 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/nssf-nssaiavailability/v1/nssai-availability/subscriptions/{subscriptionId}'**Required/Optional:** true**Schema:****Type:** string**'400'**: Reference 'TS29571_CommonData.yaml#/components/responses/400'**'401'**: Reference 'TS29571_CommonData.yaml#/components/responses/401'**'403'**: Reference 'TS29571_CommonData.yaml#/components/responses/403'**'404'**: Reference 'TS29571_CommonData.yaml#/components/responses/404'**'411'**: Reference 'TS29571_CommonData.yaml#/components/responses/411'**'413'**: Reference 'TS29571_CommonData.yaml#/components/responses/413'**'415'**: Reference 'TS29571_CommonData.yaml#/components/responses/415'**'429'**: Reference 'TS29571_CommonData.yaml#/components/responses/429'**'500'**: Reference 'TS29571_CommonData.yaml#/components/responses/500'

'503': Reference 'TS29571_CommonData.yaml#/components/responses/503'

default:

Description: Unexpected error

/nnsai-availability/subscriptions/{subscriptionId}

delete:

Summary: Deletes an already existing NSSAI availability notification subscription

Tags:

- Subscription ID (Document)

Operation ID: NSSAIAvailabilityUnsubscribe

Parameters:

- name: subscriptionId

In: path

Description: Identifier of the subscription for notification

Required/Optional: true

Schema:

Type: string

Responses:

'204': No Content (Successful deletion of subscription for NSSAI Availability notification)

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'401': Reference 'TS29571_CommonData.yaml#/components/responses/401'

'404': Reference 'TS29571_CommonData.yaml#/components/responses/404'

'429': Reference 'TS29571_CommonData.yaml#/components/responses/429'

'500': Reference 'TS29571_CommonData.yaml#/components/responses/500'

'503': Reference 'TS29571_CommonData.yaml#/components/responses/503'

default:

Description: Unexpected error

components

securitySchemes

oAuth2ClientCredentials

Type: oauth2

Flows:**clientCredentials:****tokenUrl:** '{nrfApiRoot}/oauth2/token'**scopes:****nnssf-nssaiavailability:** Access to the Nnssf_NSSAIAvailability API

schemas

NssaiAvailabilityInfo

Type: object**Required:**

- supportedNssaiAvailabilityData

Properties:**supportedNssaiAvailabilityData:****Type:** array**Items:****Reference:** '#/components/schemas/SupportedNssaiAvailabilityData'**minItems:** 1**supportedFeatures:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'

SupportedNssaiAvailabilityData

Type: object**Required:**

- tai

- supportedSnsaiList

Properties:**tai:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Tai'**supportedSnsaiList:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Snsai'**minItems:** 1

AuthorizedNssaiAvailabilityData

Type: object

Required:

- tai

- supportedSnssaiList

Properties:

tai:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Tai'

supportedSnssaiList:

Type: array

Items:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

restrictedSnssaiList:

Type: array

Items:

Reference: '#/components/schemas/RestrictedSnssai'

minItems: 1

RestrictedSnssai

Type: object

Required:

- homePlmnId

- sNssaiList

Properties:

homePlmnId:

Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'

sNssaiList:

Type: array

Items:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'

minItems: 1

AuthorizedNssaiAvailabilityInfo

Type: object

Required:

- authorizedNssaiAvailabilityData

Properties:**authorizedNssaiAvailabilityData:****Type:** array**Items:****Reference:** '#/components/schemas/AuthorizedNssaiAvailabilityData'**minItems:** 1**supportedFeatures:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'**NssfEventSubscriptionCreateData****Type:** object**Required:**

- nfNssaiAvailabilityUri
- taiList
- event

Properties:**nfNssaiAvailabilityUri:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Uri'**taiList:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Tai'**minItems:** 1**event:****Reference:** '#/components/schemas/NssfEventType'**expiry:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/DateTime'**NssfEventSubscriptionCreatedData****Type:** object**Required:**

- subscriptionId

Properties:

subscriptionId:**Type:** string**expiry:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/DateTime'**authorizedNssaiAvailabilityData:****Type:** array**Items:****Reference:** '#/components/schemas/AuthorizedNssaiAvailabilityData'**minItems:** 1

NssfEventNotification

Type: object**Required:**

- subscriptionId
- authorizedNssaiAvailabilityData

Properties:**subscriptionId:****Type:** string**authorizedNssaiAvailabilityData:****Type:** array**Items:****Reference:** '#/components/schemas/AuthorizedNssaiAvailabilityData'**minItems:** 1

NssfEventType

anyOf:

- type: string

enum:

- SNSSAI_STATUS_CHANGE_REPORT
- type: string

PatchDocument

Type: array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/PatchItem'**minItems:** 1

