



NSSAIAvailability

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OpenAPI

OpenAPI Version: 3.0.0

Info

Version: '1.0.0'

Title: 'NSSF NSSAI Availability'

Description: 'NSSF NSSAI Availability Service'

Servers

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

Variables:

API Root:

Default: <https://example.com>

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

Security

- {}

- oAuth2Clientcredentials:
- nssf-nssaiavailability

Paths

/nssai-availability/{nfId}

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:** nfId

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':

Description: 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':
Description: 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'

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    '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: nfId
      In: path
      Description: Identifier of the NF service consumer instance
      Required/Optional: true
      Schema:
        Type: string

  Responses:
    '204':
      Description: 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

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/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':

Description: 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':

Description: 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}'

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    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

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/nssai-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':

Description: 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'

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'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

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securitySchemes:
  oAuth2ClientCredentials:
    Type: oauth2
    Flows:
      clientCredentials:
        tokenUrl: '{nrfApiRoot}/oauth2/token'
        scopes:
          nssf-nssaiavailability: Access to the Nssf_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
      - supportedSnssaiList
    Properties:
      tai:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Tai'
      supportedSnssaiList:
        Type: array
        Items:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
        minItems: 1
  AuthorizedNssaiAvailabilityData:
    Type: object

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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:

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      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

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External Docs

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/

