



TS29521_Nbsf_Management

The Nbsf_Management service is used for the BSF to provide a PDU session binding functionality, which ensures that an AF request for a certain PDU session reaches the relevant PCF holding the PDU session information.

- Allows NF service consumers to register, update, and remove the binding information.
- Allows NF service consumers to retrieve the binding information.
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OpenAPI

OpenAPI Version: 3.0.0

info

Description: Binding Support Management Service API

Version: "1.0.0"

Title: Nbsf_Management

externalDocs

Description: 3GPP TS 29.521 V15.2.0; 5G System; Binding Support Management Service.

URL: 'http://www.3gpp.org/ftp/Specs/archive/29_series/29.521/'

security

- {}
- oAuth2ClientCredentials:
- nbsf-management

servers

URL: '{apiRoot}/nbsf-management/v1'

Variables:

API Root:

Default: https://example.com

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

paths

/pcfBindings

Method: Post

Request Body:

Required/Optional: true

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/PcfBinding'

Responses:

'201' The creation of an individual PCF session binding.

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/PcfBinding'

Headers:

Location:

Description: 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/nbsf-management/v1/pcfBindings/{bindingId}'

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

get:

Parameters:

- name: ipv4Addr

In: query

Description: The IPv4 Address of the served UE.

Required/Optional: false

Schema:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'

- name: ipv6Prefix

In: query

Description: The IPv6 Address Prefix of the served UE.

Required/Optional: false

Schema:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'

- name: macAddr48

In: query

Description: The MAC Address of the served UE.

Required/Optional: false

Schema:

Reference: 'TS29571_CommonData.yaml#/components/schemas/MacAddr48'

- name: dnn

In: query

Description: DNN.

Required/Optional: false

Schema:

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

- name: supi

In: query

Description: Subscription Permanent Identifier.

Required/Optional: false

Schema:

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

- name: gpsi

In: query

Description: Generic Public Subscription Identifier

Required/Optional: false

Schema:

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

- name: snssai

In: query

Description: The identification of slice.

Required/Optional: false

Schema:

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

- name: ipDomain

In: query

Description: The IPv4 address domain identifier.

Required/Optional: false

Schema:

Type: string

Responses:

'200' The individual PCF session binding session binding information resource matching the query parameter(s) is returned.

Content:

Application/JSON:

Schema:**Reference:** '#/components/schemas/PcfBinding'

'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'

'406': Reference 'TS29571_CommonData.yaml#/components/responses/406'

'414': Reference 'TS29571_CommonData.yaml#/components/responses/414'

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

/pcfBindings/{bindingId}

delete:**Parameters:**

- name: bindingId

In: path**Description:** Represents the individual PCF Session Binding.**Required/Optional:** true**Schema:****Type:** string**Responses:**

'204' No Content. The Individual PCF session binding information resource is deleted.

'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'

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

components

securitySchemes

oAuth2ClientCredentials

Type: oauth2

Flows:

clientCredentials:

tokenUrl: '{nrfApiRoot}/oauth2/token'

scopes:

nbsf-management: Access to the Nbsf_Management API

schemas

PcfBinding

Type: object

Properties:

supi:

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

gpsi:

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

ipv4Addr:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'

ipv6Prefix:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'

ipDomain:

Type: string

macAddr48:

Reference: 'TS29571_CommonData.yaml#/components/schemas/MacAddr48'

dnn:

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

pcfFqdn:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/Fqdn'

pcfIpEndPoints:

Type: array

Items:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/IpEndPoint'

minItems: 1

Description: IP end points of the PCF or the IP end points of the PCF hosting the Npcf_PolicyAuthorization service. At least one of pcfFqdn or pcfIpEndPoints shall be included if the PCF supports N5 interface. If the pcfIpEndPoints is provided at the PCF level, the transport and port in the pcfIpEndPoints are not required.

pcfDiamHost:

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

pcfDiamRealm:

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

snssai:

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

Required:

- dnn
- snssai

oneOf:

- anyOf:
- required: [ipv4Addr]
- required: [ipv6Prefix]
- required: [macAddr48]

