



# TS29521\_Nbsf\_Management

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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]

