



Nsmf_EventExposure

The Session Management Event Exposure Service (Nsmf_EventExposure) is part of the Nsmf service-based interface exhibited by the Session Management Function (SMF).

Reference: 3GPP TS 29.508 version 15.3.0

- [OpenAPI, on page 1](#)
- [info, on page 1](#)
- [externalDocs, on page 1](#)
- [security, on page 1](#)
- [servers, on page 2](#)
- [paths, on page 2](#)
- [components, on page 6](#)

OpenAPI

OpenAPI Version: 3.0.0

info

Description: Session Management Event Exposure Service API

Version: "1.0.0"

Title: Nsmf_EventExposure

externalDocs

Description: 3GPP TS 29.508 V15.2.0; 5G System; Session Management Event Exposure Service.

URL: http://www.3gpp.org/ftp/Specs/archive/29_series/29.508/

security

- {}

- oAuth2ClientCredentials:
- nsmf-event-exposure

servers

URL: '{apiRoot}/nsmf_event-exposure/v1'

Variables:

API Root:

Default: https://example.com

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

paths

/subscriptions

Method: Post

Request Body:

Required/Optional: true

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/NsmfEventExposure'

Responses:

'201' Success

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/NsmfEventExposure'

'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'

Callbacks:

myNotification:

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

Method: Post

Request Body:

Required/Optional: true

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/NsmfEventExposureNotification'

Responses:

'204' No Content, Notification was succesfull
 '307' temporary redirect
 '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'

/subscriptions/{subId}

get:

Parameters:

- name: subId

In: path

Description: Event Subscription ID

Required/Optional: true

Schema:

Type: string

Responses:

'200' OK. Resource representation is returned

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/NsmfEventExposure'

Headers:

Location:

Description: 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/npcf-event-exposure/v1/subscriptions/{subId}'

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'

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

'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'

put:

Request Body:

Required/Optional: true

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/NsmfEventExposure'

Parameters:

- name: subId

In: path

Description: Event Subscription ID

Required/Optional: true

Schema:

Type: string

Responses:

'200' OK. Resource was successfully modified and representation is returned

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/NsmfEventExposure'

'204' No Content. Resource was successfully modified

'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'

delete:

Parameters:

- name: subId

In: path

Description: Event Subscription ID

Required/Optional: true

Schema:

Type: string

Responses:

'204' No Content. Resource was successfully 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:
 nsmf_event-exposure: Access to the Nsmf_EventExposure API

schemas

NsmfEventExposure

Type: object
Properties:
supi:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
gpsi:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
anyUeInd:
Type: boolean
Description: Any UE indication. This IE shall be present if the event subscription is applicable to any UE. Default value "FALSE" is used, if not present.
groupId:
Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'

pduSeId:**Reference:** 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'**subId:****Reference:** '#/components/schemas/SubId'**notifId:****Type:** string**Description:** Notification Correlation ID assigned by the NF service consumer.**notifUri:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Uri'**altNotifIpv4Addrs:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'**Description:** Alternate or backup IPv4 Address(es) where to send Notifications.**minItems:** 1**altNotifIpv6Addrs:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'**Description:** Alternate or backup IPv6 Address(es) where to send Notifications.**minItems:** 1**eventSubs:****Type:** array**Items:****Reference:** '#/components/schemas/EventSubscription'**minItems:** 1**Description:** Subscribed events**ImmeRep:****Type:** boolean**notifMethod:****Reference:** '#/components/schemas/NotificationMethod'**maxReportNbr:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/UInteger'**expiry:**

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

repPeriod:

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

guami:

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

serviveName:

Type: string

Description: If the NF service consumer is an AMF, it should provide the name of a service produced by the AMF that makes use of notifications about subscribed events.

supportedFeatures:

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

Required:

- notifId
- notifUri
- eventSubs

NsmfEventExposureNotification

Type: object

Properties:

notifId:

Type: string

Description: Notification correlation ID

eventNotifs:

Type: array

Items:

Reference: '#/components/schemas/EventNotification'

minItems: 1

Description: Notifications about Individual Events

Required:

- notifId
- eventNotifs

EventSubscription

Type: object

Properties:

event:

Reference: '#/components/schemas/SmfEvent'

dnaiChgType:

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

Required:

- event

EventNotification

Type: object

Properties:

event:

Reference: '#/components/schemas/SmfEvent'

timeStamp:

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

supi:

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

gpsi:

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

sourceDnai:

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

targetDnai:

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

dnaiChgType:

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

sourceUeIpv4Addr:

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

sourceUeIpv6Prefix:

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

targetUeIpv4Addr:

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

targetUeIpv6Prefix:

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

sourceTraRouting:

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

targetTraRouting:

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

ueMac:**Reference:** 'TS29571_CommonData.yaml#/components/schemas/MacAddr48'**adIpv4Addr:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'**adIpv6Prefix:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'**reIpv4Addr:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'**reIpv6Prefix:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'**plmnId:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/PlmnId'**accType:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/AccessType'**pduSeId:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'**Required:**

- event
- timeStamp

SubId

Type: string**format:** SubId

Description: Identifies an Individual SMF Notification Subscription. To enable that the value is used as part of a URI, the string shall only contain characters allowed according to the "lower-with-hyphen" naming convention defined in 3GPP TS 29.501 [2]. In an OpenAPI [10] schema, the format shall be designated as "SubId".

SmfEvent

anyOf:

- type: string

This string provides forward-compatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API.

Possible values are

- AC_TY_CH: Access Type Change

- UP_PATH_CH: UP Path Change
- PDU_SES_REL: PDU Session Release
- PLMN_CH: PLMN Change
- UE_IP_CH: UE IP address change

NotificationMethod

anyOf:

- type: string

This string provides forward-compatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API.

Possible values are

- PERIODIC
- ONE_TIME
- ON_EVENT_DETECTION

