



# Npcf\_EventExposure

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The Policy Event Exposure Service is provided by the Policy Control Function (PCF).

- Allows NF service consumers to subscribe, modify, and unsubscribe for policy control events.
- Notifies NF service consumers with a corresponding subscription about observed events on the PCF.
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## OpenAPI

OpenAPI Version: 3.0.0

## info

**Description:** Policy Control Event Exposure Service API

**Version:** "1.0.0"

**Title:** Npcf\_EventExposure

## externalDocs

**Description:** 3GPP TS 29.523 V15.0.0; 5G System; Policy Control Event Exposure Service; Stage 3.

**URL:** [http://www.3gpp.org/ftp/Specs/archive/29\\_series/29.523/](http://www.3gpp.org/ftp/Specs/archive/29_series/29.523/)

## security

- {}
- oAuth2ClientCredentials:
- npcf-eventexposure

## servers

**URL:** '{apiRoot}/npcf-eventexposure/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/PcEventExposureSubsc'

**Responses:**

'201' Success

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** '#/components/schemas/PcEventExposureSubsc'

**Headers:**

**Location:**

**Description:** 'Contains the URI of the created individual policy control events subscription resource, according to the structure: {apiRoot}/npcf-eventexposure/v1/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:** Reference 'TS29571\_CommonData.yaml#/components/responses/default'

**Callbacks:**

**PcEventNotification:**

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

**Method:** Post

**Request Body:**

**Required/Optional:** true

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** '#/components/schemas/PcEventExposureNotif'

**Responses:**

'204' No Content, Notification was successful

'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/{subscriptionId}

**get**:

**Parameters**:

- name: subscriptionId

**In**: path

**Description**: Policy Control Event Subscription ID

**Required/Optional**: true

**Schema**:

**Type**: string

**Responses**:

'200' OK. Resource representation is returned

**Content**:

**Application/JSON**:

**Schema**:

**Reference**: '#/components/schemas/PcEventExposureSubsc'

'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/PcEventExposureSubsc'

**Parameters:**

- name: subscriptionId

**In:** path

**Description:** Policy Control 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/PcEventExposureSubsc'

'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: subscriptionId

**In:** path

**Description:** Policy Control 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**:

**npcf-eventexposure**: Access to the Npcf\_EventExposure API.

### schemas

#### PcEventExposureNotif

**Type**: object

**Properties**:

**notifId**:

**Type**: string

**eventNotifs**:

**Type**: array

**Items**:

**Reference**: '#/components/schemas/PcEventNotification'

**minItems:** 1

**Required:**

- notifId

- eventNotifs

## PcEventExposureSubsc

**Type:** object

**Properties:**

**eventSubscs:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/PcEvent'

**minItems:** 1

**eventsRepInfo:**

**Reference:** '#/components/schemas/ReportingInformation'

**groupId:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

**filterDnns:**

**Type:** array

**Items:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

**minItems:** 1

**filterSnssais:**

**Type:** array

**Items:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

**minItems:** 1

**filterServices:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/ServiceIdentification'

**minItems:** 1

**notifUri:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Link'

**notifId:**

**Type:** string

**suppFeat:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

**Required:**

- eventSubs

- notifId

- notifUri

## ReportingInformation

**Type:** object

**Properties:**

**immRep:**

**Type:** boolean

**notifMethod:**

**Reference:** 'TS29508\_Nsmf\_EventExposure.yaml#/components/schemas/NotificationMethod'

**maxReportNbr:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

**monDur:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**repPeriod:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'

## ServiceIdentification

**Type:** object

**Properties:**

**servEthFlows:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/EthernetFlowInfo'

**minItems:** 1

**servIpFlows:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/IpFlowInfo'

**minItems:** 1



**afAppId:**

**Reference:** 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/AfAppId'

## EthernetFlowInfo

**Type:** object

**Properties:**

**ethFlows:**

**Type:** array

**Items:**

**Reference:** 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/EthFlowDescription'

**minItems:** 1

**maxItems:** 2

**flowNumber:**

**Type:** integer

**Required:**

- flowNumber

## IpFlowInfo

**Type:** object

**Properties:**

**ipFlows:**

**Type:** array

**Items:**

**Reference:** 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/FlowDescription'

**minItems:** 1

**maxItems:** 2

**flowNumber:**

**Type:** integer

**Required:**

- flowNumber

## PcEventNotification

**Type:** object

**Properties:**

**event:**

**Reference:** '#/components/schemas/PcEvent'

**accType:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/AccessType'

**ratType:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/RatType'

**plmnId:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

**timeStamp:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**pduSessionInfo:**

**Reference:** '#/components/schemas/PduSessionInformation'

**repServices:**

**Reference:** '#/components/schemas/ServiceIdentification'

**Required:**

- event
- timeStamp

## PduSessionInformation

**Type:** object

**Properties:**

**snsai:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Snsai'

**dnn:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

**ueIpv4:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

**ueIpv6:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

**ipDomain:**

**Type:** string

**ueMac:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

**Required:**

- snsai
- dnn

# Simple data types and Enumerations

## PcEvent

**anyOf:**

- type: string

