



UEPolicyControl

- [OpenAPI, on page 1](#)
- [Info, on page 1](#)
- [Servers, on page 1](#)
- [Security, on page 1](#)
- [Paths, on page 2](#)
- [Components, on page 6](#)

OpenAPI

OpenAPI Version: 3.0.0

Info

Description: UE Policy Control Service API
Version: "1.0.0"
Title: Npcf_UEPolicyControl

Servers

URL: '{apiRoot}/npcf-ue-policy-control/v1'

Variables:

API Root:

Default: https://example.com

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

Security

- {}

```
- oAuth2ClientCredentials:
  - npcfc-ue-policy-control
```

Paths

/policies

```
Method: Post
Request Body:
  Required/Optional: true
  Content:
    Application/JSON:
      Schema:
        Reference: '#/components/schemas/PolicyAssociationRequest'

Responses:
  '201':
    Description: Created
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/PolicyAssociation'
    Headers:
      Location:
        description: 'Contains the URI of the newly created resource,
according to the structure: {apiRoot}/npcfc-ue-policy-control/v1/policies/{polAssoId}'

      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:
    policyUpdateNotification:
      '{$request.body#/notificationUri}/update':
        Method: Post
        Request Body:
          Required/Optional: true
          Content:
            Application/JSON:
              Schema:
                Reference: '#/components/schemas/PolicyUpdate'

  Responses:
    '204':
      Description: No Content, Notification was succesfull
    '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'
  policyAssocitionTerminationRequestNotification:
    '{$request.body#/notificationUri}/terminate':
      Method: Post
      Request Body:
        Required/Optional: true
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/TerminationNotification'

  Responses:
    '204':
      Description: No Content, Notification was succesfull
```

```

'307':
  Description: 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'

```

/policies/{polAssold}

get:

Parameters:

- **Name:** polAssoId
- In:** path
- Description:** Identifier of a policy association
- Required/Optional:** true
- Schema:**
 - Type:** string

Responses:

```

'200':
  Description: OK. Resource representation is returned
  Content:
    Application/JSON:
      Schema:
        Reference: '#/components/schemas/PolicyAssociation'
'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'
```

delete:

Parameters:

```
- Name: polAssoId
  In: path
  Description: Identifier of a policy association
  Required/Optional: true
  Schema:
    Type: string
```

Responses:

```
'204':
  Description: No Content. Resource was succesfully 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'
```

/policies/{polAssold}/update

Method: Post

Request Body:

Required/Optional: true

Content:

Application/JSON:

Schema:

```

    Reference: '#/components/schemas/PolicyAssociationUpdateRequest'

Parameters:
  - Name: polAssoId
    In: path
    Description: Identifier of a policy association
    Required/Optional: true
    Schema:
      Type: string

Responses:
  '200':
    Description: OK. Updated policies are returned
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/PolicyUpdate'
  '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'

```

Components

```

securitySchemes:
  oAuth2ClientCredentials:
    Type: oauth2
    Flows:
      clientCredentials:
        tokenUrl: '{nrfApiRoot}/oauth2/token'
        scopes:

```

npcf-ue-policy-control: Access to the Npcf_AMPolicyControl API

schemas:

PolicyAssociation:

Type: object

Properties:

request:

Reference: '#/components/schemas/PolicyAssociationRequest'

uePolicy:

Reference: '#/components/schemas/UePolicy'

triggers:

Type: array

Items:

Reference: '#/components/schemas/RequestTrigger'

minItems: 1

Description: Request Triggers that the PCF subscribes. Only values "LOC_CH" and "PRA_CH" are permitted.

pras:

Type: object

additionalProperties:

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

minProperties: 1

suppFeat:

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

Required:

- suppFeat

PolicyAssociationRequest:

Type: object

Properties:

notificationUri:

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

altNotifIpv4Adrrs:

Type: array

Items:

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

minItems: 1

Description: Alternate or backup IPv4 Address(es) where to send Notifications.

altNotifIpv6Adrrs:

Type: array

Items:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'

minItems: 1

Description: Alternate or backup IPv6 Address(es) where to send Notifications.

supi:

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

gpsi:

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

accessType:

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

pei:

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

userLoc:

```

    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
timeZone:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/TimeZone'
servingPlmn:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/NetworkId'
ratType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
groupId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'
hPcfId:
    Type: string
    Description: H-PCF Identifier. Shall be provided when available.
uePolReq:
    Reference: '#/components/schemas/UePolicyRequest'
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 information received within the
Npcf_UEPolicyControl_UpdateNotify service operation.
suppFeat:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
Required:
- notificationUri
- suppFeat
PolicyAssociationUpdateRequest:
Type: object
Properties:
notificationUri:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
altNotifIpv4Addrs:
    Type: array
    Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
    minItems: 1
    Description: Alternate or backup IPv4 Address(es) where to send Notifications.
altNotifIpv6Addrs:
    Type: array
    Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'
    minItems: 1
    Description: Alternate or backup IPv6 Address(es) where to send Notifications.
triggers:
    Type: array
    Items:
        Reference: '#/components/schemas/RequestTrigger'
    minItems: 1
    Description: Request Triggers that the NF service consumer observes.
praStatuses:
    Type: object
additionalProperties:

```



```

        Reference: 'TS29571_CommonData.yaml#/components/schemas/PresenceInfo'
        Description: Map of PRA status information.
        minProperties: 1
    userLoc:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
    uePolDelResult:
        Reference: '#/components/schemas/UePolicyDeliveryResult'
PolicyUpdate:
    Type: object
    Properties:
        resourceUri:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
        uePolicy:
            Reference: '#/components/schemas/UePolicy'
        triggers:
            Type: array
            Items:
                Reference: '#/components/schemas/RequestTrigger'
            minItems: 1
            nullable: true
            Description: Request Triggers that the PCF subscribes. Only values "LOC_CH" and
"PRA_CH" are permitted.
        pras:
            Type: object
            additionalProperties:
                Reference: 'TS29571_CommonData.yaml#/components/schemas/PresenceInfo'
            Description: Map of PRA information.
            minProperties: 1
            nullable: true
    Required:
    - resourceUri
TerminationNotification:
    Type: object
    Properties:
        resourceUri:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
        cause:
            Reference: '#/components/schemas/PolicyAssociationReleaseCause'
    Required:
    - resourceUri
    - cause
UePolicy:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
UePolicyDeliveryResult:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
UePolicyRequest:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
RequestTrigger:
    anyOf:
    - type: string
    enum:
    - LOC_CH
    - PRA_CH

```

- UE_POLICY
- type: string

Description:

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.

Description:

Possible values are

- LOC_CH: Location change (tracking area). The tracking area of the UE has changed.
- PRA_CH: Change of UE presence in PRA. The UE is entering/leaving a Presence Reporting Area.
- UE_POLICY: A MANAGE UE POLICY COMPLETE message or a MANAGE UE POLICY COMMAND REJECT message, as defined in Annex D.5 of 3GPP TS 24.501, has been received by the AMF and is being forwarded.

PolicyAssociationReleaseCause:**anyOf:**

- type: string

enum:

- UNSPECIFIED
- UE_SUBSCRIPTION
- INSUFFICIENT_RES
- type: string

Description:

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.

Description:

Possible values are

- UNSPECIFIED: This value is used for unspecified reasons.
- UE_SUBSCRIPTION: This value is used to indicate that the session needs to be terminated because the subscription of UE has changed (e.g. was removed).
- INSUFFICIENT_RES: This value is used to indicate that the server is overloaded and needs to abort the session.