



# UEPolicyControl

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- [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.