



Npcf AMPolicyControl

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OpenAPI

OpenAPI Version: 3.0.0

Info

Description: Access and Mobility Policy Control Service API

Version: "1.0.0"

Title: Npcf_AMPolicyControl

Servers

URL: '{apiRoot}/npcf-am-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:
  - npcf-am-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}/npcf-am-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
  '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'
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-am-policy-control: Access to the Npcf_AMPolicyControl API

```

schemas:

PolicyAssociation:

Type: object

Properties:

request:

Reference: '#/components/schemas/PolicyAssociationRequest'

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.

servAreaRes:

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

rfsp:

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

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'

altNotifIpv4Adrs:

Type: array

Items:

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

minItems: 1

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

altNotifIpv6Adrs:

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'
groupIds:
    Type: array
    Items:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'
    minItems: 1
servAreaRes:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/ServiceAreaRestriction'
rfsp:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RfspIndex'
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_AMPolicyControl_UpdateNotify service operation.
traceReq:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
suppFeat:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
Required:
    - notificationUri
    - suppFeat
    - supi
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.
servAreaRes:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/ServiceAreaRestriction'
rfsp:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/RfspIndex'
praStatuses:
  Type: object
  additionalProperties:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PresenceInfo'
  minProperties: 1
  Description: Map of PRA status information.
userLoc:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
traceReq:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
PolicyUpdate:
  Type: object
  Properties:
    resourceUri:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
    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.
    servAreaRes:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/ServiceAreaRestriction'
    rfsp:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/RfspIndex'
    pras:
      Type: object
      additionalProperties:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/PresenceInfoRm'
      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

RequestTrigger:

anyOf:

- type: string
 - enum:**
 - LOC_CH
 - PRA_CH
 - SERV_AREA_CH
 - RFSP_CH
- 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.
 - SERV_AREA_CH: Service Area Restriction change. The UDM notifies the AMF that the subscribed service area restriction information has changed.
 - RFSP_CH: RFSP index change. The UDM notifies the AMF that the subscribed RFSP index has changed.

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.