Nchf_SpendingLimitControl

The Nchf_SpendingLimitControl service enables the NF service consumer to retrieve policy counter status information per UE from the CHF by subscribing to spending limit reporting (that is notifications of policy counter status changes).

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OpenAPI

OpenAPI Version: 3.0.0

Info

```
Description: Spending Limit Control Service API
Version: "1.0.0"
Title: Nchf_SpendingLimitControl
```

Servers

```
URL: 'http://{apiRoot}/nchf-spendinglimitcontrol/v1'
Variables:
  API Root:
    Default: https://example.com
    Description: apiRoot as defined in subclause subclause 4.4 of 3GPP TS 29.501
```

Security

```
- {}
- oAuth2ClientCredentials:
  - nchf-spendinglimitcontrol
```

Paths

/subscriptions

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

    Responses:
      '201':
        Description: Success
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/SpendingLimitStatus'
        Headers:
          Location:
          description: 'Contains the URI of the created individual spending
 limit resource, according to the structure:
{apiRoot}/nchf-spendinglimitcontrol/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:
    statusNotification:
      '{$request.body#/notifUri}/notify':
        Method: Post
          Request Body:
            Required/Optional: true
            Content:
              Application/JSON:
                Schema:
                  Reference: '#/components/schemas/SpendingLimitStatus'

          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'
    subscriptionTermination:
      '{$request.body#/notifUri}/terminate':
        Method: Post
          Request Body:
            Required/Optional: true
            Content:
              Application/JSON:
                Schema:
```

```
            Reference: '#/components/schemas/SubscriptionTerminationInfo'

        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'
```

/subscriptions/{subscriptionId}

```
Parameters:
  - in: path
    name: subscriptionId
    Description: Identifies an individual spending limit retrieval subscription.
    Required/Optional: true
    Schema:
      Type: string
put:
  Request Body:
    Required/Optional: true
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/SpendingLimitContext'

  Responses:
    '200':
     Description: OK. Resource was succesfully modified and representation is returned

     Content:
```

```
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/SpendingLimitStatus'
      '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:

    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'
```

Components

```
securitySchemes:
  oAuth2ClientCredentials:
    Type: oauth2
    Flows:
      clientCredentials:
        tokenUrl: '{nrfApiRoot}/oauth2/token'
        scopes:
          nchf-spendinglimitcontrol: Access to the Nchf_SpendingLimitControl API

schemas:
  SpendingLimitContext:
    Type: object
    Properties:
      supi:
       Description: The Subscription Permanent Identifier (Supi) shall be present within
 the initial spending limit retrieval procedure (creation of a new individual subscription).

        Reference: './TS29571_CommonData.yaml#/components/schemas/Supi'
      gpsi:
        Description: The Generic Public Subscription Identifier (Gpsi) may be present
within the initial spending limit retrieval procedure (creation of a new individual
subscription).
        Reference: './TS29571_CommonData.yaml#/components/schemas/Gpsi'
      policyCounterIds:
        Type: array
        Items:
          Reference: '#/components/schemas/PolicyCounterId'
        minItems: 1
        Description: This is a list of policy counter identifier(s), which identifies
policy counters maintained per subscriber within the CHF.
      notifUri:
        Description: This attribute identifies the recipient of spending limit
notifications sent to the NF service consumer by the CHF. The notifUri shall be present
within the initial spending limit retrieval procedure (creation of a new individual
subscription). It may be present within the intermediate spending limit retrieval procedure
 (modification of an existing subscription).
        Reference: './TS29571_CommonData.yaml#/components/schemas/Uri'
      supportedFeatures:
        Description: The list of supported features as described in subclause 5.8 shall
 be supplied by the NF service consumer in the POST request that request the creation of a
 spending limit report resource.
        Reference: './TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
  SpendingLimitStatus:
    Type: object
    Properties:
      supi:
       Description: The Subscription Permanent Identifier (Supi) shall be present within
 the callback notify service operation (notification of the status of subscribed policy
counters).
        Reference: './TS29571_CommonData.yaml#/components/schemas/Supi'
```

```
      statusInfos:
        Type: object
        additionalProperties:
          Reference: '#/components/schemas/PolicyCounterInfo'
        minProperties: 1
        Description: Status of the requested policy counters. The key of the map is the
attribute "policyCounterId".
      supportedFeatures:
       Description: If the supportedFeatures is included in the request by the NF service
consumer, it shall be supplied in the reply of the corresponding request by the CHF.
        Reference: './TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    Required:
      - statusInfos
  PolicyCounterInfo:
    Type: object
    Properties:
      policyCounterId:
        Reference: '#/components/schemas/PolicyCounterId'
      currentStatus:
        Type: string
       Description: Identifies the policy counter status applicable for a specific policy
counter identified by the policyCounterId. The values (e.g. valid, invalid or any other
status) are not specified. The interpretation and actions related to the defined values are
out of scope of 3GPP.
      penPolCounterStatuses:
        Type: array
        Items:
          Reference: '#/components/schemas/PendingPolicyCounterStatus'
        minItems: 1
        Description: Provides the pending policy counter status.
    Required:
      - policyCounterId
      - currentStatus
  PendingPolicyCounterStatus:
    Type: object
    Properties:
      policyCounterStatus:
        Type: string
       Description: Identifies the policy counter status applicable for a specific policy
counter identified by the policyCounterId. The values (e.g. valid, invalid or any other
status) are not specified. The interpretation and actions related to the defined values are
out of scope of 3GPP.
      activationTime:
        Description: Indicates the activation times per required policy counter.
        Reference: './TS29571_CommonData.yaml#/components/schemas/DateTime'
    Required:
      - policyCounterStatus
      - activationTime
  PolicyCounterId:
    Type: string
    Description: Identifies a policy counter.
  SubscriptionTerminationInfo:
    Type: object
    Properties:
```

```
    supi:
      Reference: './TS29571_CommonData.yaml#/components/schemas/Supi'
    termCause:
      Reference: '#/components/schemas/TerminationCause'
  Required:
    - supi
TerminationCause:
  Type: string
  enum:
    - REMOVED_SUBSCRIBER
```

External Docs

```
Description: 3GPP TS 29.594 V15.2.0; 5G System; Spending Limit Control Service.
URL: 'http://www.3gpp.org/ftp/Specs/archive/29_series/29.594/'
```