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

externalDocs

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/'

security

- {}

- oAuth2ClientCredentials:

- 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

paths

/subscriptions

Method: Post

Request Body:

Required/Optional: true

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/SpendingLimitContext'

Responses:

'201' 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' 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' 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' 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' 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