



Nnwdaf_EventsSubscription

The NWDAF slice congestion events notification Service is provided by the Network Data Analytics Function (NWDAF).

- Allows NF consumers to subscribe to and unsubscribe from load events of network slice instance.
- Notifies NF consumers with a corresponding subscription about observed events.
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OpenAPI

OpenAPI Version: 3.0.0

info

Description: Nnwdaf_EventsSubscription Service API

Version: "1.0.0"

Title: Nnwdaf_EventsSubscription

externalDocs

Description: 3GPP TS 29.520 V15.2.0; 5G System; Network Data Analytics Services.

URL: 'http://www.3gpp.org/ftp/Specs/archive/29_series/29.520/'

security

- {}
- oAuth2ClientCredentials:
- nnwdaf-eventssubscription

servers

URL: '{apiRoot}/nnwdaf-eventssubscription/v1'

Variables:

API Root:

Default: https://example.com

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

paths

/subscriptions

Method: Post

Request Body:

Required/Optional: true

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/NnwdafEventsSubscription'

Headers:

Location:

Description: 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/nnwdaf-eventssubscription/v1/subscriptions/{subscriptionId}'

Required/Optional: true

Schema:

Type: string

Responses:

'201' Create a new Individual NWDAF Event Subscription resource.

Content:

Application/JSON:**Schema:****Reference:** '#/components/schemas/NnwdafEventsSubscription'

'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:****myNotification:**

'{\$request.body#/notificationURI}':

Method: Post**Request Body:****Required/Optional:** true**Content:****Application/JSON:****Schema:****Type:** array**items:****Reference:** '#/components/schemas/NnwdafEventsSubscriptionNotification'**minItems:** 1**Responses:**

'204': The receipt of the Notification is acknowledged.

'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}

delete:

Parameters:

- name: subscriptionId

In: path

Description: String identifying a subscription to the Nnwdaf_EventsSubscription Service

Required/Optional: true

Schema:

Type: string

Responses:

'204' No Content. The Individual NWDAF Event Subscription resource matching the subscriptionId was 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' The Individual NWDAF Event Subscription resource does not exist.

Content:

application/problem+json:

Schema:

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

'429': Reference 'TS29571_CommonData.yaml#/components/responses/429'

'500': Reference 'TS29571_CommonData.yaml#/components/responses/500'

'501': Reference 'TS29571_CommonData.yaml#/components/responses/501'

'503': Reference 'TS29571_CommonData.yaml#/components/responses/503'

default: Reference 'TS29571_CommonData.yaml#/components/responses/default'

put:

Request Body:

Required/Optional: true

Content:**Application/JSON:****Schema:****Reference:** '#/components/schemas/NnwdafEventsSubscription'**Parameters:**

- name: subscriptionId

In: path**Description:** String identifying a subscription to the Nnwdaf_EventsSubscription Service**Required/Optional:** true**Schema:****Type:** string**Responses:****'200'** The Individual NWDAF Event Subscription resource was modified successfully and a representation of that resource is returned.**Content:****Application/JSON:****Schema:****Reference:** '#/components/schemas/NnwdafEventsSubscription'**'204'** The Individual NWDAF Event Subscription resource was modified successfully.**'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'** The Individual NWDAF Event Subscription resource does not exist.**Content:**

application/problem+json:

Schema:**Reference:** 'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'**'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'**'501'**: Reference 'TS29571_CommonData.yaml#/components/responses/501'**'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:

nnwdaf-eventssubscription: Access to the Nnwdaf_EventsSubscription API

schemas

NnwdafEventsSubscription

Type: object

Properties:

eventSubscriptions:

Type: array

Items:

Reference: '#/components/schemas/EventSubscription'

minItems: 1

Description: Subscribed events

notificationURI:

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

supportedFeatures:

Reference: 'TS29571_CommonData.yaml#/components/schema/SupportedFeature'

Required:

- eventSubscriptions

EventSubscription

Type: object

Properties:

anySlice:

Reference: '#/components/schemas/AnySlice'

event:

Reference: '#/components/schemas/NwdafEvent'

loadLevelThreshold:

Type: integer

Description: Shall be supplied for notification method "THRESHOLD". Indicates that the NWDAF shall report the corresponding network slice load level to the NF service consumer where the load level of the network slice instance identified by snssai is reached.

notificationMethod:

Reference: '#/components/schemas/NotificationMethod'

repetitionPeriod:

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

snssaia:

Type: array

Items:

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

minItems: 1

Description: Identification(s) of network slice to which the subscription applies. When subscribed event is "SLICE_LOAD_LEVEL", either information about slice(s) identified by snssai, or anySlice set to "TRUE" shall be included.

Required:

- event

NnwdafEventsSubscriptionNotification

Type: object

Properties:

eventNotifications:

Type: array

Items:

Reference: '#/components/schemas/EventNotification'

minItems: 1

Description: Notifications about Individual Events

subscriptionId:

Type: string

Description: String identifying a subscription to the Nnwdaf_EventsSubscription Service

Required:

- eventNotifications
- subscriptionId

EventNotification

Type: object

Properties:

event:

Reference: '#/components/schemas/NwdafEvent'

sliceLoadLevelInfo:

Reference: '#/components/schemas/SliceLoadLevelInformation'

Required:

- event
- sliceLoadLevelInfo

SliceLoadLevelInformation

Type: object

Properties:

loadLevelInformation:

Reference: '#/components/schemas/LoadLevelInformation'

snsais:

Type: array

Items:

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

minItems: 1

Description: Identification(s) of network slice to which the subscription.

Required:

- loadLevelInformation
- snsais

AnySlice

Type: boolean

Description: FALSE represents not applicable for all slices. TRUE represents applicable for all slices.

LoadLevelInformation

Type: integer

Description: Load level information of the network slice instance.

NotificationMethod

anyOf:

- type: string

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.

Possible values are

- PERIODIC: The subscribe of NWDAF Event is periodically. The periodic of the notification is identified by repetitionPeriod defined in subclause 5.1.6.2.3.
- THRESHOLD: The subscribe of NWDAF Event is upon threshold exceeded. The threshold of the notification is identified by loadLevelThreshold defined in subclause 5.1.6.2.3.

NwdafEvent

anyOf:

- type: string

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.

Possible values are

- SLICE_LOAD_LEVEL: Indicates that the event subscribed is load level information of Network Slice instance

