



Nnrf_NFManagement

The Network Repository Function uses the Nnrf_NFManagement service to manage the create, update, and delete an NF.

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OpenAPI

OpenAPI Version: 3.0.0

info

Version: '1.0.0'

Title: 'NRF NFManagement Service'

Description: 'NRF NFManagement Service'

servers

URL: '{apiRoot}/nnrf-nfm/v1'

Variables:

API Root:

Default: https://example.com

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

security

- {}
- oAuth2ClientCredentials:
- nnrf-nfm

paths

/nf-instances

get:

Summary: Retrieves a collection of NF Instances

Operation ID: GetNFInstances

Tags:

- NF Instances (Store)

Parameters:

- name: nf-type

In: query

Description: Type of NF

Required/Optional: false

Schema:

Reference: '#/components/schemas/NFType'

- name: limit

In: query

Description: How many items to return at one time

Required/Optional: false

Schema:

Type: integer

Responses:

'200' Expected response to a valid request

Content:

application/3gppHal+json:

Schema:

Type: object

Properties:

_links:

Type: object

Description: 'List of the URI of NF instances. It has two members whose names are item and self. The item one contains an array of URIs.'

additionalProperties:

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

minProperties: 1

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'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'

'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'

/nf-instances/{nfInstanceId}

get:

Summary: Read the profile of a given NF Instance

Operation ID: GetNFInstance

Tags:

- NF Instance ID (Document)

Parameters:

- name: nfInstanceId

In: path

Description: Unique ID of the NF Instance

Required/Optional: true

Schema:

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

Responses:

'200' Expected response to a valid request

Content:

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

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'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'

'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:****Summary:** Register a new NF Instance**Operation ID:** RegisterNFInstance**Tags:**

- NF Instance ID (Document)

Parameters:

- name: nfInstanceID

In: path**Required/Optional:** true**Description:** Unique ID of the NF Instance to register**Schema:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'**Request Body:****Content:****Application/JSON:****Schema:****Reference:** '#/components/schemas/NFProfile'**Required/Optional:** true**Responses:**

'200' OK (Profile Replacement)

Content:

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

'201' Expected response to a valid request

Content:**Application/JSON:****Schema:****Reference:** '#/components/schemas/NFProfile'**Headers:****Location:****Description:** 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/nnrf-nfm/v1/nf-instances/{nfInstanceId}'**Required/Optional:** true**Schema:****Type:** string**'400':** Reference 'TS29571_CommonData.yaml#/components/responses/400'**'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'**'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'**patch:****Summary:** Update NF Instance profile**Operation ID:** UpdateNFInstance**Tags:**

- NF Instance ID (Document)

Parameters:

- name: nfInstanceId

In: path**Required/Optional:** true**Description:** Unique ID of the NF Instance to update

Schema:**Reference:** 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'**Request Body:****Content:**

application/json-patch+json:

Schema:**Type:** array**items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/PatchItem'**minItems:** 1**Required/Optional:** true**Responses:**

'200' Expected response to a valid request

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

'204' Expected response with empty body

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'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'

'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'**delete:****Summary:** Deregisters a given NF Instance**Operation ID:** DeregisterNFInstance**Tags:**

- NF Instance ID (Document)

Parameters:

- name: nfInstanceId

In: path

Required/Optional: true

Description: Unique ID of the NF Instance to deregister

Schema:

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

Responses:

'204' Expected response to a successful deregistration

/subscriptions

Method: Post

Summary: Create a new subscription

Operation ID: CreateSubscription

Tags:

- Subscriptions (Collection)

Request Body:

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/SubscriptionData'

Required/Optional: true

Responses:

'201' Expected response to a valid request

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/SubscriptionData'

Headers:

Location:

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

Required/Optional: true

Schema:

Type: string

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'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'

'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'

Callbacks:

onNFStatusEvent:

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

Method: Post

Request Body:

Description: Notification Payload

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/NotificationData'

Responses:

'204' Expected response to a successful callback processing

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'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'

'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'

/subscriptions/{subscriptionID}

patch:

Summary: Updates a subscription

Operation ID: UpdateSubscription

Tags:

- Subscription ID (Document)

Parameters:

- name: subscriptionID

In: path

Required/Optional: true

Description: Unique ID of the subscription to update

Schema:

Type: string

pattern: '^([0-9]{5,6}-)?[^\-]+\$'

Request Body:

Content:

application/json-patch+json:

Schema:

Type: array

items:

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

Required/Optional: true

Responses:

'200' Expected response to a valid request

Content:

Application/JSON:

Schema:

Reference: '#/components/schemas/SubscriptionData'

'204' No Content

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'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'

'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'

delete:

Summary: Deletes a subscription

Operation ID: RemoveSubscription

Tags:

- Subscription ID (Document)

Parameters:

- name: subscriptionID

In: path

Required/Optional: true

Description: Unique ID of the subscription to remove

Schema:

Type: string

pattern: '^([0-9]{5,6}-)?[^-]+\$'

Responses:

'204' Expected response to a successful subscription removal

'400': Reference 'TS29571_CommonData.yaml#/components/responses/400'

'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'

'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: '/oauth2/token'

scopes:

nnrf-nfm: Access to the Nnrf_NFManagement API

schemas

NFProfile

Type: object

Required:

- nfInstanceId

- nfType

- nfStatus

anyOf:

- required: [fqdn]

- required: [ipv4Addresses]

- required: [ipv6Addresses]

Properties:

nfInstanceId:

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

nfType:

Reference: '#/components/schemas/NFType'

nfStatus:

Reference: '#/components/schemas/NFStatus'

heartBeatTimer:

Type: integer

plmnList:

Type: array

Items:

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

minItems: 1

sNssais:

Type: array

Items:

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

minItems: 1

nsiList:

Type: array

Items:

Type: string

minItems: 1

fqdn:

Reference: '#/components/schemas/Fqdn'

interPlmnFqdn:

Reference: '#/components/schemas/Fqdn'

ipv4Addresses:

Type: array

Items:

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

minItems: 1

ipv6Addresses:

Type: array

Items:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'

minItems: 1

allowedPlmns:

Type: array

Items:

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

minItems: 1

allowedNfTypes:

Type: array

Items:

Reference: '#/components/schemas/NFType'

minItems: 1

allowedNfDomains:

Type: array

Items:

Type: string

minItems: 1

allowedNssais:

Type: array

Items:

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

minItems: 1

priority:

Type: integer

Minimum: 0

Maximum: 65535

capacity:

Type: integer

Minimum: 0

Maximum: 65535

load:

Type: integer

Minimum: 0

Maximum: 100

locality:

Type: string

udrInfo:

Reference: '#/components/schemas/UdrInfo'

udmInfo:

Reference: '#/components/schemas/UdmInfo'

ausfInfo:

Reference: '#/components/schemas/AusfInfo'

amfInfo:**Reference:** '#/components/schemas/AmfInfo'**smfInfo:****Reference:** '#/components/schemas/SmfInfo'**upfInfo:****Reference:** '#/components/schemas/UpfInfo'**pcfInfo:****Reference:** '#/components/schemas/PcfInfo'**bsfInfo:****Reference:** '#/components/schemas/BsfInfo'**chfInfo:****Reference:** '#/components/schemas/ChfInfo'**nrfInfo:****Reference:** '#/components/schemas/NrfInfo'**customInfo:****Type:** object**recoveryTime:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/DateTime'**nfServicePersistence:****Type:** boolean**Default:** false**nfServices:****Type:** array**Items:****Reference:** '#/components/schemas/NFService'**minItems:** 1

NFService

Type: object**Required:**

- serviceInstanceId
- serviceName
- versions
- scheme
- nfServiceStatus

Properties:**serviceInstanceId:****Type:** string**serviceName:****Reference:** '#/components/schemas/ServiceName'**versions:****Type:** array**Items:****Reference:** '#/components/schemas/NFServiceVersion'**minItems:** 1**scheme:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/UriScheme'**nfServiceStatus:****Reference:** '#/components/schemas/NFServiceStatus'**fqdn:****Reference:** '#/components/schemas/Fqdn'**interPlmnFqdn:****Reference:** '#/components/schemas/Fqdn'**ipEndPoints:****Type:** array**Items:****Reference:** '#/components/schemas/IpEndPoint'**minItems:** 1**apiPrefix:****Type:** string**defaultNotificationSubscriptions:****Type:** array**Items:****Reference:** '#/components/schemas/DefaultNotificationSubscription'**minItems:** 1**allowedPlmns:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/PlmnId'

minItems: 1

allowedNfTypes:

Type: array

Items:

Reference: '#/components/schemas/NFType'

minItems: 1

allowedNfDomains:

Type: array

Items:

Type: string

minItems: 1

allowedNssais:

Type: array

Items:

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

minItems: 1

priority:

Type: integer

Minimum: 0

Maximum: 65535

capacity:

Type: integer

Minimum: 0

Maximum: 65535

load:

Type: integer

Minimum: 0

Maximum: 100

recoveryTime:

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

chfServiceInfo:

Reference: '#/components/schemas/ChfServiceInfo'

supportedFeatures:

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

NFType

anyOf:

- type: string

enum:

- NRF

- UDM

- AMF

- SMF

- AUSF

- NEF

- PCF

- SMSF

- NSSF

- UDR

- LMF

- GMLC

- 5G_EIR

- SEPP

- UPF

- N3IWF

- AF

- UDSF

- BSF

- CHF

- NWDAF

- type: string

Fqdn

Type: string

IpEndPoint

Type: object

Properties:**ipv4Address:**

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

ipv6Address:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'

transport:

Reference: '#/components/schemas/TransportProtocol'

port:

Type: integer

Minimum: 0

Maximum: 65535

SubscriptionData

Type: object

Required:

- nfStatusNotificationUri
- subscriptionId

Properties:

nfStatusNotificationUri:

Type: string

subscrCond:

oneOf:

- \$ref: '#/components/schemas/NfInstanceIdCond'
- \$ref: '#/components/schemas/NfTypeCond'
- \$ref: '#/components/schemas/ServiceNameCond'
- \$ref: '#/components/schemas/AmfCond'
- \$ref: '#/components/schemas/GuamiListCond'
- \$ref: '#/components/schemas/NetworkSliceCond'
- \$ref: '#/components/schemas/NfGroupCond'

subscriptionId:

Type: string

Pattern: '^([0-9]{5,6}-)?[^-]+\$'

readOnly: true

validityTime:

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

reqNotifEvents:

Type: array

Items:

Reference: '#/components/schemas/NotificationEventType'

minItems: 1

plmnId:

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

notifCondition:

Reference: '#/components/schemas/NotifCondition'

reqNfType:

Reference: '#/components/schemas/NFType'

reqNfFqdn:

Reference: '#/components/schemas/Fqdn'

NfInstanceIdCond

Type: object

Required:

- nfInstanceId

Properties:

nfInstanceId:

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

NfTypeCond

Type: object

Required:

- nfType

Properties:

nfType:

Reference: '#/components/schemas/NFType'

ServiceNameCond

Type: object

Required:

- serviceName

Properties:

serviceName:

Reference: '#/components/schemas/ServiceName'

AmfCond

Type: object

anyOf:

- required: [amfSetId]

- required: [amfRegionId]

Properties:

amfSetId:

Type: string

amfRegionId:

Type: string

GuamiListCond

Type: object

Required:

- guamiList

Properties:

guamiList:

Type: array

Items:

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

NetworkSliceCond

Type: object

Required:

- snssaiList

Properties:

snssaiList:

Type: array

Items:

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

nsiList:

Type: array

Items:

Type: string

NfGroupCond

Type: object

Required:

- nfType
- nfGroupId

Properties:

nfType:

Type: string

enum:

- UDM
- AUSF
- UDR

nfGroupId:

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

NotifCondition

Type: object

not:

Required: [monitoredAttributes, unmonitoredAttributes]

Properties:

monitoredAttributes:

Type: array

Items:

Type: string

minItems: 1

unmonitoredAttributes:

Type: array

Items:

Type: string

minItems: 1

UdrInfo

Type: object

Properties:

groupId:

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

supiRanges:

Type: array

Items:

Reference: '#/components/schemas/SupiRange'

minItems: 1

gpsiRanges:

Type: array

Items:

Reference: '#/components/schemas/IdentityRange'

minItems: 1

externalGroupIdentifiersRanges:

Type: array

Items:

Reference: '#/components/schemas/IdentityRange'

minItems: 1

supportedDataSets:

Type: array

Items:

Reference: '#/components/schemas/DataSetId'

minItems: 1

SupiRange

Type: object

Properties:

start:

Type: string

Pattern: '^[0-9]+\$'

end:

Type: string

Pattern: '^[0-9]+\$'

Pattern:

Type: string

IdentityRange

Type: object

Properties:

start:

Type: string

Pattern: '^[0-9]+\$'

end:

Type: string

Pattern: '^[0-9]+\$'

Pattern:

Type: string

DataSetId

anyOf:

- type: string

enum:

- SUBSCRIPTION

- POLICY

- EXPOSURE

- APPLICATION

- type: string

UdmlInfo

Type: object

Properties:

groupId:

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

supiRanges:

Type: array

Items:

Reference: '#/components/schemas/SupiRange'

minItems: 1

gpsiRanges:

Type: array

Items:

Reference: '#/components/schemas/IdentityRange'

minItems: 1

externalGroupIdentifiersRanges:

Type: array

Items:

Reference: '#/components/schemas/IdentityRange'

minItems: 1

routingIndicators:

Type: array

Items:

Type: string

Pattern: '^[0-9]{1,4}\$'

minItems: 1

AusflInfo

Type: object

Properties:

groupId:

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

supiRanges:

Type: array

Items:

Reference: '#/components/schemas/SupiRange'

minItems: 1

routingIndicators:

Type: array

Items:

Type: string

Pattern: '^[0-9]{1,4}\$'

minItems: 1

AmflInfo

Type: object

Required:

- amfSetId

- amfRegionId

- guamiList

Properties:

amfSetId:

Type: string

amfRegionId:

Type: string

guamiList:

Type: array

Items:

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

minItems: 1

taiList:

Type: array

Items:

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

minItems: 1

taiRangeList:

Type: array

Items:

Reference: '#/components/schemas/TaiRange'

minItems: 1

backupInfoAmfFailure:

Type: array

Items:

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

minItems: 1

backupInfoAmfRemoval:

Type: array

Items:

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

minItems: 1

n2InterfaceAmfInfo:

Reference: '#/components/schemas/N2InterfaceAmfInfo'

SmfInfo

Type: object

Required:

- sNssaiSmfInfoList

Properties:

sNssaiSmfInfoList:

Type: array

Items:

Reference: '#/components/schemas/SnssaiSmfInfoItem'

minItems: 1

taiList:

Type: array

Items:

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

minItems: 1

taiRangeList:

Type: array

Items:

Reference: '#/components/schemas/TaiRange'

minItems: 1

pgwFqdn:

Reference: '#/components/schemas/Fqdn'

accessType:

Type: array

Items:

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

minItems: 1

SnssaiSmfInfoItem

Type: object

Required:

- sNssai

- dnnSmfInfoList

Properties:

sNssai:

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

dnnSmfInfoList:

Type: array

Items:

Reference: '#/components/schemas/DnnSmfInfoItem'

minItems: 1

DnnSmfInfoItem

Type: object

Required:

- dnn

Properties:

dnn:

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

UpfInfo

Type: object

Required:

- sNssaiUpfInfoList

Properties:

sNssaiUpfInfoList:

Type: array

Items:

Reference: '#/components/schemas/SnssaiUpfInfoItem'

minItems: 1

smfServingArea:

Type: array

Items:

Type: string

minItems: 1

interfaceUpfInfoList:

Type: array

Items:

Reference: '#/components/schemas/InterfaceUpfInfoItem'

minItems: 1
iwkEpsInd:
Type: boolean
Default: false

SnsaiUpfInfoItem

Type: object
Required:
- sNssai
- dnnUpfInfoList
Properties:
sNssai:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Snsai'
dnnUpfInfoList:
Type: array
Items:
Reference: '#/components/schemas/DnnUpfInfoItem'
minItems: 1

DnnUpfInfoItem

Type: object
Required:
- dnn
Properties:
dnn:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
dnaiList:
Type: array
Items:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnai'
minItems: 1

InterfaceUpfInfoItem

Type: object
Required:
- interfaceType

Properties:**interfaceType:****Reference:** '#/components/schemas/UPInterfaceType'**ipv4EndpointAddresses:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'**minItems:** 1**ipv6EndpointAddresses:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'**minItems:** 1**endpointFqdn:****Reference:** '#/components/schemas/Fqdn'**networkInstance:****Type:** string

UPInterfaceType

anyOf:

- type: string

enum:

- N3

- N6

- N9

- type: string

PcflInfo

Type: object**Properties:****dnnList:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Dnn'**minItems:** 1

supiRanges:**Type:** array**Items:****Reference:** '#/components/schemas/SupiRange'**minItems:** 1**rxDiamHost:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/DiameterIdentity'**rxDiamRealm:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/DiameterIdentity'**BsflInfo****Type:** object**Properties:****dnnList:****Type:** array**Items:****Reference:** 'TS29571_CommonData.yaml#/components/schemas/Dnn'**minItems:** 1**ipDomainList:****Type:** array**Items:****Type:** string**minItems:** 1**ipv4AddressRanges:****Type:** array**Items:****Reference:** '#/components/schemas/Ipv4AddressRange'**minItems:** 1**ipv6PrefixRanges:****Type:** array**Items:****Reference:** '#/components/schemas/Ipv6PrefixRange'**minItems:** 1

ChfInfo

Type: object

Properties:

supiRangeList:

Type: array

Items:

Reference: '#/components/schemas/SupiRange'

minItems: 1

gpsiRangeList:

Type: array

Items:

Reference: '#/components/schemas/IdentityRange'

minItems: 1

plmnRangeList:

Type: array

Items:

Reference: '#/components/schemas/PlmnRange'

minItems: 1

Ipv4AddressRange

Type: object

Properties:

start:

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

end:

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

Ipv6PrefixRange

Type: object

Properties:

start:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'

end:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'

DefaultNotificationSubscription

Type: object

Required:

- notificationType
- callbackUri

Properties:

notificationType:

Reference: '#/components/schemas/NotificationType'

callbackUri:

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

n1MessageClass:

Reference: 'TS29518_Namf_Communication.yaml#/components/schemas/N1MessageClass'

n2InformationClass:

Reference: 'TS29518_Namf_Communication.yaml#/components/schemas/N2InformationClass'

NotificationType

anyOf:

- type: string

enum:

- N1_MESSAGES
- N2_INFORMATION
- LOCATION_NOTIFICATION
- DATA_REMOVAL_NOTIFICATION
- DATA_CHANGE_NOTIFICATION
- type: string

TransportProtocol

anyOf:

- type: string

enum:

- TCP
- type: string

NotificationEventType

anyOf:

- type: string
- enum:**
- NF_REGISTERED
- NF_DEREGISTERED
- NF_PROFILE_CHANGED
- type: string

NotificationData

Type: object

Required:

- event
- nfInstanceUri

allOf:

- anyOf:
- not:

Properties:

event:

Type: string

enum:

- NF_PROFILE_CHANGED
- oneOf:
- required: [nfProfile]
- required: [profileChanges]
- anyOf:
- not:

Properties:

event:

Type: string

enum:

- NF_REGISTERED
- required: [nfProfile]

Properties:

event:

Reference: '#/components/schemas/NotificationEventType'

nfInstanceUri:

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

nfProfile:

allOf:

- \$ref: '#/components/schemas/NFProfile'

- not:

Required: [interPlmnFqdn]

- properties:

nfServices:

Type: array

Items:

allOf:

- \$ref: '#/components/schemas/NFService'

- not:

Required: [interPlmnFqdn]

- not:

Required: [allowedPlmns]

- not:

Required: [allowedNfTypes]

- not:

Required: [allowedNfDomains]

- not:

Required: [allowedNssais]

profileChanges:

Type: array

Items:

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

minItems: 1

NFStatus

anyOf:

- type: string

enum:

- REGISTERED

- SUSPENDED

- type: string

NFServiceVersion

Type: object

Required:

- apiVersionInUri
- apiFullVersion

Properties:

apiVersionInUri:

Type: string

apiFullVersion:

Type: string

expiry:

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

ServiceName

anyOf:

- type: string

enum:

- nnrf-nfm
- nnrf-disc
- nudm-sdm
- nudm-uecm
- nudm-ueau
- nudm-ee
- nudm-pp
- namf-comm
- namf-evts
- namf-mt
- namf-loc
- nsmf-pdusession
- nsmf-event-exposure
- nausf-auth
- nausf-sorprotection
- nnef-pfdmanagement
- npcfc-am-policy-control
- npcfc-smpolicycontrol

- npcf-policyauthorization
- npcf-bdtpolicycontrol
- npcf-eventexposure
- npcf-ue-policy-control
- nsmsf-sms
- mnssf-nssselection
- mnssf-nssaiavailability
- nudr-dr
- nlmf-loc
- n5g-eir-eic
- nbsf-management
- nchf-spendinglimitcontrol
- nchf-convergedcharging
- nnwdaf-eventssubscription
- nnwdaf-analyticsinfo
- type: string

N2InterfaceAmfInfo

Type: object

Properties:

ipv4EndpointAddress:

Type: array

Items:

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

minItems: 1

ipv6EndpointAddress:

Type: array

Items:

Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'

minItems: 1

amfName:

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

NFServiceStatus

anyOf:

- type: string
- enum:**
- REGISTERED
- SUSPENDED
- type: string

TaiRange

- Type:** object
- Required:**
- plmnId
- tacRangeList
- Properties:**
- plmnId:**
- Reference:** 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
- tacRangeList:**
- Type:** array
- Items:**
- Reference:** '#/components/schemas/TacRange'
- minItems:** 1

TacRange

- Type:** object
- Properties:**
- start:**
- Type:** string
- Pattern:** '^([A-Fa-f0-9]{4}|[A-Fa-f0-9]{6})\$'
- end:**
- Type:** string
- Pattern:** '^([A-Fa-f0-9]{4}|[A-Fa-f0-9]{6})\$'
- Pattern:**
- Type:** string

ChfServiceInfo

- Type:** object
- not:**
- Required:** [primaryChfServiceInstance, secondaryChfServiceInstance]

Properties:**primaryChfServiceInstance:****Type:** string**secondaryChfServiceInstance:****Type:** string**PlmnRange****Type:** object**Properties:****start:****Type:** string**Pattern:** '^[0-9]{3}[0-9]{2,3}\$'**end:****Type:** string**Pattern:** '^[0-9]{3}[0-9]{2,3}\$'**Pattern:****Type:** string**NrfInfo****Type:** object**Properties:****servedUdrInfo:****Type:** object**additionalProperties:****Reference:** '#/components/schemas/UdrInfo'**minProperties:** 1**servedUdmInfo:****Type:** object**additionalProperties:****Reference:** '#/components/schemas/UdmInfo'**minProperties:** 1**servedAusfInfo:****Type:** object**additionalProperties:****Reference:** '#/components/schemas/AusfInfo'

minProperties: 1
servedAmfInfo:
Type: object
additionalProperties:
Reference: '#/components/schemas/AmfInfo'

minProperties: 1
servedSmfInfo:
Type: object
additionalProperties:
Reference: '#/components/schemas/SmfInfo'

minProperties: 1
servedUpfInfo:
Type: object
additionalProperties:
Reference: '#/components/schemas/UpfInfo'

minProperties: 1
servedPcfInfo:
Type: object
additionalProperties:
Reference: '#/components/schemas/PcfInfo'

minProperties: 1
servedBsfInfo:
Type: object
additionalProperties:
Reference: '#/components/schemas/BsfInfo'

minProperties: 1
servedChfInfo:
Type: object
additionalProperties:
Reference: '#/components/schemas/ChfInfo'

minProperties: 1

externalDocs

Description: 3GPP TS 29.510 V15.2.0; 5G System; Network Function Repository Services; Stage 3

URL: 'http://www.3gpp.org/ftp/Specs/archive/29_series/29.510/'