



Nnrf_NFDiscovery

The Network Repository Function authorizes an NF client to perform the discovery operation using the Nnrf_NFDiscovery service to detect an NF.

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OpenAPI

OpenAPI Version: 3.0.0

Info

Version: '1.1.4'
Title: 'NRF NFDiscovery Service'
Description: 'NRF NFDiscovery Service'

Servers

URL: '{apiRoot}/nnrf-disc/v1'
Variables:
API Root:
Default: https://example.com

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

Security

```
- {}
- oAuth2ClientCredentials:
  - nnrfdisc
```

Paths

/nf-instances

get:

Summary: Search a collection of NF Instances

Operation ID: SearchNFInstances

Tags:

- NF Instances (Store)

Parameters:

```
#- Name: Accept-Encoding
# in: header
# description: Accept-Encoding, described in IETF RFC 7231
# schema:
# type: string
- Name: target-nf-type
  In: query
  Description: Type of the target NF
  Required/Optional: true
  Schema:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NFType'
- Name: requester-nf-type
  In: query
  Description: Type of the requester NF
  Required/Optional: true
  Schema:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NFType'
#- name: requester-nf-instance-id
# in: query
# description: NfInstanceId of the requester NF
# schema:
# $ref: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
- Name: service-names
  In: query
  Description: Name of the service offered by the NF
  Schema:
    Type: array
    Items:
# $ref: 'TS29571_CommonData.yaml#/components/schemas/ServiceName'
```

Min Items: 1

Unique Items: False

Style: form

Explode: false

- **Name:** requester-nf-instance-fqdn

In: query

Description: FQDN of the requester NF

Schema:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/Fqdn'

- **Name:** target-plmn-list

In: query

Description: Id of the PLMN where the target NF is located

Content:

Application/JSON:

Schema:

Type: array

Items:

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

Min Items: 1

- **Name:** requester-plmn-list

In: query

Description: Id of the PLMN where the NF issuing the Discovery request is located

Content:

Application/JSON:

Schema:

Type: array

Items:

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

Min Items: 1

- **Name:** target-nf-instance-id

In: query

Description: Identity of the NF instance being discovered

Schema:

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

- **Name:** target-nf-fqdn

In: query

Description: FQDN of the NF instance being discovered

Schema:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/Fqdn'

- **Name:** hnr-uri

In: query

Description: Uri of the home NRF

Schema:

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

- **Name:** snssais

In: query

Description: Slice info of the target NF

Content:

```

    Application/JSON:
      Schema:
        Type: array
        Items:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
          Min Items: 1
- Name: plmn-specific-snssai-list
  In: query
  Description: PLMN specific Slice info of the target NF
  Content:
    Application/JSON:
      Schema:
        Type: array
        Items:
          Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/PlmnSnssai'
          Min Items: 1
#- Name: requester-plmn-specific-snssai-list
# In: query
# Description: PLMN-specific slice info of the NF issuing the Discovery request
# Content:
# Application/JSON:
# Schema:
# Type: array
# Items:
# Reference:
'TS29510_Nnrf_NFManagement.yaml#/components/schemas/PlmnSnssai'
# Min Items: 1
- Name: dnn
  In: query
  Description: Dnn supported by the BSF, SMF or UPF
  Schema:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
- Name: nsi-list
  In: query
  Description: NSI IDs that are served by the services being discovered
  Schema:
    Type: array
    Items:
      Type: string
    Min Items: 1
  Style: form
  Explode: false
- Name: smf-serving-area
  In: query
  Schema:
    Type: string
- Name: tai
  In: query
  Description: Tracking Area Identity
  Content:

```

Application/JSON:
Schema:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Tai'

- **Name:** amf-region-id
In: query
Description: AMF Region Identity
Schema:
Type: string
- **Name:** amf-set-id
In: query
Description: AMF Set Identity
Schema:
Type: string
- **Name:** guami
In: query
Description: Guami used to search for an appropriate AMF
Content:
Application/JSON:
Schema:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Guami'
- **Name:** supi
In: query
Description: SUPI of the user
Schema:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
- **Name:** ue-ipv4-address
In: query
Description: IPv4 address of the UE
Schema:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
- **Name:** ip-domain
In: query
Description: IP domain of the UE, which supported by BSF
Schema:
Type: string
- **Name:** ue-ipv6-prefix
In: query
Description: IPv6 prefix of the UE
Schema:
Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'
- **Name:** pgw-ind
In: query
Description: Combined PGW-C and SMF or a standalone SMF
Schema:
Type: boolean
- **Name:** pgw
In: query
Description: PGW FQDN of a combined PGW-C and SMF
Schema:
Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/Fqdn'
- **Name:** gpsi

```

In: query
Description: GPSI of the user
Schema:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
- Name: external-group-identity
  In: query
  Description: external group identifier of the user
  Schema:
    Reference: 'TS29503_Nudm_SDM.yaml#/components/schemas/ExtGroupId'
# - Name: internal-group-identity
# In: query
# Description: internal group identifier of the user
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'
# - Name: pfd-data
# In: query
# Description: pfd-data
# Content:
# Application/JSON:
# Schema:
# Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/PfdData'
- Name: data-set
  In: query
  Description: data set supported by the NF
  Schema:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/DataSetId'
- Name: routing-indicator
  In: query
  Description: routing indicator in SUCI
  Schema:
    Type: string
    pattern: '^[0-9]{1,4}$'
- Name: group-id-list
  In: query
  Description: Group IDs of the NFs being discovered
  Schema:
    Type: array
    Items:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfGroupId'
      Min Items: 1
    Style: form
    Explode: false
- Name: dnai-list
  In: query
  Description: Data network access identifiers of the NFs being discovered
  Schema:
    Type: array
    Items:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnai'
      Min Items: 1
    Style: form

```

```

    Explode: false
  - Name: pdu-session-types
    In: query
    Description: list of PDU Session Type required to be supported by the target NF
    Schema:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionType'
      Min Items: 1
    Style: form
    Explode: false
  #- Name: event-id-list
    # In: query
    # Description: Analytics event(s) requested to be supported by the
    Nnwdaf_AnalyticsInfo service
    # Schema:
    # Type: array
    # Items:
    # Reference: 'TS29520_Nnwdaf_AnalyticsInfo.yaml#/components/schemas/EventId'

    # Min Items: 1
    # Style: form
    # Explode: false
  #- Name: nwdaf-event-list
    # In: query
    # Description: Analytics event(s) requested to be supported by the
    Nnwdaf_EventsSubscription service.
    # Schema:
    # Type: array
    # Items:
    # Reference:
    'TS29520_Nnwdaf_EventsSubscription.yaml#/components/schemas/NwdafEvent'
    # Min Items: 1
    # Style: form
    # Explode: false
  - Name: supported-features
    In: query
    Description: Features required to be supported by the target NF
    Schema:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
  - Name: upf-iwk-eps-ind
    In: query
    Description: UPF supporting interworking with EPS or not
    Schema:
      Type: boolean
  - Name: chf-supported-plmn
    In: query
    Description: PLMN ID supported by a CHF
    Content:
      Application/JSON:
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'

```

```

- Name: preferred-locality
  In: query
  Description: preferred target NF location
  Schema:
    Type: string
- Name: access-type
  In: query
  Description: AccessType supported by the target NF
  Schema:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/AccessType'
- Name: limit
  In: query
  Description: Maximum number of NFProfiles to return in the response
  required: false
  Schema:
    Type: integer
    minimum: 1
    Reference: 'TS29571_CommonData.yaml#/components/schemas/AccessType'
- Name: required-features
  In: query
  Description: Features required to be supported by the target NF
  Schema:
    Type: array
    Items:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    Min Items: 1
  Style: form
  Explode: false
- Name: complex-query
  In: query
  Description: the complex query condition expression
  Content:
    Application/JSON:
  Schema:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/ComplexQuery'
- Name: max-payload-size
  In: query
  Description: Maximum payload size of the response expressed in kilo octets
  required: false
  Schema:
    Type: integer
    maximum: 2000
    default: 124
#- Name: max-payload-size-ext
  # In: query
  # Description: Extended query for maximum payload size of the response expressed
in kilo octets
  # required: false
  # Schema:
  # Type: integer
  # default: 124
#- Name: ATSSS Capability

```



```
# Content:
# Application/JSON:
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/AtsssCapability'
#- Name: upf-ue-ip-addr-ind
# In: query
# Description: UPF supporting allocating UE IP addresses/prefixes
# Schema:
# Type: boolean
#- Name: client-type
# In: query
# Description: Requested client type served by the NF
# Content:
# Application/JSON:
# Schema:
# Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/ExternalClientType'

#- Name: lmf-id
# In: query
# Description: LMF identification to be discovered
# Content:
# Application/JSON:
# Schema:
# Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/LMFIdentification'

#- Name: an-node-type
# In: query
# Description: Requested AN node type served by the NF
# Content:
# Application/JSON:
# Schema:
# Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/AnNodeType'
#- Name: rat-type
# In: query
# Description: Requested AN node type served by the NF
# Content:
# Application/JSON:
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
#- Name: preferred-tai
# In: query
# Description: preferred Tracking Area Identity
# Content:
# Application/JSON:
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/Tai'
#- Name: preferred-nf-instances
# In: query
# Description: preferred NF Instances
# Schema:
# Type: array
# Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
```

```

    # Min Items: 1
    # Style: form
    # Explode: false
  - Name: If-None-Match
    In: header
    Description: Validator for conditional requests, as described in IETF RFC 7232,
3.2
    Schema:
      Type: string
  #- Name: target-snpn
    # In: query
    Description: Target SNPN Identity
    # Content:
      # Application/JSON:
    Schema:
      # Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnIdNid'
  #- Name: requester-snpn-list
    # In: query
    Description: SNPN ID(s) of the NF instance issuing the Discovery request
    # Content:
      # Application/JSON:
    # Schema:
      # Type: array
      # Items:
      # Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnIdNid'
      # Min Items: 1
  #- Name: af-ee-data
    # In: query
    # Description: NEF exposed by the AF
    # Content:
      # Application/JSON:
    # Schema:
      # Reference:
'TS29510_Nnrf_NFManagement.yaml#/components/schemas/AfEventExposureData'
  #- Name: w-agf-info
    # In: query
    Description: UPF collocated with W-AGF
    # Content:
      # Application/JSON:
    # Schema:
      # Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/WAgfInfo'
  #- Name: tngf-info
    # In: query
    # Description: UPF collocated with TNGF
    # Content:
      # Application/JSON:
    # Schema:
      # Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/TngfInfo'
  #- Name: twif-info
    # In: query
    # Description: UPF collocated with TWIF
    # Content:

```

```

    # Application/JSON:
    Schema:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/TwifInfo'
  #- Name: target-nf-set-id
    # In: query
    Description: Target NF Set ID
    Schema:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/TwifInfo'
  #- Name: target-nf-service-set-id
    # In: query
    # Description: Target NF Service Set ID
    # Schema:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfServiceSetId'
  #- Name: nef-id
    # In: query
    # Description: NEF ID
    # Schema:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NefId'
  #- Name: notification-type
    # In: query
    # Description: Notification Type
    # Schema:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NotificationType'

  #- Name: n1-msg-class
    # In: query
    # Description: N1 Message Class
    # Schema:
      Reference: 'TS29518_Namf_Communication.yaml#/components/schemas/N1MessageClass'

  #- Name: n2-info-class
    # In: query
    # Description: N2 Information Class
    # Schema:
      # Reference:
'TS29518_Namf_Communication.yaml#/components/schemas/N2InformationClass'
  #- Name: serving-scope
    # In: query
    # Description: areas that can be served by the target NF
    # Schema:
      # Type: array
      # Items:
      # Type: string
      # Min Items: 1
    # Style: form
    # Explode: false
  #- Name: imsi
    # In: query
    # Description: IMSI of the requester UE to search for an appropriate NF (e.g.
HSS)
    # Schema:
      # Type: string

```

```

#- Name: ims-private-identity
# In: query
# Description: IMPI of the requester UE to search for a target HSS
# Schema:
# Type: string
#- Name: ims-public-identity
# In: query
# Description: IMS Public Identity of the requester UE to search for a target
HSS
# Schema:
# Type: string
#- Name: msisdn
# In: query
# Description: MSISDN of the requester UE to search for a target HSS
# Schema:
# Type: string
#- Name: preferred-api-versions
# In: query
# Description: Preferred API version of the services to be discovered
# Content:
# Application/JSON:
# Schema:
# Type: object
# additionalProperties:
# Type: string
# minProperties: 1
#- Name: v2x-support-ind
# In: query
# Description: PCF supports V2X
# Schema:
# Type: boolean
#- Name: redundant-gtpu
# In: query
# Description: UPF supports redundant gtp-u to be discovered
# Schema:
# Type: boolean
#- Name: ipups
# In: query
# Description: UPF which is configured for IPUPS functionality to be discovered

# Schema:
# Type: boolean
#- Name: scp-domain-list
# In: query
# Description: SCP domains the target SCP belongs to
# Schema:
# Type: array
# Items:
# Type: string
# Min Items: 1
# Style: form
# Explode: false

```

```

#- Name: scp-domain-list
# In: query
# Description: SCP domains the target SCP belongs to # Schema:
# Schema:
# Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/Fqdn'
#- Name: ipv4-addr
# In: query
# Description: IPv4 address reachable through the SCP
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
#- Name: ipv6-prefix
# In: query
# Description: IPv6 prefix reachable through the SCP
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'
#- Name: served-nf-set-id
# In: query
# Description: NF Set ID served by the SCP
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/NfSetId'
#- Name: remote-plmn-id
# In: query
# Description: Id of the PLMN reachable through the SCP
# Content:
# Application/JSON:
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
#- Name: data-forwarding
# In: query
# Description: UPF Instance(s) configured for data forwarding are requested
# Schema:
# Type: boolean
#- Name: preferred-full-plmn
# In: query
# Description: NF Instance(s) serving the full PLMN are preferred
# Schema:
# Type: boolean
#- Name: requester-features
# In: query
# Description: Features supported by the NF Service Consumer that is invoking
the Nnrf_NFDiscovery service
# Schema:
# Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'

#- Name: realm-id
# In: query
# Description: realm-id to search for an appropriate UDSF
# Schema:
# Type: string
#- Name: storage-id
# In: query
# Description: storage-id to search for an appropriate UDSF

```

```

# Schema:
#   Type: string
#- Name: vsmf-support-ind
# In: query
# Description: storage-id to search for an appropriate UDSF
# Schema:
#   Type: boolean

```

Responses:**'200':****Description:** Expected response to a valid request**Content:****Application/JSON:****Schema:****Reference:** '#/components/schemas/SearchResult'**Links:****search:****operationId:** RetrieveStoredSearch**parameters:****searchId:** \$response.body#/searchId**Description:**

The 'searchId' parameter returned in the response can be used as the 'searchId' parameter in the GET request to '/searches/{searchId}'

completeSearch:**operationId:** RetrieveCompleteSearch**parameters:****searchId:** \$response.body#/searchId**Description:**

The 'searchId' parameter returned in the response can be used as the 'searchId' parameter in the GET request to '/searches/{searchId}/complete'

Headers:**Cache-Control:**

Description: Cache-Control containing max-age, described in IETF RFC 7234, 5.2

Schema:**Type:** string**ETag:**

Description: Entity Tag containing a strong validator, described in IETF RFC 7232, 2.3

Schema:**Type:** string**Content-Encoding:**

Description: Entity Tag containing a strong validator, described in IETF RFC 7232, 2.3

Schema:**Type:** string**'307':****Description:** Temporary Redirect**Content:****Application/JSON:****Schema:****Reference:** '#/components/schemas/SearchResult'**Headers:**

```

      Location:
      Description: 'The URI pointing to the resource located on the redirect target
NRF'
      required: true
      schema:
      Type: string
'308':
  Description: Permanent Redirect
  Content:
  Application/JSON:
  Schema:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RedirectResponse'
  Headers:
  Location:
  Description: 'The URI pointing to the resource located on the redirect target
NRF'
    required: 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'

```

/searches/{searchId}

```

get:
  operationId: RetrieveStoredSearch
  tags:
  - Stored Search (Document)
  parameters:
  - $ref: '#/components/parameters/searchId'
  - name: Accept-Encoding
    in: header

```

/searches/{searchId}/complete:

```

    description: Accept-Encoding, described in IETF RFC 7231
    schema:
      type: string
  responses:
    '200':
      $ref: '#/components/responses/200'
    '307':
      description: Temporary Redirect
      content:
        application/json:
          schema:
            $ref: 'TS29571_CommonData.yaml#/components/schemas/RedirectResponse'
      headers:
        Location:
          description: 'The URI pointing to the resource located on the redirect
target NRF'
          required: true
          schema:
            type: string
    '308':
      description: Permanent Redirect
      content:
        application/json:
          schema:
            $ref: 'TS29571_CommonData.yaml#/components/schemas/RedirectResponse'
      headers:
        Location:
          description: 'The URI pointing to the resource located on the redirect
target NRF'
          required: true
          schema:
            type: string

```

/searches/{searchId}/complete:

```

get:
  operationId: RetrieveCompleteSearch
  tags:
    - Complete Stored Search (Document)
  parameters:
    - $ref: '#/components/parameters/searchId'
    - name: Accept-Encoding
      in: header
      description: Accept-Encoding, described in IETF RFC 7231
      schema:
        type: string
  responses:
    '200':
      $ref: '#/components/responses/200'
    '307':

```



```

    description: Temporary Redirect
    content:
      application/json:
        schema:
          $ref: 'TS29571_CommonData.yaml#/components/schemas/RedirectResponse'
    headers:
      Location:
        description: 'The URI pointing to the resource located on the redirect
target NRF'
        required: true
        schema:
          type: string
  '308':
    description: Permanent Redirect
    content:
      application/json:
        schema:
          $ref: 'TS29571_CommonData.yaml#/components/schemas/RedirectResponse'
    headers:
      Location:
        description: 'The URI pointing to the resource located on the redirect
target NRF'
        required: true
        schema:
          type: string

```

Components

```

securitySchemes:
  oAuth2ClientCredentials:
    Type: oauth2
    Flows:
      clientCredentials:
        tokenUrl: '/oauth2/token'
        scopes:
          nnrf-disc: Access to the Nnrf_NFDDiscovery API
parameters:
  searchId:
    name: searchId
    in: path
    description: Id of a stored search
    required: true
    schema:
      type: string
responses:
  '200':
    description: Expected response to a valid request
    content:
      application/json:

```

```

    schema:
      $ref: '#/components/schemas/StoredSearchResult'
headers:
  Cache-Control:
    description: Cache-Control containing max-age, described in IETF RFC 7234, 5.2

    schema:
      type: string
  ETag:
    description: Entity Tag containing a strong validator, described in IETF RFC
7232, 2.3
    schema:
      type: string
  Content-Encoding:
    description: Content-Encoding, described in IETF RFC 7231
    schema:
      type: string

schemas:
  SearchResult:
    description: Contains the list of NF Profiles returned in a Discovery response
    Type: object
    Required:
      - nfInstances
    Properties:
      validityPeriod:
        Type: integer
      nfInstances:
        Type: array
        Items:
          Reference: '#/components/schemas/NFProfile'
      searchId:
        type: string
      numNfInstComplete:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Uint32'
      preferredSearch:
        Reference: '#/components/schemas/PreferredSearch'
      nrfSupportedFeatures:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
  StoredSearchResult:
    description: Contains a complete search result (i.e. a number of discovered NF
Instances), stored by NRF as a consequence of a prior search result
    type: object
    required:
      - nfInstances
    properties:
      nfInstances:
        type: array
        items:
          Reference: '#/components/schemas/NFProfile'
    description: Information of an NF Instance discovered by the NRF
  NFProfile:
    Type: object

```

Required:

- nfInstanceId
- nfType
- nfStatus

Properties:**nfInstanceId:**

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

nfInstanceName:

type: string

nfType:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NFType'

nfStatus:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NFStatus'

plmnList:

Type: array

Items:

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

minItems: 1

sNssais:

Type: array

Items:

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

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

minItems: 1

nsiList:

Type: array

Items:

Type: string

minItems: 1

fqdn:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/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

capacity:

Type: integer

Minimum: 0

Maximum: 65535

load:

Type: integer

Minimum: 0

Maximum: 100

locality:

Type: string

priority:

```

    Type: integer
    Minimum: 0
    Maximum: 65535
  udrInfo:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/UdrInfo'
    udrInfoList:
      type: object
      additionalProperties:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/UdrInfo'
      minProperties: 1
  udmInfo:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/UdmInfo'
    udmInfoList:
      type: object
      additionalProperties:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/UdmInfo'
      minProperties: 1
  ausfInfo:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/AusfInfo'
    ausfInfoList:
      type: object
      additionalProperties:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/AusfInfo'
      minProperties: 1
  amfInfo:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/AmfInfo'
    amfInfoList:
      type: object
      additionalProperties:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/AmfInfo'
      minProperties: 1
  smfInfo:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/SmfInfo'
    smfInfoList:
      type: object
      additionalProperties:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/smfInfo'
      minProperties: 1
  upfInfo:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/UpfInfo'
    upfInfoList:
      type: object
      additionalProperties:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/upfInfo'
      minProperties: 1
  pcfInfo:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/PcfInfo'
    pcffInfoList:
      type: object
      additionalProperties:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/pcfInfo'

```

```

    minProperties: 1
bsfInfo:
  Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/bsfInfo'
bsfInfoList:
  type: object
  additionalProperties:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/bsfInfo'
    minProperties: 1
chfInfo:
  Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/ChfInfo'
chfInfoList:
  type: object
  additionalProperties:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/chfInfo'
    minProperties: 1
udsInfo:
  Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/udsInfo'
udsInfoList:
  type: object
  additionalProperties:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/udsInfo'
    minProperties: 1
nwdafInfo:
  Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/nwdafInfo'
nefInfo:
  Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/nefInfo'
pcscfInfoList:
  type: object
  additionalProperties:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/pcscfInfo'
    minProperties: 1
hssInfoList:
  type: object
  additionalProperties:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/hssInfo'
    minProperties: 1
customInfo:
  Type: object
recoveryTime:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
nfServicePersistence:
  Type: boolean
  Default: false
nfServices:
  deprecated: true
  Type: array
  Items:
    Reference: '#/components/schemas/NFService'
  minItems: 1
  deprecated: true
nfServiceList:

```

```

    type: object
    additionalProperties:
      Reference: '#/components/schemas/NFService'
    minProperties: 1
    defaultNotificationSubscriptions:
      type: array
      items:
        Reference:
'TS29510_Nnrf_NFManagement.yaml#/components/schemas/DefaultNotificationSubscription'
    lmfInfo:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/lmfInfo'
    gmlcInfo:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/gmlcInfo'
    snpnList:
      type: array
      items:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/PlmnIdNid'
      minItems: 1
    nfSetIdList:
      type: array
      items:
        Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NfSetId'
      minItems: 1
    servingScope:
      type: array
      items:
        type: string
      minItems: 1
    lcHSupportInd:
      type: boolean
      default: false
    olcHSupportInd:
      type: boolean
      default: false
    nfSetRecoveryTimeList:
      type: object
      additionalProperties:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
      minProperties: 1
    serviceSetRecoveryTimeList:
      type: object
      additionalProperties:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
      minProperties: 1
    scpDomains:
      type: array
      items:
        type: string
      minItems: 1
    scpInfo:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/ScpInfo'
  NFService:

```

description: Information of a given NF Service Instance; it is part of the NFProfile of an NF Instance discovered by the NRF

Type: object

Required:

- serviceInstanceId
- serviceName
- versions
- scheme
- nfServiceStatus

Properties:

serviceInstanceId:

Type: string

serviceName:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/ServiceName'

versions:

Type: array

Items:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NFServiceVersion'

minItems: 1

scheme:

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

nfServiceStatus:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NFServiceStatus'

fqdn:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/Fqdn'

ipEndPoints:

Type: array

Items:

Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/IpEndPoint'

minItems: 1

apiPrefix:

Type: string

defaultNotificationSubscriptions:

Type: array

Items:

Reference:

'TS29510_Nnrf_NFManagement.yaml#/components/schemas/DefaultNotificationSubscription'

minItems: 1

capacity:

Type: integer

Minimum: 0

Maximum: 65535

load:

Type: integer

Minimum: 0

Maximum: 100

loadTimeStamp:

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

priority:

Type: integer

Minimum: 0

Maximum: 65535

```

recoveryTime:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
chfServiceInfo:
  Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/ChfServiceInfo'
supportedFeatures:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
nfServiceSetIdList:
  type: array
  items:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/NfServiceSetId'
  minItems: 1
sNssais:
  type: array
  items:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/ExtSnsai'
  minItems: 1
perPlmnSnsaiList:
  type: array
  items:
    Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/PlmnSnsai'
  minItems: 1
vendorId:
  Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/VendorId'
supportedVendorSpecificFeatures:
  type: object
  additionalProperties:
    type: array
    items:
      Reference:
'TS29510_Nnrf_NFManagement.yaml#/components/schemas/VendorSpecificFeature'
    minItems: 1
    minProperties: 1
externalDocs:
  description: 3GPP TS 29.510 V15.3.0; 5G System; Network Function Repository Services;
Stage 3
  url: 'http://www.3gpp.org/ftp/Specs/archive/29_series/29.510/'
  oauth2Required:
    type: boolean
  allowedOperationsPerNfType:
    type: object
    additionalProperties:
      type: array
      items:
        type: string
        minItems: 1
        minProperties: 1
  allowedOperationsPerNfInstance:
    type: object
    additionalProperties:
      type: array
      items:
        type: string

```



```
      minItems: 1
      minProperties: 1
    PreferredSearch:
      description: Contains information on whether the returned NFProfiles match the
preferred query parameters
      type: object
      properties:
        preferredTaiMatchInd:
          type: boolean
          default: false
        preferredFullPlmnMatchInd:
          type: boolean
          default: false
        preferredApiVersionsMatchInd:
          type: boolean
        otherApiVersionsInd:
          type: boolean
        preferredLocalityMatchInd:
          type: boolean
          default: false
        otherLocalityInd:
          type: boolean
          default: false
```

External Docs

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/'

