

Package: geonapi (via r-universe)

August 16, 2024

Type Package

Title 'GeoNetwork' API R Interface

Version 0.7-2

Date 2024-03-21

Maintainer Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Description Provides an R interface to the 'GeoNetwork' API (<<https://geonetwork-opensource.org/#api>>) allowing to upload and publish metadata in a 'GeoNetwork' web-application and expose it to OGC CSW.

Depends R (>= 3.1.0), geometa, keyring

Imports R6, openssl, httr, XML, plyr

Suggests testthat, roxygen2

License MIT + file LICENSE

URL <https://github.com/eblondel/geonapi/wiki>,
<https://geonetwork-opensource.org>

BugReports <https://github.com/eblondel/geonapi/issues>

LazyLoad yes

RoxygenNote 7.2.3

Repository <https://eblondel.r-universe.dev>

RemoteUrl <https://github.com/eblondel/geonapi>

RemoteRef HEAD

RemoteSha f9b98b46385d3579d44aef0a4d35de18be857bb0

Contents

geonapi	2
GNAbstractManager	2
GNLegacyAPIManager	5
GNManager	10

GNOpenAPIManager	11
GNPrivConfiguration	18
GNRESTRequest	20
GNUtills	21
GNVersion	22

Index	25
--------------	-----------

geonapi	<i>'GeoNetwork' API R Interface</i>
---------	-------------------------------------

Description

Provides an R interface to the 'GeoNetwork' API (<<https://geonetwork-opensource.org/#api>>) allowing to upload and publish metadata in a 'GeoNetwork' web-application and expose it to OGC CSW Web-Services (Catalogue Service for the Web).

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GNAbstractManager	<i>GNAbstractManager</i>
-------------------	--------------------------

Description

GNAbstractManager
GNAbstractManager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for communication with the REST API of a GeoNetwork instance.

Public fields

verbose.info If package info log messages have to be printed out
 verbose.debug If curl debug log messages have to be printed out
 loggerType the type of logger
 url the Base url of GeoNetwork
 version the version of GeoNetwork. Handled as GNVersion object
 lang the language for Geonetwork service. Default is eng
 basicAuth if basic auth is performed

Methods

Public methods:

- [GNAbstractManager\\$logger\(\)](#)
- [GNAbstractManager\\$INFO\(\)](#)
- [GNAbstractManager\\$WARN\(\)](#)
- [GNAbstractManager\\$ERROR\(\)](#)
- [GNAbstractManager\\$new\(\)](#)
- [GNAbstractManager\\$getUrl\(\)](#)
- [GNAbstractManager\\$getLang\(\)](#)
- [GNAbstractManager\\$login\(\)](#)
- [GNAbstractManager\\$getClassName\(\)](#)
- [GNAbstractManager\\$clone\(\)](#)

Method `logger()`: Provides log messages

Usage:

`GNAbstractManager$logger(type, text)`

Arguments:

type type of log ("INFO", "WARN", "ERROR")

text the log message text

Method `INFO()`: Provides INFO log messages

Usage:

`GNAbstractManager$INFO(text)`

Arguments:

text the log message text

Method `WARN()`: Provides WARN log messages

Usage:

`GNAbstractManager$WARN(text)`

Arguments:

text the log message text

Method `ERROR()`: Provides ERROR log messages

Usage:

`GNAbstractManager$ERROR(text)`

Arguments:

text the log message text

Method `new()`: This method is used to instantiate a [GNAbstractManager](#) with the url of the GeoNetwork and credentials to authenticate (user/pwd). By default, the logger argument will be set to NULL (no logger).

The `keyring_backend` can be set to use a different backend for storing the Geonetwork password/token with **keyring** (Default value is 'env').

The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

Usage:

```
GNAbstractManager$new(  
  url,  
  user = NULL,  
  pwd = NULL,  
  version,  
  logger = NULL,  
  keyring_backend = "env"  
)
```

Arguments:

url url
user user
pwd pwd
version version
logger logger
keyring_backend keyring backend. Default is 'env'

Method getUrl(): Get URL*Usage:*

```
GNAbstractManager$getUrl()
```

Returns: an object of class character

Method getLang(): Get service language*Usage:*

```
GNAbstractManager$getLang()
```

Returns: an object of class character

Method login(): Log-ins. This methods (here abstract) attempts a connection to GeoNetwork API. Used internally by subclasses of [GNAbstractManager](#) to login Geonetwork.*Usage:*

```
GNAbstractManager$login(user, pwd)
```

Arguments:

user user
pwd pwd

Method getClassName(): Get class name*Usage:*

```
GNAbstractManager$getClassName()
```

Returns: an object of class character

Method clone(): The objects of this class are cloneable with this method.*Usage:*

```
GNAbstractManager$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GNLegacyAPIManager *GNLegacyAPIManager*

Description

GNLegacyAPIManager

GNLegacyAPIManager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for communication with the REST API of a GeoNetwork instance using the legacy API.

Super class

[geonapi::GNAbstractManager](#) -> GNLegacyAPIManager

Methods**Public methods:**

- [GNLegacyAPIManager\\$new\(\)](#)
- [GNLegacyAPIManager\\$login\(\)](#)
- [GNLegacyAPIManager\\$getGroups\(\)](#)
- [GNLegacyAPIManager\\$getCategories\(\)](#)
- [GNLegacyAPIManager\\$insertMetadata\(\)](#)
- [GNLegacyAPIManager\\$setPrivConfiguration\(\)](#)
- [GNLegacyAPIManager\\$get\(\)](#)
- [GNLegacyAPIManager\\$getMetadataByID\(\)](#)
- [GNLegacyAPIManager\\$getMetadataByUUID\(\)](#)
- [GNLegacyAPIManager\\$getInfoByID\(\)](#)
- [GNLegacyAPIManager\\$getInfoByUUID\(\)](#)
- [GNLegacyAPIManager\\$updateMetadata\(\)](#)
- [GNLegacyAPIManager\\$deleteMetadata\(\)](#)
- [GNLegacyAPIManager\\$deleteMetadataAll\(\)](#)
- [GNLegacyAPIManager\\$clone\(\)](#)

Method new(): This method is used to instantiate a GNLegacyAPIManager with the url of the GeoNetwork and credentials to authenticate (user/pwd).

The keyring_backend can be set to use a different backend for storing the Geonetwork password/token with **keyring** (Default value is 'env').

The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

Usage:

```
GNLegacyAPIManager$new(
  url,
  user = NULL,
  pwd = NULL,
  version,
  logger = NULL,
  keyring_backend = "env"
)
```

Arguments:

```
url url
user user
pwd pwd
version version
logger logger
keyring_backend keyring backend. Default is 'env'
```

Method login(): #' This methods attempts a connection to GeoNetwork REST API. User internally during initialization of GNLegacyAPIManager.

Usage:

```
GNLegacyAPIManager$login(user, pwd)
```

Arguments:

```
user user
pwd pwd
```

Method getGroups(): Retrieves the list of user groups available in Geonetwork

Usage:

```
GNLegacyAPIManager$getGroups()
```

Returns: an object of class data.frame

Method getCategories(): Retrieves the list of categories available in Geonetwork

Usage:

```
GNLegacyAPIManager$getCategories()
```

Returns: an object of class data.frame

Method insertMetadata(): Inserts a metadata by file, XML object or **geometa** object of class ISOMetadata or ISOFeatureCatalogue. If successful, returns the Geonetwork metadata internal identifier (integer). Extra parameters geometa_validate (TRUE by default) and geometa_inspire (FALSE by default) can be used with geometa objects for perform ISO and INSPIRE validation respectively. In that case on object of class geometa::INSPIREMetadataValidator, with a proper user API key, should be specified as geometa_inspireValidator argument.

Usage:

```
GNLegacyAPIManager$insertMetadata(
    xml = NULL,
    file = NULL,
    geometa = NULL,
    group,
    category = NULL,
    stylesheet = NULL,
    validate = FALSE,
    geometa_validate = TRUE,
    geometa_inspire = FALSE,
    geometa_inspireValidator = NULL
)
```

Arguments:

xml xml object of class [XMLInternalNode-class](#) from **XML**
file file
geometa geometa, object of class ISOMetadata or ISOFeatureCatalogue from **geometa**
group group
category category
stylesheet stylesheet
validate validate
geometa_validate validate geometa object
geometa_inspire validate geometa object vs. INSPIRE
geometa_inspireValidator geometa INSPIRE validator to use

Method setPrivConfiguration(): Set the privilege configuration for a metadata. 'id' is the metadata integer id. 'config' is an object of class "GNPrivConfiguration".

Usage:

```
GNLegacyAPIManager$setPrivConfiguration(id, config)
```

Arguments:

id id
config config

Method get(): Generic getter for metadata. Possible values for by are 'id', 'uuid'. Used internally only. The 'output' argument gives the type of output to return, with possible values "id", "metadata", "info".

Usage:

```
GNLegacyAPIManager$get(id, by, output)
```

Arguments:

id id
by by
output output

Method getMetadataByID(): Get a metadata by Id

Usage:

```
GNLegacyAPIManager$getMetadataByID(id)
```

Arguments:

```
id id
```

Returns: an object of class ISOMetadata (ISO 19115) or ISOFeatureCatalogue (ISO 19110) (from **geometa** package)

Method getMetadataByUUID(): Get a metadata by UUID*Usage:*

```
GNLegacyAPIManager$getMetadataByUUID(uuid)
```

Arguments:

```
uuid uuid
```

Returns: an object of class ISOMetadata (ISO 19115) or ISOFeatureCatalogue (ISO 19110) (from **geometa** package)

Method getInfoByID(): Get a metadata Info by Id.*Usage:*

```
GNLegacyAPIManager$getInfoByID(id)
```

Arguments:

```
id id
```

Returns: an XML document object

Method getInfoByUUID(): Get a metadata Info by UUID*Usage:*

```
GNLegacyAPIManager$getInfoByUUID(uuid)
```

Arguments:

```
uuid uuid
```

Returns: an XML document object

Method updateMetadata(): Updates a metadata by file, XML object or **geometa** object of class 'ISOMetadata' or 'ISOFeatureCatalogue'. Extra parameters `geometa_validate` (TRUE by default) and `geometa_inspire` (FALSE by default) can be used with `geometa` objects for perform ISO and INSPIRE validation respectively. In that case on object of class `geometa::INSPIREMetadataValidator`, with a proper user API key, should be specified as `geometa_inspireValidator` argument.

Usage:

```
GNLegacyAPIManager$updateMetadata(
  id,
  xml = NULL,
  file = NULL,
  geometa = NULL,
  geometa_validate = TRUE,
  geometa_inspire = FALSE,
  geometa_inspireValidator = NULL
)
```


Arguments:

id metadata id

xml xml object of class [XMLInternalNode-class](#) from **XML**

file file

geometa geometa, object of class ISOMetadata or ISOFeatureCatalogue from **geometa**

geometa_validate validate geometa object

geometa_inspire validate geometa object vs. INSPIRE

geometa_inspireValidator geometa INSPIRE validator to use

Method deleteMetadata(): Deletes metadata by Id.

Usage:

```
GNLegacyAPIManager$deleteMetadata(id)
```

Arguments:

id id

Returns: the id of the record deleted, NULL otherwise

Method deleteMetadataAll(): Deletes all metadata

Usage:

```
GNLegacyAPIManager$deleteMetadataAll()
```

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
GNLegacyAPIManager$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

Examples

```
## Not run:  
GNLegacyAPIManager$new("http://localhost:8080/geonetwork", "admin", "geonetwork", "3.0.0")  
  
## End(Not run)
```

GNManager

GeoNetwork REST API Manager

Description

The function `GNManager$new` will set-up the right Geonetwork manager depending on the GeoNetwork version specified by the user. For the time-being, GeoNetwork with version < 4 will be interfaced with the GeoNetwork legacy API (see detailed documentation at [GNLegacyAPIManager](#)), while starting with GeoNetwork 3.2, the new GeoNetwork OpenAPI will be used.

Format

`R6Class` object.

Value

Object of `R6Class` with methods for communication with the API of a GeoNetwork instance.

Super class

`geonapi::GNAbstractManager` -> `GNManager`

Methods

Public methods:

- `GNManager$new()`
- `GNManager$clone()`

Method `new()`: Initializes a `GNManager`

Usage:

```
GNManager$new(url, user = NULL, pwd = NULL, version, logger = NULL)
```

Arguments:

`url` url

`user` user

`pwd` pwd

`version` version

`logger` logger

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
GNManager$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:  
  GManager$new("http://localhost:8080/geonetwork", "admin", "geonetwork", "3.0.0")  
  
## End(Not run)
```

GNOpenAPIManager

GNOpenAPIManager

Description

GNOpenAPIManager

GNOpenAPIManager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for communication with the REST API of a GeoNetwork instance using the legacy API.

Super class

[geonapi::GNAbstractManager](#) -> GNOpenAPIManager

Methods**Public methods:**

- [GNOpenAPIManager\\$new\(\)](#)
- [GNOpenAPIManager\\$login\(\)](#)
- [GNOpenAPIManager\\$getGroups\(\)](#)
- [GNOpenAPIManager\\$getTags\(\)](#)
- [GNOpenAPIManager\\$getCategories\(\)](#)
- [GNOpenAPIManager\\$getMetadataByUUID\(\)](#)
- [GNOpenAPIManager\\$insertRecord\(\)](#)
- [GNOpenAPIManager\\$insertMetadata\(\)](#)
- [GNOpenAPIManager\\$updateMetadata\(\)](#)
- [GNOpenAPIManager\\$deleteMetadata\(\)](#)

- `GNOpenAPIManager$uploadAttachment()`
- `GNOpenAPIManager$publishThumbnail()`
- `GNOpenAPIManager$doiCheckPreConditions()`
- `GNOpenAPIManager$createDOI()`
- `GNOpenAPIManager$deleteDOI()`
- `GNOpenAPIManager$clone()`

Method new(): This method is used to instantiate a GNOpenAPIManager with the url of the GeoNetwork and credentials to authenticate (user/pwd).

The `keyring_backend` can be set to use a different backend for storing the Geonetwork password/token with **keyring** (Default value is 'env').

The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

Usage:

```
GNOpenAPIManager$new(
  url,
  user = NULL,
  pwd = NULL,
  version,
  logger = NULL,
  keyring_backend = "env"
)
```

Arguments:

```
url url
user user
pwd pwd
version version
logger logger
keyring_backend keyring backend
```

Method login(): This methods attempts a connection to GeoNetwork REST API. User internally during initialization of GNLegacyAPIManager.

Usage:

```
GNOpenAPIManager$login(user, pwd)
```

Arguments:

```
user user
pwd pwd
```

Method getGroups(): Retrieves the list of user groups available in Geonetwork

Usage:

```
GNOpenAPIManager$getGroups()
```

Returns: an object of class `data.frame`

Method getTags(): Retrieves the list of tags (categories) available in Geonetwork

Usage:

```
GNOpenAPIManager$getTags()
```

Returns: an object of class `data.frame`

Method `getCategories()`: Retrieves the list of categories (same as tags) available in Geonet-work

Usage:

```
GNOpenAPIManager$getCategories()
```

Returns: an object of class `data.frame`

Method `getMetadataByUUID()`: Get a metadata by UUID.

Usage:

```
GNOpenAPIManager$getMetadataByUUID(
  uuid,
  addSchemaLocation = TRUE,
  increasePopularity = TRUE,
  approved = TRUE
)
```

Arguments:

`uuid` `uuid`

`addSchemaLocation` add schema location. Default is TRUE

`increasePopularity` increase popularity. Default is TRUE

`approved` approved

Returns: Returns an object of class `ISOMetadata` (ISO 19115) or `ISOFeatureCatalogue` (ISO 19110) (from **geometa** package)

Method `insertRecord()`: Inserts a record by file, XML object or **geometa** object of class `ISOMetadata` or `ISOFeatureCatalogue`. Extra parameters related to **geometa** objects: `geometa_validate` (TRUE by default) and `geometa_inspire` (FALSE by default) can be used to perform ISO and INSPIRE validation respectively. In that case an object of class `geometa::INSPIREMetadataValidator`, with a proper user API key, should be specified as `geometa_inspireValidator` argument.

Usage:

```
GNOpenAPIManager$insertRecord(
  xml = NULL,
  file = NULL,
  geometa = NULL,
  metadataType = "METADATA",
  uuidProcessing = "NOTHING",
  group,
  category = NULL,
  rejectIfInvalid = FALSE,
  publishToAll = TRUE,
  transformWith = "_none_",
  schema = NULL,
  extra = NULL,
```

```

    geometa_validate = TRUE,
    geometa_inspire = FALSE,
    geometa_inspireValidator = NULL
)

```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**

file file

geometa geometa object of class ISOMetadata or ISOFeatureCatalogue

metadataType metadata type. By default METADATA

uuidProcessing UUID processing. By default NOTHING. Other possible value: OVERWRITE

group group

category category

rejectIfInvalid reject if invalid. Default FALSE

publishToAll publish to all. Default TRUE

transformWith transform with. Default is `_none_`

schema schema

extra extra

geometa_validate validate geometa object

geometa_inspire validate geometa object vs. INSPIRE

geometa_inspireValidator geometa INSPIRE validator to use

Method `insertMetadata()`: Inserts a metadata by file, XML object or **geometa** object of class ISOMetadata or ISOFeatureCatalogue. Extra parameters related to **geometa** objects: `geometa_validate` (TRUE by default) and `geometa_inspire` (FALSE by default) can be used to perform ISO and INSPIRE validation respectively. In that case on object of class `geometa::INSPIREMetadataValidator`, with a proper user API key, should be specified as `geometa_inspireValidator` argument.

Usage:

```

GNOpenAPIManager$insertMetadata(
  xml = NULL,
  file = NULL,
  geometa = NULL,
  metadataType = "METADATA",
  uuidProcessing = "NOTHING",
  group,
  category = NULL,
  rejectIfInvalid = FALSE,
  publishToAll = TRUE,
  transformWith = "_none_",
  schema = NULL,
  extra = NULL,
  geometa_validate = TRUE,
  geometa_inspire = FALSE,
  geometa_inspireValidator = NULL
)

```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**
 file file
 geometa geometa object of class ISOMetadata or ISOFeatureCatalogue
 metadataType metadata type. By default METADATA
 uuidProcessing UUID processing. By default NOTHING. Other possible value: OVERWRITE
 group group
 category category
 rejectIfInvalid reject if invalid. Default FALSE
 publishToAll publish to all. Default TRUE
 transformWith transform with. Default is `_none_`
 schema schema
 extra extra
 geometa_validate validate geometa object
 geometa_inspire validate geometa object vs. INSPIRE
 geometa_inspireValidator geometa INSPIRE validator to use

Method `updateMetadata()`: Inserts a metadata by file, XML object or **geometa** object of class ISOMetadata or ISOFeatureCatalogue. Extra parameters related to **geometa** objects: `geometa_validate` (TRUE by default) and `geometa_inspire` (FALSE by default) can be used to perform ISO and INSPIRE validation respectively. In that case an object of class `geometa::INSPIREMetadataValidator`, with a proper user API key, should be specified as `geometa_inspireValidator` argument.

Usage:

```

GNOpenAPIManager$updateMetadata(
  xml = NULL,
  file = NULL,
  geometa = NULL,
  metadataType = "METADATA",
  group,
  category = NULL,
  rejectIfInvalid = FALSE,
  publishToAll = TRUE,
  transformWith = "_none_",
  schema = NULL,
  extra = NULL,
  geometa_validate = TRUE,
  geometa_inspire = FALSE,
  geometa_inspireValidator = NULL
)

```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**
 file file
 geometa geometa object of class ISOMetadata or ISOFeatureCatalogue
 metadataType metadata type. By default METADATA
 group group
 category category

rejectIfInvalid reject if invalid. Default FALSE
 publishToAll publish to all. Default TRUE
 transformWith transform with. Default is `_none_`
 schema schema
 extra extra
 geometa_validate validate geometa object
 geometa_inspire validate geometa object vs. INSPIRE
 geometa_inspireValidator geometa INSPIRE validator to use

Method `deleteMetadata()`: Deletes a metadata by ID

Usage:

```
GNOpenAPIManager$deleteMetadata(id, withBackup = TRUE)
```

Arguments:

id id
 withBackup proceed with backup. Default is TRUE

Method `uploadAttachment()`: Uploads attachment

Usage:

```
GNOpenAPIManager$uploadAttachment(
  id,
  file,
  visibility = "public",
  approved = TRUE
)
```

Arguments:

id metadata identifier
 file file to upload
 visibility public or private
 approved object of class logical

Returns: a named list of the uploaded attachment, including the url, size, id and type, NULL otherwise

Method `publishThumbnail()`: Publishes thumbnail based on URL

Usage:

```
GNOpenAPIManager$publishThumbnail(id, url, desc = "")
```

Arguments:

id metadata identifier
 url thumbnail URL
 desc thumbnail description

Returns: TRUE if published, FALSE otherwise

Method `doiCheckPreConditions()`: Checks pre-conditions to publish DOI

Usage:


```
GNOpenAPIManager$doiCheckPreConditions(id)
```

Arguments:

id metadata identifier

Returns: TRUE if DOI pre-conditions are fulfilled, FALSE otherwise

Method createDOI(): Submit a record to the Datacite metadata store in order to create a DOI.

Usage:

```
GNOpenAPIManager$createDOI(id)
```

Arguments:

id metadata identifier

Returns: TRUE if metadata record has been submitted with DOI created, FALSE otherwise

Method deleteDOI(): Remove a DOI (this is not recommended, DOI are supposed to be persistent once created. This is mainly here for testing).

Usage:

```
GNOpenAPIManager$deleteDOI(id)
```

Arguments:

id

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
GNOpenAPIManager$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:  
GNOpenAPIManager$new("http://localhost:8080/geonetwork", "admin", "geonetwork", "4.0.5")  
  
## End(Not run)
```

GNPrivConfiguration *A GeoNetwork privilege configuration*

Description

This class is an utility to configure privileges

This class is an utility to configure privileges

Format

[R6Class](#) object.

[R6Class](#) object.

Details

GeoNetwork REST API - GeoNetwork privilege configuration

GeoNetwork REST API - GeoNetwork privilege configuration

Value

Object of [R6Class](#) for modelling a GeoNetwork Privilege configuration

Object of [R6Class](#) for modelling a GeoNetwork Privilege configuration

Public fields

group group

privileges privileges

Methods

Public methods:

- [GNPriv\\$new\(\)](#)
- [GNPriv\\$clone\(\)](#)

Method new(): Initializes a [GNPriv](#) object

Usage:

GNPriv\$new(group, privileges)

Arguments:

group group

privileges privileges

Method clone(): The objects of this class are cloneable with this method.

Usage:

GNPriv\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Public fields

privileges privileges

Methods**Public methods:**

- [GNPrivConfiguration\\$new\(\)](#)
- [GNPrivConfiguration\\$setPrivileges\(\)](#)
- [GNPrivConfiguration\\$clone\(\)](#)

Method `new()`: Initializes an object of class [GNPrivConfiguration](#)

Usage:

```
GNPrivConfiguration$new()
```

Method `setPrivileges()`: Sets the operation privileges for a particular group. Allowed group values are "guest", "intranet" and "all". Allowed values for operation privileges are "view", "download", "editing", "notify", "dynamic" and "featured".

Usage:

```
GNPrivConfiguration$setPrivileges(group, privileges)
```

Arguments:

group group

privileges privileges

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
GNPrivConfiguration$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

Examples

```
## Not run:
priv <- GNPriv$new(group="all", privileges=c("view","dynamic","featured"))

## End(Not run)

## Not run:
pcfg <- GNPrivConfiguration$new()
pcfg$setPrivileges("all", c("view","dynamic","featured"))

## End(Not run)
```

GNRESTRequest

GeoNetwork REST API REST Request

Description

GeoNetwork REST API REST Request

GeoNetwork REST API REST Request

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoNetwork REST request

Public fields

rootName root name

children children

Methods

Public methods:

- [GNRESTRequest\\$new\(\)](#)
- [GNRESTRequest\\$setChild\(\)](#)
- [GNRESTRequest\\$encode\(\)](#)
- [GNRESTRequest\\$clone\(\)](#)

Method [new\(\)](#): Initializes a [GNRESTRequest](#)

Usage:

[GNRESTRequest\\$new\(...\)](#)

Arguments:

... any parameter to pass to the request

Method [setChild\(\)](#): Set child

Usage:

[GNRESTRequest\\$setChild\(key, value\)](#)

Arguments:

key key

value value

Method [encode\(\)](#): Encodes request as XML

Usage:

GNRESTRequest\$encode()

Returns: an object of class character representing the XML

Method clone(): The objects of this class are cloneable with this method.

Usage:

GNRESTRequest\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

GNUtils

GeoNetwork REST API Manager Utils

Description

GeoNetwork REST API Manager Utils

GeoNetwork REST API Manager Utils

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with static util methods for communication with the REST API of a GeoNetwork instance.

Static methods

getUserAgent() This method is used to get the user agent for performing GeoNetwork API requests. Here the user agent will be compound by geonapi package name and version.

getUserToken(user, pwd) This method is used to get the user authentication token for performing GeoNetwork API requests. Token is given a Base64 encoded string.

GET(url, path, token, verbose) This method performs a GET request for a given path to GeoNetwork REST API

PUT(url, path, token, filename, contentType, verbose) This method performs a PUT request for a given path to GeoNetwork REST API, to upload a file of name filename with given contentType

POST(url, path, token, content, contentType, encode, verbose) This method performs a POST request for a given path to GeoNetwork REST API, to post content of given contentType

DELETE(url, path, token, verbose) This method performs a DELETE request for a given GeoNetwork resource identified by a path in GeoNetwork REST API

parseResponseXML(req) Convenience method to parse XML response from GeoNetwork REST API. Although package **httr** suggests the use of **xml2** package for handling XML, **geonapi** still relies on the package **XML**. Response from **httr** is retrieved as text, and then parsed as XML 'xmlParse' function.

getPayloadXML(obj) Convenience method to create payload XML to send to GeoNetwork.

Methods

Public methods:

- [GNUutils\\$clone\(\)](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
GNUutils$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

GNVersion

A GeoNetwork version

Description

This class is an utility wrap the Geonetwork version

Format

[R6Class](#) object.

Details

GeoNetwork REST API - GeoNetwork Version

Value

Object of [R6Class](#) for modelling a GeoNetwork version

Public fields

version version

value value

Methods**Public methods:**

- [GNVersion\\$new\(\)](#)
- [GNVersion\\$lowerThan\(\)](#)
- [GNVersion\\$greaterThan\(\)](#)
- [GNVersion\\$equalTo\(\)](#)
- [GNVersion\\$clone\(\)](#)

Method `new()`: Initializes an object of class [GNVersion](#)

Usage:

```
GNVersion$new(version)
```

Arguments:

version version

Method `lowerThan()`: Compares to a version and returns TRUE if it is lower, FALSE otherwise

Usage:

```
GNVersion$lowerThan(version)
```

Arguments:

version version

Returns: TRUE if lower, FALSE otherwise

Method `greaterThan()`: Compares to a version and returns TRUE if it is greater, FALSE otherwise

Usage:

```
GNVersion$greaterThan(version)
```

Arguments:

version version

Returns: TRUE if lower, FALSE otherwise

Method `equalTo()`: Compares to a version and returns TRUE if it is equal, FALSE otherwise

Usage:

```
GNVersion$equalTo(version)
```

Arguments:

version version

Returns: TRUE if lower, FALSE otherwise

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
GNVersion$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:  
version <- GNVersion$new("2.6.4")  
  
## End(Not run)
```


Index

* **GeoNetwork**

GNPrivConfiguration, [18](#)
GNVersion, [22](#)

* **api**

GNAbstractManager, [2](#)
GNLegacyAPIManager, [5](#)
GNManager, [10](#)
GNOpenAPIManager, [11](#)
GNRESTRequest, [20](#)
GNUtils, [21](#)

* **configuration**

GNPrivConfiguration, [18](#)

* **geonetwork**

GNAbstractManager, [2](#)
GNLegacyAPIManager, [5](#)
GNManager, [10](#)
GNOpenAPIManager, [11](#)
GNRESTRequest, [20](#)
GNUtils, [21](#)

* **privilege**

GNPrivConfiguration, [18](#)

* **rest**

GNAbstractManager, [2](#)
GNLegacyAPIManager, [5](#)
GNManager, [10](#)
GNOpenAPIManager, [11](#)
GNRESTRequest, [20](#)
GNUtils, [21](#)

* **version**

GNVersion, [22](#)

geonapi, [2](#)

geonapi-package (geonapi), [2](#)

geonapi::GNAbstractManager, [5](#), [10](#), [11](#)

GNAbstractManager, [2](#), [3](#), [4](#)

GNLegacyAPIManager, [5](#), [10](#)

GNManager, [10](#), [10](#)

GNOpenAPIManager, [11](#)

GNPriv, [18](#)

GNPriv (GNPrivConfiguration), [18](#)

GNPrivConfiguration, [18](#), [19](#)

GNRESTRequest, [20](#), [20](#)

GNUtils, [21](#)

GNVersion, [22](#), [23](#)

R6Class, [2](#), [5](#), [10](#), [11](#), [18](#), [20–22](#)

XMLInternalNode-class, [7](#), [9](#), [14](#), [15](#)