

Package ‘geonode4R’

July 22, 2025

Type Package

Title Interface to 'GeoNode' REST API

Version 0.1-1

Date 2024-05-20

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Description Provides an interface to the 'GeoNode' API, allowing to upload and publish meta-data and data in 'GeoNode'.

For more information about the 'GeoNode' API, see <<https://geonode.org/>>.

Depends R (>= 3.1.0)

Imports R6, openssl, httr, keyring, readr

Suggests testthat, roxygen2, covr, shiny, knitr, markdown

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URL <https://github.com/eblondel/geonode4R>,
<https://eblondel.github.io/geonode4R/>, <https://geonode.org/>

BugReports <https://github.com/eblondel/geonode4R/issues>

Encoding UTF-8

LazyLoad yes

RoxygenNote 7.3.1

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

Date/Publication 2024-05-20 15:00:02 UTC

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GeoNodeManager

*GeoNode REST API Manager***Description**

GeoNode REST API Manager

GeoNode REST API Manager

Format[R6Class](#) object.**Value**Object of [R6Class](#) with methods for communication with the REST API of a GeoNode instance.**Public fields**`verbose.info` if geonode4R logs have to be printed`verbose.debug` if curl logs have to be printed`loggerType` the type of logger`url` the Base url of GeoNode**Methods****Public methods:**

- [GeoNodeManager\\$logger\(\)](#)
- [GeoNodeManager\\$INFO\(\)](#)
- [GeoNodeManager\\$WARN\(\)](#)
- [GeoNodeManager\\$ERROR\(\)](#)
- [GeoNodeManager\\$new\(\)](#)
- [GeoNodeManager\\$getUrl\(\)](#)
- [GeoNodeManager\\$connect\(\)](#)
- [GeoNodeManager\\$getExecutionStatus\(\)](#)
- [GeoNodeManager\\$getCategories\(\)](#)
- [GeoNodeManager\\$getCategory\(\)](#)
- [GeoNodeManager\\$getResourceByUUID\(\)](#)
- [GeoNodeManager\\$getResourceByAlternate\(\)](#)
- [GeoNodeManager\\$getResource\(\)](#)
- [GeoNodeManager\\$deleteResource\(\)](#)
- [GeoNodeManager\\$upload\(\)](#)
- [GeoNodeManager\\$uploadMetadata\(\)](#)

- [GeoNodeManager\\$getDataset\(\)](#)
- [GeoNodeManager\\$clone\(\)](#)

Method `logger()`: Prints a log message

Usage:

`GeoNodeManager$logger(type, text)`

Arguments:

`type` type of log, "INFO", "WARN", "ERROR"

`text` text

Method `INFO()`: Prints an INFO log message

Usage:

`GeoNodeManager$INFO(text)`

Arguments:

`text` text

Method `WARN()`: Prints an WARN log message

Usage:

`GeoNodeManager$WARN(text)`

Arguments:

`text` text

Method `ERROR()`: Prints an ERROR log message

Usage:

`GeoNodeManager$ERROR(text)`

Arguments:

`text` text

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

By default, the `logger` argument will be set to `NULL` (no logger). This argument accepts two possible values: `INFO`: to print only geosapi logs, `DEBUG`: to print geosapi and CURL logs.

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

Usage:

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

Arguments:

`url` url

`user` user

`pwd` pwd

`logger` logger

`keyring_backend` keyring backend. Default is 'env'

Method getUrl(): Get URL

Usage:

GeoNodeManager\$getUrl()

Returns: the Geoserver URL

Method connect(): Connects to geoServer

Usage:

GeoNodeManager\$connect()

Returns: TRUE if connected, raises an error otherwise

Method getExecutionStatus(): Get execution status

Usage:

GeoNodeManager\$getExecutionStatus(execution_id)

Arguments:

execution_id the execution id

Returns: the status of execution

Method getCategories(): Get categories

Usage:

GeoNodeManager\$getCategories(raw = FALSE)

Arguments:

raw Controls the output. Default will return an object of class [data.frame](#).

Returns: an object of class [list](#)

Method getCategory(): Get category

Usage:

GeoNodeManager\$getCategory(id, raw = FALSE)

Arguments:

id category id

raw Controls the output. Default will return an object of class [data.frame](#).

Returns: an object of class [list](#)

Method getResourceByUUID(): Get resource by UUID

Usage:

GeoNodeManager\$getResourceByUUID(uuid)

Arguments:

uuid resource uuid (or semantic id if used in place of uuid)

Returns: an object of class [list](#)

Method getResourceByAlternate(): Get resource by Alternate

Usage:

GeoNodeManager\$getResourceByAlternate(alternate)

Arguments:

alternate resource alternate

Returns: an object of class [list](#)

Method getResource(): Get resource

Usage:

GeoNodeManager\$getResource(id)

Arguments:

id resource id

Returns: an object of class [list](#)

Method deleteResource(): Deletes a resource

Usage:

GeoNodeManager\$deleteResource(id)

Arguments:

id resource (either a dataset or document) id

Returns: TRUE if deleted, FALSE otherwise

Method upload(): Uploads resource files

Usage:

GeoNodeManager\$upload(files)

Arguments:

files files

Returns: an object of class [list](#) giving the upload status

Method uploadMetadata(): Uploads ISO 19115 dataset metadata

Usage:

GeoNodeManager\$uploadMetadata(id, file)

Arguments:

id dataset id

file a metadata XML file following ISO 19115 specification

Returns: an object

Method getDataset(): Get dataset standardized metadata

Usage:

GeoNodeManager\$getDataset(id)

Arguments:

id dataset id

Returns: an object of class [list](#)

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

Usage:

GeoNodeManager\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:
  GeoNodeManager$new("http://localhost:8080", "user", "password")

## End(Not run)
```

 GeoNodeUtils

GeoNode REST API Manager Utils

Description

GeoNode REST API Manager Utils

GeoNode REST API Manager Utils

Format

[R6Class](#) object.

Value

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

Static methods

`getUserAgent()` This method is used to get the user agent for performing GeoNode API requests. Here the user agent will be compound by geonode4R package name and version.

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

`GET(url, user, pwd, path, verbose)` This method performs a GET request for a given path to GeoNode REST API

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

`POST(url, user, pwd, path, content, contentType, verbose)` This method performs a POST request for a given path to GeoNode REST API, to post content of given contentType

`DELETE(url, user, pwd, path, verbose)` This method performs a DELETE request for a given GeoServer resource identified by a path in GeoNode REST API

Methods

Public methods:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GeoNodeVersion

A GeoNode version

Description

This class allows to grab the GeoNode version.

Format

[R6Class](#) object.

Details

GeoNode REST API - GeoNode Version

Value

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

Public fields

`version` version

`value` value

Methods

Public methods:

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

Method [new\(\)](#): Initializes an object of class [GeoNodeVersion](#)

Usage:

```
GeoNodeVersion$new(url, user, pwd)
```

Arguments:

url url

user user

pwd pwd

Method [lowerThan\(\)](#): Compares to a version and returns TRUE if it is lower, FALSE otherwise

Usage:

```
GeoNodeVersion$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:

```
GeoNodeVersion$greaterThan(version)
```

Arguments:

version version

Returns: TRUE if greater, FALSE otherwise

Method [equalTo\(\)](#): Compares to a version and returns TRUE if it is equal, FALSE otherwise

Usage:

```
GeoNodeVersion$equalTo(version)
```

Arguments:

version version

Returns: TRUE if equal, FALSE otherwise

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:
version <- GeoNodeVersion$new(
  url = "http://localhost:8080/GeoNode",
  user = "admin", pwd = "GeoNode"
)

## End(Not run)
```

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