

Package ‘geosapi’

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Type Package

Title GeoServer REST API R Interface

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Description Provides an R interface to the GeoServer REST API, allowing to upload and publish data in a GeoServer web-application and expose data to OGC Web-Services. The package currently supports all CRUD (Create,Read,Update,Delete) operations on GeoServer workspaces, namespaces, datastores (stores of vector data), featuretypes, layers, styles, as well as vector data upload operations. For more information about the GeoServer REST API, see <<https://docs.geoserver.org/stable/en/user/rest/>>.

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<i>geosapi</i>	<i>GeoServer REST API R Interface</i>
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Description

Provides an R interface to the GeoServer REST API, allowing to upload and publish data in a GeoServer web-application and expose data to OGC Web-Services. The package currently supports all CRUD (Create,Read,Update,Delete) operations on GeoServer workspaces, namespaces, datastores (stores of vector data), featuretypes, layers, styles, as well as vector data upload operations. For more information about the GeoServer REST API, see <<https://docs.geoserver.org/stable/en/user/rest/>>

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

<i>GSAbsractCoverageStore</i>	<i>Geoserver REST API CoverageStore</i>
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Description

Geoserver REST API CoverageStore

Geoserver REST API CoverageStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer CoverageStore

Super classes

[geosapi::GSRESTResource](#) -> [geosapi::GSAbsractStore](#) -> [GSAbsractCoverageStore](#)

Public fields

url URL of the abstract coverage store

Methods

Public methods:

- [GSAbstractCoverageStore\\$new\(\)](#)
- [GSAbstractCoverageStore\\$decode\(\)](#)
- [GSAbstractCoverageStore\\$url\(\)](#)
- [GSAbstractCoverageStore\\$clone\(\)](#)

Method new(): initializes an abstract coverage store

Usage:

```
GSAbstractCoverageStore$new(
  xml = NULL,
  type = NULL,
  name = NULL,
  description = "",
  enabled = TRUE,
  url = NULL
)
```

Arguments:

xml an object of class [xml_node-class](#) to create object from XML
 type the type of coverage store
 name coverage store name
 description coverage store description
 enabled whether the store should be enabled or not. Default is TRUE
 url URL of the store

Method decode(): Decodes a coverage store from XML

Usage:

```
GSAbstractCoverageStore$decode(xml)
```

Arguments:

xml an object of class [xml_node-class](#)

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

Method setUrl(): set coverage store URL

Usage:

```
GSAbstractCoverageStore$url(url)
```

Arguments:

url the store URL to set

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GSAbstractDataStore *Geoserver REST API DataStore*

Description

Geoserver REST API DataStore

Geoserver REST API DataStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer dataStore

Super classes

[geosapi::GSRESTResource](#) -> [geosapi::GSAbstractStore](#) -> GSAbstractDataStore

Public fields

connectionParameters the list of connection parameters

Methods**Public methods:**

- [GSAbstractDataStore\\$new\(\)](#)
- [GSAbstractDataStore\\$decode\(\)](#)
- [GSAbstractDataStore\\$setConnectionParameters\(\)](#)
- [GSAbstractDataStore\\$addConnectionParameter\(\)](#)
- [GSAbstractDataStore\\$setConnectionParameter\(\)](#)
- [GSAbstractDataStore\\$delConnectionParameter\(\)](#)
- [GSAbstractDataStore\\$clone\(\)](#)

Method new(): initializes an abstract data store

Usage:

```
GSAbstractDataStore$new(  
  xml = NULL,  
  type = NULL,  
  name = NULL,  
  description = "",  
  enabled = TRUE,  
  connectionParameters  
)
```

Arguments:

`xml` an object of class [xml_node-class](#) to create object from XML
`type` the type of coverage store
`name` coverage store name
`description` coverage store description
`enabled` whether the store should be enabled or not. Default is TRUE
`connectionParameters` the list of connection parameters

Method `decode()`: Decodes a data store from XML

Usage:

```
GSAbstractDataStore$decode(xml)
```

Arguments:

`xml` an object of class [xml_node-class](#)

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

Method `setConnectionParameters()`: Set list connection parameters. The argument should be an object of class GSRESTEntrySet giving a list of key/value parameter entries.

Usage:

```
GSAbstractDataStore$setConnectionParameters(parameters)
```

Arguments:

`parameters` an object of class [GSRESTEntrySet](#)

Method `addConnectionParameter()`: Adds a connection parameter

Usage:

```
GSAbstractDataStore$addConnectionParameter(key, value)
```

Arguments:

`key` connection parameter key
`value` connection parameter value

Returns: TRUE if added, FALSE otherwise

Method `setConnectionParameter()`: Sets a connection parameter

Usage:

```
GSAbstractDataStore$setConnectionParameter(key, value)
```

Arguments:

`key` connection parameter key
`value` connection parameter value

Method `delConnectionParameter()`: Removes a connection parameter

Usage:

```
GSAbstractDataStore$delConnectionParameter(key)
```

Arguments:

`key` connection parameter key

value connection parameter value

Returns: TRUE if removed, FALSE otherwise

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

Usage:

GSAbstractDataStore\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

GSAbstractDBDataStore Geoserver REST API AbstractDBDataStore

Description

Geoserver REST API AbstractDBDataStore

Geoserver REST API AbstractDBDataStore

Format

R6Class object.

Value

Object of R6Class for modelling a GeoServer abstract DB dataStore

Super classes

geosapi::GSRESTResource -> geosapi::GSAbstractStore -> geosapi::GSAbstractDataStore
-> GSAbstractDBDataStore

Methods

Public methods:

- GSAbstractDBDataStore\$new()
- GSAbstractDBDataStore\$setDatabaseType()
- GSAbstractDBDataStore\$setNamespace()
- GSAbstractDBDataStore\$setHost()
- GSAbstractDBDataStore\$setPort()
- GSAbstractDBDataStore\$setDatabase()
- GSAbstractDBDataStore\$setSchema()
- GSAbstractDBDataStore\$setUser()

- `GSAbstractDBDataStore$setPassword()`
- `GSAbstractDBDataStore$setJndiReferenceName()`
- `GSAbstractDBDataStore$setExposePrimaryKeys()`
- `GSAbstractDBDataStore$setMinConnections()`
- `GSAbstractDBDataStore$setMaxConnections()`
- `GSAbstractDBDataStore$setFetchSize()`
- `GSAbstractDBDataStore$setConnectionTimeout()`
- `GSAbstractDBDataStore$setValidateConnections()`
- `GSAbstractDBDataStore$setPrimaryKeyMetadataTable()`
- `GSAbstractDBDataStore$setLooseBBox()`
- `GSAbstractDBDataStore$setPreparedStatements()`
- `GSAbstractDBDataStore$setMaxOpenPreparedStatements()`
- `GSAbstractDBDataStore$setEstimatedExtends()`
- `GSAbstractDBDataStore$setDefaultConnectionParameters()`
- `GSAbstractDBDataStore$clone()`

Method `new()`: initializes an abstract DB data store

Usage:

```
GSAbstractDBDataStore$new(
  xml = NULL,
  type = NULL,
  dbType = NULL,
  name = NULL,
  description = "",
  enabled = TRUE
)
```

Arguments:

`xml` an object of class `xml_node-class` to create object from XML
`type` the type of DB data store
`dbType` DB type
`name` coverage store name
`description` coverage store description
`enabled` whether the store should be enabled or not. Default is TRUE

Method `setDatabaseType()`: Set database type

Usage:

```
GSAbstractDBDataStore$setDatabaseType(dbtype)
```

Arguments:

`dbtype` DB type

Method `setNamespace()`: Set namespace

Usage:

```
GSAbstractDBDataStore$setNamespace(namespace)
```

Arguments:

namespace namespace

Method setHost(): Set host

Usage:

GSAbstractDBDataStore\$setHost(host)

Arguments:

host host

Method setPort(): Set port

Usage:

GSAbstractDBDataStore\$setPort(port)

Arguments:

port port

Method setDatabase(): Set database

Usage:

GSAbstractDBDataStore\$setDatabase(database)

Arguments:

database database

Method setSchema(): Set schema

Usage:

GSAbstractDBDataStore\$setSchema(schema)

Arguments:

schema schema

Method setUser(): Set user

Usage:

GSAbstractDBDataStore\$setUser(user)

Arguments:

user user

Method setPassword(): Set password

Usage:

GSAbstractDBDataStore\$setPassword(password)

Arguments:

password password

Method setJndiReferenceName(): Set JNDI reference name

Usage:

GSAbstractDBDataStore\$setJndiReferenceName(jndiReferenceName)

Arguments:

jndiReferenceName JNDI reference name

Method setExposePrimaryKeys(): Set expose primary keyws

Usage:

GSAbstractDBDataStore\$setExposePrimaryKeys(exposePrimaryKeys)

Arguments:

exposePrimaryKeys expose primary keys

Method setMinConnections(): Set min connections

Usage:

GSAbstractDBDataStore\$setMinConnections(minConnections = 1)

Arguments:

minConnections min connections. Default is 11

Method setMaxConnections(): Set max connections

Usage:

GSAbstractDBDataStore\$setMaxConnections(maxConnections = 10)

Arguments:

maxConnections max connections. Default is 10

Method setFetchSize(): Set fetch size

Usage:

GSAbstractDBDataStore\$setFetchSize(fetchSize = 1000)

Arguments:

fetchSize fetch size. Default is 1000

Method setConnectionTimeout(): Set connection timeout

Usage:

GSAbstractDBDataStore\$setConnectionTimeout(seconds = 20)

Arguments:

seconds timeout (in seconds). Default is 20

Method setValidateConnections(): Set validate connection

Usage:

GSAbstractDBDataStore\$setValidateConnections(validateConnections)

Arguments:

validateConnections Validate connections

Method setPrimaryKeyMetadataTable(): Set primary key metadata table

Usage:

GSAbstractDBDataStore\$setPrimaryKeyMetadataTable(primaryKeyMetadataTable)

Arguments:

primaryKeyMetadataTable primary key metadata table

Method setLooseBBox(): Set loose bbox

Usage:

GSAbstractDBDataStore\$setLooseBBox(looseBBox = TRUE)

Arguments:

looseBBox loose bbox. Default is TRUE

Method setPreparedStatements(): Set prepared statements

Usage:

GSAbstractDBDataStore\$setPreparedStatements(preparedStatements = FALSE)

Arguments:

preparedStatements prepared Statements. Default is FALSE

Method setMaxOpenPreparedStatements(): Set max open prepared statements

Usage:

GSAbstractDBDataStore\$setMaxOpenPreparedStatements(
maxOpenPreparedStatements = 50
)

Arguments:

maxOpenPreparedStatements max open preepared statements. Default is 50

Method setEstimatedExtends(): Set estimatedExtends

Usage:

GSAbstractDBDataStore\$setEstimatedExtends(estimatedExtends = FALSE)

Arguments:

estimatedExtends estimated extends. Default is FALSE

Method setDefaultConnectionParameters(): Set default connection parameters

Usage:

GSAbstractDBDataStore\$setDefaultConnectionParameters()

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

Usage:

GSAbstractDBDataStore\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Internal abstract class used for setting DB stores

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

GSAbstractStore *Geoserver REST API Store*

Description

Geoserver REST API Store

Geoserver REST API Store

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer store

Super class

[geosapi::GSRESTResource](#) -> GSAbstractStore

Public fields

full whether store object is fully described

name store name

enabled if the store is enabled or not

description store description

type store type

workspace workspace name

Methods

Public methods:

- [GSAbstractStore\\$new\(\)](#)
- [GSAbstractStore\\$decode\(\)](#)
- [GSAbstractStore\\$setType\(\)](#)
- [GSAbstractStore\\$setEnabled\(\)](#)
- [GSAbstractStore\\$setDescription\(\)](#)
- [GSAbstractStore\\$clone\(\)](#)

Method new(): initializes an abstract store

Usage:

```
GSAbstractStore$new(  
  xml = NULL,  
  storeType,  
  type = NULL,  
  name = NULL,  
  description = "",  
  enabled = TRUE  
)  
Arguments:  
xml an object of class xml\_node-class to create object from XML  
storeType store type  
type the type of coverage store  
name coverage store name  
description coverage store description  
enabled whether the store should be enabled or not. Default is TRUE
```

Method decode(): Decodes store from XML

Usage:

```
GSAbstractStore$decode(xml)
```

Arguments:

```
xml object of class xml\_node-class
```

Method setType(): Set type

Usage:

```
GSAbstractStore$setType(type)
```

Arguments:

```
type type
```

Method setEnabled(): Set enabled

Usage:

```
GSAbstractStore$setEnabled(enabled)
```

Arguments:

```
enabled enabled
```

Method setDescription(): Set description

Usage:

```
GSAbstractStore$setDescription(description)
```

Arguments:

```
description description
```

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

Usage:

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

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GSArcGridCoverageStore

Geoserver REST API ArcGridCoverageStore

Description

Geoserver REST API ArcGridCoverageStore

Geoserver REST API ArcGridCoverageStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer ArcGrid CoverageStore

Super classes

```
geosapi::GSRESTResource -> geosapi::GSAbstractStore -> geosapi::GSAbstractCoverageStore
-> GSArcGridCoverageStore
```

Public fields

url url

Methods**Public methods:**

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

Method new(): initializes an abstract ArcGrid coverage store

Usage:

```
GSArcGridCoverageStore$new(
  xml = NULL,
  name = NULL,
  description = "",
  enabled = TRUE,
  url = NULL
)
```

Arguments:

xml an object of class [xml_node-class](#) to create object from XML

```
name coverage store name
description coverage store description
enabled whether the store should be enabled or not. Default is TRUE
url url
```

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GSCoverage

A GeoServer coverage

Description

This class models a GeoServer coverage. This class is to be used for manipulating representations of vector data with GeoServer.

Format

[R6Class](#) object.

Details

Geoserver REST API Resource

Value

Object of [R6Class](#) for modelling a GeoServer coverage

Super classes

[geosapi::GSRESTResource](#) -> [geosapi::GSResource](#) -> GSCoverage

Public fields

`cqlFilter` CQL filter

Methods

Public methods:

- [GSCoverage\\$new\(\)](#)
- [GSCoverage\\$decode\(\)](#)
- [GSCoverage\\$setView\(\)](#)
- [GSCoverage\\$delView\(\)](#)
- [GSCoverage\\$clone\(\)](#)

Method new(): Initializes a [GSCoverage](#) from XML

Usage:

`GSCoverage$new(xml = NULL)`

Arguments:

`xml` object of class [xml_node-class](#)

Method decode(): Decodes coverage from XML

Usage:

`GSCoverage$decode(xml)`

Arguments:

`xml` object of class [xml_node-class](#)

Method setView(): Set view

Usage:

`GSCoverage$setView(cv)`

Arguments:

`cv` `cv`, object of class [GSCoverageView](#)

Returns: TRUE if set, FALSE otherwise

Method delView(): Deletes view

Usage:

`GSCoverage$delView()`

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

`GSCoverage$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel@gmail.com>

Examples

```
gt <- GSCoverage$new()
```

Description

Geoserver REST API GSCoverageBand

Geoserver REST API GSCoverageBand

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer coverage band

Methods

`new(xml)` This method is used to instantiate a GSCoverageBand

`decode(xml)` This method is used to decode a GSCoverageBand from XML

`encode()` This method is used to encode a GSCoverageBand to XML

`setDefinition(definition)` Sets the coverage band definition

`setIndex(index)` Sets the coverage band index

`setCompositionType` Sets the composition type. Only 'BAND_SELECT' is supported by GeoServer for now.

`addInputBand(band)` Adds a input coverage band, object of class GSInputCoverageBand

`delInputBand(band)` Removes a input coverage band, object of class GSInputCoverageBand

Super class

[geosapi::GSRESTResource](#) -> GSCoverageBand

Public fields

`inputCoverageBands` list of input coverage bands

`definition` coverage band definition

`index` coverage band index

`compositionType` coverage band composition type

Methods

Public methods:

- [GSCoverageBand\\$new\(\)](#)
- [GSCoverageBand\\$decode\(\)](#)
- [GSCoverageBand\\$setName\(\)](#)
- [GSCoverageBand\\$setDefinition\(\)](#)
- [GSCoverageBand\\$setIndex\(\)](#)
- [GSCoverageBand\\$setCompositionType\(\)](#)
- [GSCoverageBand\\$addInputBand\(\)](#)
- [GSCoverageBand\\$delInputBand\(\)](#)
- [GSCoverageBand\\$clone\(\)](#)

Method `new():` Initializes a [GSCoverageBand](#)

Usage:

`GSCoverageBand$new(xml = NULL)`

Arguments:

`xml` object of class [xml_node-class](#)

Method `decode():` Decodes from XML

Usage:

`GSCoverageBand$decode(xml)`

Arguments:

`xml` object of class [xml_node-class](#)

Method `setName():` Set name

Usage:

`GSCoverageBand$setName(name)`

Arguments:

`name` name

Method `setDefinition():` Set definition

Usage:

`GSCoverageBand$setDefinition(definition)`

Arguments:

`definition` definition

Method `setIndex():` Set index

Usage:

`GSCoverageBand$setIndex(index)`

Arguments:

`index` index

Method `setCompositionType()`: Set composition type

Usage:

`GSCoverageBand$setCompositionType(compositionType)`

Arguments:

`compositionType` composition type

Method `addInputBand()`: Adds an input band

Usage:

`GSCoverageBand$addInputBand(band)`

Arguments:

`band` object of class [GSInputCoverageBand](#)

Returns: TRUE if added, FALSE otherwise

Method `delInputBand()`: Deletes an input band

Usage:

`GSCoverageBand$delInputBand(band)`

Arguments:

`band` object of class [GSInputCoverageBand](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

`GSCoverageBand$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

`GSCoverageBand$new()`

GSCoverageStoreManager

Geoserver REST API CoverageStore Manager

Description

Geoserver REST API CoverageStore Manager

Geoserver REST API CoverageStore Manager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for managing GeoServer CoverageStores (i.e. stores of coverage data)

Super class

[geosapi::GSManager](#) -> GSCoverageStoreManager

Methods

Public methods:

- [GSCoverageStoreManager\\$getCoverageStores\(\)](#)
- [GSCoverageStoreManager\\$getCoverageStoreNames\(\)](#)
- [GSCoverageStoreManager\\$getCoverageStore\(\)](#)
- [GSCoverageStoreManager\\$createCoverageStore\(\)](#)
- [GSCoverageStoreManager\\$updateCoverageStore\(\)](#)
- [GSCoverageStoreManager\\$deleteCoverageStore\(\)](#)
- [GSCoverageStoreManager\\$getCoverages\(\)](#)
- [GSCoverageStoreManager\\$getCoverageNames\(\)](#)
- [GSCoverageStoreManager\\$getCoverage\(\)](#)
- [GSCoverageStoreManager\\$createCoverage\(\)](#)
- [GSCoverageStoreManager\\$updateCoverage\(\)](#)
- [GSCoverageStoreManager\\$deleteCoverage\(\)](#)
- [GSCoverageStoreManager\\$uploadCoverage\(\)](#)
- [GSCoverageStoreManager\\$uploadGeoTIFF\(\)](#)
- [GSCoverageStoreManager\\$uploadWorldImage\(\)](#)
- [GSCoverageStoreManager\\$uploadArcGrid\(\)](#)
- [GSCoverageStoreManager\\$uploadImageMosaic\(\)](#)
- [GSCoverageStoreManager\\$clone\(\)](#)

Method `getCoverageStores()`: Get the list of available coverage stores. Returns an object of class list giving items of class `GSAbstractCoverageStore`

Usage:

```
GSCoverageStoreManager$getCoverageStores(ws)
```

Arguments:

`ws` workspace name

Returns: the list of coverage stores

Method `getCoverageStoreNames()`: Get the list of available coverage store names. Returns an vector of class character

Usage:

```
GSCoverageStoreManager$getCoverageStoreNames(ws)
```

Arguments:

`ws` workspace name

Returns: the list of coverage store names, as character

Method `getCoverageStore()`: Get an object of class `GSAbstractDataStore` given a workspace and coverage store names.

Usage:

```
GSCoverageStoreManager$getCoverageStore(ws, cs)
```

Arguments:

`ws` workspace name

`cs` coverage store name

Returns: the coverage store

Method `createCoverageStore()`: Creates a new coverage store given a workspace, coverage store name. Abstract method used in below format-specific methods to create coverage stores.

Usage:

```
GSCoverageStoreManager$createCoverageStore(ws, coverageStore)
```

Arguments:

`ws` workspace name

`coverageStore` coverage store object

Returns: TRUE if created, FALSE otherwise

Method `updateCoverageStore()`: Updates a coverage store given a workspace, coverage store name. Abstract method used in below format-specific methods to create coverage stores.

Usage:

```
GSCoverageStoreManager$updateCoverageStore(ws, coverageStore)
```

Arguments:

`ws` workspace name

`coverageStore` coverage store object

Returns: TRUE if updated, FALSE otherwise

Method `deleteCoverageStore()`: Deletes a coverage store given a workspace and an object of class `GSAbstractCoverageStore`. By default, the option `recurse` is set to FALSE, ie datastore layers are not removed. To remove all coverage store layers, set this option to TRUE. The `purge` parameter is used to customize the delete of files on disk (in case the underlying reader implements a delete method). It can take one of the three values: none, metadata, all. For more details see <https://docs.geoserver.org/stable/en/user/rest/api/coveragestores.html#purge>

Usage:

```
GSCoverageStoreManager$deleteCoverageStore(
    ws,
    cs,
    recurse = FALSE,
    purge = NULL
)
```

Arguments:

- `ws` workspace name
- `cs` coverage store name
- `recurse` recurse
- `purge` purge

Returns: TRUE if deleted, FALSE otherwise

Method `getCoverages()`: Get the list of available coverages for given workspace and coverage store. Returns an object of class `list` giving items of class `GSCoverage`

Usage:

```
GSCoverageStoreManager$getCoverages(ws, cs)
```

Arguments:

- `ws` workspace name
- `cs` coverage store name

Returns: the list of `GSCoverage`

Method `getCoverageNames()`: Get the list of available coverage names for given workspace and coverage store. Returns an object of class `list` giving items of class `GSCoverage`

Usage:

```
GSCoverageStoreManager$getCoverageNames(ws, cs)
```

Arguments:

- `ws` workspace name
- `cs` coverage store name

Returns: the list of coverage names

Method `getCoverage()`: Get coverage

Usage:

```
GSCoverageStoreManager$getCoverage(ws, cs, cv)
```

Arguments:

- `ws` workspace name

cs coverage store name
 cv coverage name

Method `createCoverage()`: Creates a new coverage given a workspace, coverage store names and an object of class [GSCoverage](#)

Usage:

```
GSCoverageStoreManager$createCoverage(ws, cs, coverage)
```

Arguments:

ws workspace name
 cs coverage store name
 coverage object of class [GSCoverage](#)

Returns: TRUE if created, FALSE otherwise

Method `updateCoverage()`: Updates a coverage given a workspace, coverage store names and an object of class [GSCoverage](#)

Usage:

```
GSCoverageStoreManager$updateCoverage(ws, cs, coverage)
```

Arguments:

ws workspace name
 cs coverage store name
 coverage object of class [GSCoverage](#)

Returns: TRUE if updated, FALSE otherwise

Method `deleteCoverage()`: Deletes a coverage given a workspace, coverage store names, and an object of class [GSCoverage](#). By default, the option `recurse` is set to FALSE, ie coverage layers are not removed.

Usage:

```
GSCoverageStoreManager$deleteCoverage(ws, cs, cv, recurse = FALSE)
```

Arguments:

ws workspace name
 cs coverage store name
 cv coverage name
 recurse recurse

Method `uploadCoverage()`: Abstract method to upload a coverage file targeting a workspace (ws) and datastore (cs). The extension corresponds to the format/type of coverage to be uploaded (among values 'geotiff', 'worldimage', 'arcgrid', or 'imagemosaic'). The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the coverage file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSCoverageStoreManager$uploadCoverage(
    ws,
    cs,
    endpoint = "file",
    extension,
    filename,
    configure = "first",
    update = "append",
    contentType
)
```

Arguments:

ws workspace name
 cs coverage store name
 endpoint endpoint. Default is "file"
 extension extension
 filename filename
 configure configure. Default is "first"
 update update. Default is "append"
 contentType content type

Returns: TRUE if uploaded, FALSE otherwise

Method uploadGeoTIFF(): Uploads a GeoTIFF file targeting a workspace (ws) and datastore (cs). The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the GeoTIFF file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSCoverageStoreManager$uploadGeoTIFF(
    ws,
    cs,
    endpoint = "file",
    filename,
    configure = "first",
    update = "append"
)
```

Arguments:

ws workspace name
 cs coverage store name
 endpoint endpoint. Default is "file"
 filename filename
 configure configure. Default is "first"
 update update. Default is "append"

Returns: TRUE if uploaded, FALSE otherwise

Method uploadWorldImage(): Uploads a WorldImage file targeting a workspace (ws) and datastore (cs). The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the zipped file to upload and set for the newly created datastore. It is assumed the zip archive contains the .prj file to set the SRS. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSCoverageStoreManager$uploadWorldImage(
    ws,
    cs,
    endpoint = "file",
    filename,
    configure = "first",
    update = "append"
)
```

Arguments:

- ws workspace name
- cs coverage store name
- endpoint endpoint. Default is "file"
- filename filename
- configure configure. Default is "first"
- update update. Default is "append"

Returns: TRUE if uploaded, FALSE otherwise

Method uploadArcGrid(): Uploads an ArcGrid file targeting a workspace (ws) and datastore (cs). The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the ArcGrid file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSCoverageStoreManager$uploadArcGrid(
    ws,
    cs,
    endpoint = "file",
    filename,
    configure = "first",
    update = "append"
)
```

Arguments:

- ws workspace name
- cs coverage store name
- endpoint endpoint. Default is "file"

```

filename filename
configure configure. Default is "first"
update update. Default is "append"
>Returns: TRUE if uploaded, FALSE otherwise

```

Method `uploadImageMosaic()`: Uploads an ImageMosaic file targeting a workspace (ws) and datastore (cs). The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the ImageMosaic file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```

GSCoverageStoreManager$uploadImageMosaic(
  ws,
  cs,
  endpoint = "file",
  filename,
  configure = "first",
  update = "append"
)

```

Arguments:

```

ws workspace name
cs coverage store name
endpoint endpoint. Default is "file"
filename filename
configure configure. Default is "first"
update update. Default is "append"

```

Returns: TRUE if uploaded, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```

## Not run:
GSCoverageStoreManager$new("http://localhost:8080/geoserver", "admin", "geoserver")

## End(Not run)

```

GSCoverageView *Geoserver REST API GSCoverageView*

Description

Geoserver REST API GSCoverageView
Geoserver REST API GSCoverageView

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer coverage view

Super class

[geosapi::GSRESTResource](#) -> GSCoverageView

Public fields

name name
envelopeCompositionType envelope composition type
selectedResolution selected resolution
selectedResolutionIndex selected resolution index
coverageBands coverage bands

Methods

Public methods:

- [GSCoverageView\\$new\(\)](#)
- [GSCoverageView\\$decode\(\)](#)
- [GSCoverageView\\$setName\(\)](#)
- [GSCoverageView\\$setEnvelopeCompositionType\(\)](#)
- [GSCoverageView\\$setSelectedResolution\(\)](#)
- [GSCoverageView\\$setSelectedResolutionIndex\(\)](#)
- [GSCoverageView\\$addBand\(\)](#)
- [GSCoverageView\\$delBand\(\)](#)
- [GSCoverageView\\$clone\(\)](#)

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

Usage:

`GSCoverageView$new(xml = NULL)`

Arguments:

xml object of class [xml_node-class](#)

Method decode(): Decodes from XML

Usage:

GSCoverageView\$decode(xml)

Arguments:

xml object of class [xml_node-class](#)

Method setName(): Set name

Usage:

GSCoverageView\$setName(name)

Arguments:

name name

Method setEnvelopeCompositionType(): Sets the envelope composition type. Type of Envelope Composition, used to expose the bounding box of the CoverageView, either 'UNION' or 'INTERSECTION'.

Usage:

GSCoverageView\$setEnvelopeCompositionType(envelopeCompositionType)

Arguments:

envelopeCompositionType envelope composition type

Method setSelectedResolution(): Set selected resolution

Usage:

GSCoverageView\$setSelectedResolution(selectedResolution)

Arguments:

selectedResolution selected resolution

Method setSelectedResolutionIndex(): Set selected resolution index

Usage:

GSCoverageView\$setSelectedResolutionIndex(selectedResolutionIndex)

Arguments:

selectedResolutionIndex selected resolution index

Method addBand(): Adds band

Usage:

GSCoverageView\$addBand(band)

Arguments:

band object of class [GSCoverageBand](#)

Returns: TRUE if added, FALSE otherwise

Method delBand(): Deletes band

Usage:

GSCoverageView\$delBand(band)

Arguments:

band object of class [GSCoverageBand](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GSCoverageView\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

GSCoverageView\$new()

GSDataStoreManager *Geoserver REST API DataStore Manager*

Description

Geoserver REST API DataStore Manager

Geoserver REST API DataStore Manager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for managing GeoServer DataStores (i.e. stores of vector data)

Super class

[geosapi::GSManager](#) -> GSDataStoreManager

Methods

Public methods:

- [GSDataStoreManager\\$getDataStores\(\)](#)
- [GSDataStoreManager\\$getDataStoreNames\(\)](#)
- [GSDataStoreManager\\$getDataStore\(\)](#)
- [GSDataStoreManager\\$createDataStore\(\)](#)
- [GSDataStoreManager\\$updateDataStore\(\)](#)
- [GSDataStoreManager\\$deleteDataStore\(\)](#)
- [GSDataStoreManager\\$getFeatureTypes\(\)](#)
- [GSDataStoreManager\\$getFeatureTypeNames\(\)](#)
- [GSDataStoreManager\\$getFeatureType\(\)](#)
- [GSDataStoreManager\\$createFeatureType\(\)](#)
- [GSDataStoreManager\\$updateFeatureType\(\)](#)
- [GSDataStoreManager\\$deleteFeatureType\(\)](#)
- [GSDataStoreManager\\$publishLayer\(\)](#)
- [GSDataStoreManager\\$unpublishLayer\(\)](#)
- [GSDataStoreManager\\$uploadData\(\)](#)
- [GSDataStoreManager\\$uploadShapefile\(\)](#)
- [GSDataStoreManager\\$uploadProperties\(\)](#)
- [GSDataStoreManager\\$uploadH2\(\)](#)
- [GSDataStoreManager\\$uploadSpatialite\(\)](#)
- [GSDataStoreManager\\$uploadAppschema\(\)](#)
- [GSDataStoreManager\\$uploadGeoPackage\(\)](#)
- [GSDataStoreManager\\$clone\(\)](#)

Method `getDataStores():` Get the list of available dataStores.

Usage:

```
GSDataStoreManager$getDataStores(ws)
```

Arguments:

`ws` workspace name

Returns: an object of class `list` giving items of class [GSAbstractDataStore](#)

Method `getDataStoreNames():` Get the list of available dataStore names.

Usage:

```
GSDataStoreManager$getDataStoreNames(ws)
```

Arguments:

`ws` workspace name

Returns: a vector of class `character`

Method `getDataStore():` Get an object of class [GSAbstractDataStore](#) given a workspace and datastore names.

Usage:

```
GSDataStoreManager$getDataStore(ws, ds)
```

Arguments:

ws workspace name

ds datastore name

Returns: the datastore

Method `createDataStore()`: Creates a datastore given a workspace and an object of class [GSAbstractDataStore](#).

Usage:

```
GSDataStoreManager$createDataStore(ws, dataStore)
```

Arguments:

ws workspace name

dataStore datastore object of class [GSAbstractDataStore](#)

Returns: TRUE if created, FALSE otherwise

Method `updateDataStore()`: Updates a datastore given a workspace and an object of class [GSAbstractDataStore](#).

Usage:

```
GSDataStoreManager$updateDataStore(ws, dataStore)
```

Arguments:

ws workspace name

dataStore datastore object of class [GSAbstractDataStore](#)

Returns: TRUE if updated, FALSE otherwise

Method `deleteDataStore()`: Deletes a datastore given workspace and datastore names. By default, the option `recurse` is set to FALSE, ie datastore layers are not removed. To remove all datastore layers, set this option to TRUE.

Usage:

```
GSDataStoreManager$deleteDataStore(ws, ds, recurse = FALSE)
```

Arguments:

ws workspace name

ds datastore name

recurse recurse

Returns: TRUE if deleted, FALSE otherwise

Method `getFeatureTypes()`: Get the list of available feature types for given workspace and datastore.

Usage:

```
GSDataStoreManager$getFeatureTypes(ws, ds, list = "configured")
```

Arguments:

ws workspace name

ds datastore name

`list` list type value, among "configured", "available", "available_with_geom", "all"

Returns: an object of class `list` giving items of class [GSFeatureType](#)

Method `getFeatureTypeNames()`: Get the list of available feature type names for given workspace and datastore.

Usage:

`GSDataStoreManager$getFeatureTypeNames(ws, ds)`

Arguments:

`ws` workspace name

`ds` datastore name

Returns: a vector of class `character`

Method `getFeatureType()`: Get an object of class [GSFeatureType](#) given a workspace, datastore and feature type names.

Usage:

`GSDataStoreManager$getFeatureType(ws, ds, ft)`

Arguments:

`ws` workspace name

`ds` datastore name

`ft` feature type name

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

Method `createFeatureType()`: Creates a new featureType given a workspace, datastore names and an object of class [GSFeatureType](#)

Usage:

`GSDataStoreManager$createFeatureType(ws, ds, featureType)`

Arguments:

`ws` workspace name

`ds` datastore name

`featureType` feature type

Returns: TRUE if created, FALSE otherwise

Method `updateFeatureType()`: Updates a featureType given a workspace, datastore names and an object of class [GSFeatureType](#)

Usage:

`GSDataStoreManager$updateFeatureType(ws, ds, featureType)`

Arguments:

`ws` workspace name

`ds` datastore name

`featureType` feature type

Returns: TRUE if updated, FALSE otherwise

Method deleteFeatureType(): Deletes a featureType given a workspace, datastore names, and an object of class [GSFeatureType](#). By default, the option `recurse` is set to FALSE, ie datastore layers are not removed.

Usage:

```
GSDataStoreManager$deleteFeatureType(ws, ds, ft, recurse = FALSE)
```

Arguments:

`ws` workspace name

`ds` datastore name

`ft` feature type name

`recurse` recurse

Returns: TRUE if deleted, FALSE otherwise

Method publishLayer(): Publish a feature type/layer pair given a workspace and datastore. The name 'layer' here encompasses both [GSFeatureType](#) and [GSLayer](#) resources.

Usage:

```
GSDataStoreManager$publishLayer(ws, ds, featureType, layer)
```

Arguments:

`ws` workspace name

`ds` datastore name

`featureType` object of class [GSFeatureType](#)

`layer` object of class [GSLayer](#)

Returns: TRUE if published, FALSE otherwise

Method unpublishLayer(): Unpublish a feature type/layer pair given a workspace and datastore. The name 'layer' here encompasses both [GSFeatureType](#) and [GSLayer](#) resources.

Usage:

```
GSDataStoreManager$unpublishLayer(ws, ds, lyr)
```

Arguments:

`ws` workspace name

`ds` datastore name

`lyr` layer name

Returns: TRUE if published, FALSE otherwise

Method uploadData(): Uploads features data. The extension corresponds to the format/type of features to be uploaded among "shp", "spatialite", "h2", "gpkg". The endpoint takes a value among "file" (default), "url" or "external". The `filename` is the name of the coverage file to upload and set for the newly created datastore. The `configure` parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The `update` defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSDataStoreManager$uploadData(
    ws,
    ds,
    endpoint = "file",
    extension,
    configure = "first",
    update = "append",
    filename,
    charset,
    contentType
)
Arguments:
ws workspace name
ds datastore name
endpoint endpoint
extension extension
configure configure strategy among values: "first" or "none"
update update strategy, among values: "append", "overwrite"
filename file name of the resource to upload
charset charset
contentType content type
Returns: TRUE if uploaded, FALSE otherwise
```

Method `uploadShapefile()`: Uploads zipped shapefile. The `endpoint` takes a value among "`file`" (default), "`url`" or "`external`". The `filename` is the name of the coverage file to upload and set for the newly created datastore. The `configure` parameter can take a value among values "`none`" (indicates to configure only the datastore but no layer configuration) or "`first`" (configure both datastore and layer). The `update` defines the strategy for the upload: "`append`" (default value) for the first upload, "`overwrite`" in case the file should be overwritten.

Usage:

```
GSDataStoreManager$uploadShapefile(
    ws,
    ds,
    endpoint = "file",
    configure = "first",
    update = "append",
    filename,
    charset = "UTF-8"
)
```

Arguments:

```
ws workspace name
ds datastore name
endpoint endpoint
configure configure strategy among values: "first" or "none"
update update strategy, among values: "append", "overwrite"
```

filename file name of the resource to upload

charset charset

Returns: TRUE if uploaded, FALSE otherwise

Method `uploadProperties()`: Uploads properties. The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the coverage file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSDataStoreManager$uploadProperties(
    ws,
    ds,
    endpoint = "file",
    configure = "first",
    update = "append",
    filename,
    charset = "UTF-8"
)
```

Arguments:

ws workspace name

ds datastore name

endpoint endpoint

configure configure strategy among values: "first" or "none"

update update strategy, among values: "append", "overwrite"

filename file name of the resource to upload

charset charset

Returns: TRUE if uploaded, FALSE otherwise

Method `uploadH2()`: Uploads H2 database. The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the coverage file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSDataStoreManager$uploadH2(
    ws,
    ds,
    endpoint = "file",
    configure = "first",
    update = "append",
    filename,
    charset = "UTF-8"
)
```

Arguments:

```
ws workspace name
ds datastore name
endpoint endpoint
configure configure strategy among values: "first" or "none"
update update strategy, among values: "append", "overwrite"
filename file name of the resource to upload
charset charset
```

Returns: TRUE if uploaded, FALSE otherwise

Method `uploadSpatialite()`: Uploads spatialite file. The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the coverage file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSDataStoreManager$uploadSpatialite(
  ws,
  ds,
  endpoint = "file",
  configure = "first",
  update = "append",
  filename,
  charset = "UTF-8"
)
```

Arguments:

```
ws workspace name
ds datastore name
endpoint endpoint
configure configure strategy among values: "first" or "none"
update update strategy, among values: "append", "overwrite"
filename file name of the resource to upload
charset charset
```

Returns: TRUE if uploaded, FALSE otherwise

Method `uploadAppschema()`: Uploads App schema. The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the coverage file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSDataStoreManager$uploadAppSchema(
    ws,
    ds,
    endpoint = "file",
    configure = "first",
    update = "append",
    filename,
    charset = "UTF-8"
)
```

Arguments:

ws workspace name
 ds datastore name
 endpoint endpoint
 configure configure strategy among values: "first" or "none"
 update update strategy, among values: "append", "overwrite"
 filename file name of the resource to upload
 charset charset

Returns: TRUE if uploaded, FALSE otherwise

Method uploadGeoPackage(): Uploads GeoPackage. The endpoint takes a value among "file" (default), "url" or "external". The filename is the name of the coverage file to upload and set for the newly created datastore. The configure parameter can take a value among values "none" (indicates to configure only the datastore but no layer configuration) or "first" (configure both datastore and layer). The update defines the strategy for the upload: "append" (default value) for the first upload, "overwrite" in case the file should be overwritten.

Usage:

```
GSDataStoreManager$uploadGeoPackage(
    ws,
    ds,
    endpoint = "file",
    configure = "first",
    update = "append",
    filename,
    charset = "UTF-8"
)
```

Arguments:

ws workspace name
 ds datastore name
 endpoint endpoint
 configure configure strategy among values: "first" or "none"
 update update strategy, among values: "append", "overwrite"
 filename file name of the resource to upload
 charset charset

Returns: TRUE if uploaded, FALSE otherwise

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:
GSDataStoreManager$new("http://localhost:8080/geoserver", "admin", "geoserver")

## End(Not run)
```

GSDimension

A GeoServer dimension

Description

This class models a GeoServer resource dimension.

Format

[R6Class](#) object.

Details

Geoserver REST API Dimension

Value

Object of [R6Class](#) for modelling a GeoServer dimension

Super class

[geosapi::GSRESTResource](#) -> *GSDimension*

Public fields

`enabled` true/false

`presentation` dimension presentation

`resolution` dimension resolution

`units` dimension units

`unitSymbol` dimension unitsSymbol

Methods

Public methods:

- `GSDimension$new()`
- `GSDimension$decode()`
- `GSDimension$setEnabled()`
- `GSDimension$setPresentation()`
- `GSDimension$setUnit()`
- `GSDimension$setUnitSymbol()`
- `GSDimension$clone()`

Method `new()`: Initializes an object of class `GSDimension`

Usage:

```
GSDimension$new(xml = NULL)
```

Arguments:

`xml` object of class `xml_node-class`

Method `decode()`: Decodes from XML

Usage:

```
GSDimension$decode(xml)
```

Arguments:

`xml` object of class `xml_node-class`

Method `setEnabled()`: Set enabled

Usage:

```
GSDimension$setEnabled(enabled)
```

Arguments:

`enabled` enabled

Method `setPresentation()`: Set presentation

Usage:

```
GSDimension$setPresentation(presentation, interval = NULL)
```

Arguments:

`presentation` presentation. Possible values: "LIST", "CONTINUOUS_INTERVAL", "DISCRETE_INTERVAL"

`interval` interval

Method `setUnit()`: Set unit

Usage:

```
GSDimension$setUnit(unit)
```

Arguments:

`unit` unit

Method `setUnitSymbol()`: Set unit symbol

Usage:

`GSDimension$setUnitSymbol(unitSymbol)`

Arguments:

`unitSymbol` unit symbol

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

Usage:

`GSDimension$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
dim <- GSDimension$new()
```

GSFeatureDimension A GeoServer dimension

Description

This class models a GeoServer feature dimension.

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer feature dimension

Super classes

[geosapi::GSRESTResource](#) -> [geosapi::GSDimension](#) -> *GSFeatureDimension*

Public fields

`attribute` attribute

`endAttribute` end attribute

Methods

Public methods:

- `GSFeatureDimension$new()`
- `GSFeatureDimension$decode()`
- `GSFeatureDimension$setAttribute()`
- `GSFeatureDimension$setEndAttribute()`
- `GSFeatureDimension$clone()`

Method `new():` Initializes an object of class `GSFeatureDimension`

Usage:

`GSFeatureDimension$new(xml = NULL)`

Arguments:

`xml` object of class `xml_node-class`

Method `decode():` Decodes from XML

Usage:

`GSFeatureDimension$decode(xml)`

Arguments:

`xml` object of class `xml_node-class`

Method `setAttribute():` Set attribute

Usage:

`GSFeatureDimension$setAttribute(attribute)`

Arguments:

`attribute` attribute

Method `setEndAttribute():` Set end attribute

Usage:

`GSFeatureDimension$setEndAttribute(endAttribute)`

Arguments:

`endAttribute` end attribute

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

Usage:

`GSFeatureDimension$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
dim <- GSFeatureDimension$new()
```

GSFeatureType	A <i>GeoServer feature type</i>
---------------	---------------------------------

Description

This class models a GeoServer feature type. This class is to be used for manipulating representations of vector data with GeoServer.

Format

[R6Class](#) object.

Details

Geoserver REST API Resource

Value

Object of [R6Class](#) for modelling a GeoServer feature type

Super classes

[geosapi::GSRESTResource](#) -> [geosapi::GSResource](#) -> [GSFeatureType](#)

Public fields

cqlFilter CQL filter

Methods

Public methods:

- [GSFeatureType\\$new\(\)](#)
- [GSFeatureType\\$decode\(\)](#)
- [GSFeatureType\\$setCqlFilter\(\)](#)
- [GSFeatureType\\$setVirtualTable\(\)](#)
- [GSFeatureType\\$delVirtualTable\(\)](#)
- [GSFeatureType\\$clone\(\)](#)

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

Usage:

`GSFeatureType$new(xml = NULL)`

Arguments:

`xml` object of class [xml_node-class](#)

Method [decode\(\)](#): Decodes from XML

Usage:

```
GSFeatureType$decode(xml)
```

Arguments:

xml object of class [xml_node-class](#)

Method `setCqlFilter():` Set CQL filter

Usage:

```
GSFeatureType$setCqlFilter(cqlFilter)
```

Arguments:

cqlFilter CQL filter

Method `setVirtualTable():` Set virtual table

Usage:

```
GSFeatureType$setVirtualTable(vt)
```

Arguments:

vt object of class [GSVirtualTable](#)

Returns: TRUE if set/added, FALSE otherwise

Method `delVirtualTable():` Deletes virtual table

Usage:

```
GSFeatureType$delVirtualTable()
```

Arguments:

vt object of class [GSVirtualTable](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
ft <- GSFeatureType$new()
```

GSGeoPackageDataStore *Geoserver REST API GeoPackageDataStore*

Description

Geoserver REST API GeoPackageDataStore
Geoserver REST API GeoPackageDataStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer GeoPackage dataStore

Super classes

```
geosapi::GSRESTResource -> geosapi::GSAbstractStore -> geosapi::GSAbstractDataStore
-> geosapi::GSAbstractDBDataStore -> GSGeoPackageDataStore
```

Methods

Public methods:

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

Method new(): initializes an GeoPackage data store

Usage:

```
GSGeoPackageDataStore$new(
  xml = NULL,
  name = NULL,
  description = "",
  enabled = TRUE,
  database = NULL
)
```

Arguments:

xml an object of class [xml_node-class](#) to create object from XML
name coverage store name
description coverage store description
enabled whether the store should be enabled or not. Default is TRUE
database database

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
ds <- GSGeoPackageDataStore$new(  
  name = "ds", description = "des",  
  enabled = TRUE, database = NULL  
)
```

GSGeoTIFFCoverageStore

Geoserver REST API GeoTIFF CoverageStore

Description

Geoserver REST API GeoTIFF CoverageStore
Geoserver REST API GeoTIFF CoverageStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer GeoTIFF CoverageStore

Super classes

[geosapi::GSRESTResource](#) -> [geosapi::GSAbstractStore](#) -> [geosapi::GSAbstractCoverageStore](#)
-> GSGeoTIFFCoverageStore

Public fields

url url

Methods

Public methods:

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

Method new(): Initializes an GeoTIFF coverage store

Usage:

```
GSGeoTIFFCoverageStore$new(
  xml = NULL,
  name = NULL,
  description = "",
  enabled = TRUE,
  url = NULL
)
```

Arguments:

xml an object of class [xml_node-class](#) to create object from XML
 name coverage store name
 description coverage store description
 enabled whether the store should be enabled or not. Default is TRUE
 url url

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel@gmail.com>

GSImageMosaicCoverageStore

Geoserver REST API ImageMosaicCoverageStore

Description

Geoserver REST API ImageMosaicCoverageStore

Geoserver REST API ImageMosaicCoverageStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer ImageMosaic CoverageStore

Super classes

```
geosapi::GSRESTResource -> geosapi::GSAbstractStore -> geosapi::GSAbstractCoverageStore  
-> GSImageMosaicCoverageStore
```

Public fields

url url

Methods**Public methods:**

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

Method new(): Initializes an Image Mosaic coverage store

Usage:

```
GSImageMosaicCoverageStore$new(  
  xml = NULL,  
  name = NULL,  
  description = "",  
  enabled = TRUE,  
  url = NULL  
)
```

Arguments:

xml an object of class [xml_node-class](#) to create object from XML
name coverage store name
description coverage store description
enabled whether the store should be enabled or not. Default is TRUE
url url

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

GSInputCoverageBand *Geoserver REST API GSInputCoverageBand*

Description

Geoserver REST API GSInputCoverageBand
Geoserver REST API GSInputCoverageBand

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer input coverage band

Super class

[geosapi::GSRESTResource](#) -> GSInputCoverageBand

Public fields

coverageName coverage name
band band

Methods**Public methods:**

- [GSInputCoverageBand\\$new\(\)](#)
- [GSInputCoverageBand\\$decode\(\)](#)
- [GSInputCoverageBand\\$setCoverageName\(\)](#)
- [GSInputCoverageBand\\$setBand\(\)](#)
- [GSInputCoverageBand\\$clone\(\)](#)

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

Usage:

GSInputCoverageBand\$new(xml = NULL, coverageName = NULL, band = NULL)

Arguments:

xml object of class [xml_node-class](#)
coverageName coverage name
band band name

Method decode(): Decodes from XML

Usage:

GSInputCoverageBand\$decode(xml)

Arguments:

`xml` object of class [xml_node-class](#)

Method `setCoverageName():` Set coverage name

Usage:

`GSInputCoverageBand$setCoverageName(coverageName)`

Arguments:

`coverageName` coverage name

Method `setBand():` Set band

Usage:

`GSInputCoverageBand$setBand(band)`

Arguments:

`band` band

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

Usage:

`GSInputCoverageBand$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
GSInputCoverageBand$new()
```

GSLayer

A GeoServer layer resource

Description

This class models a GeoServer layer. This class is to be used for published resource (feature type or coverage).

This class models a GeoServer style.

Format

[R6Class](#) object.

[R6Class](#) object.

Details

Geoserver REST API Resource

Geoserver REST API Style

Value

Object of [R6Class](#) for modelling a GeoServer layer

Object of [R6Class](#) for modelling a GeoServer style

Super class

[geosapi::GSRESTResource](#) -> *GSLayer*

Public fields

full full
name name
path path
defaultStyle default style
styles styles
enabled enabled
queryable queryable
advertised advertised

Methods**Public methods:**

- [GSLayer\\$new\(\)](#)
- [GSLayer\\$decode\(\)](#)
- [GSLayer\\$setName\(\)](#)
- [GSLayer\\$setPath\(\)](#)
- [GSLayer\\$setEnabled\(\)](#)
- [GSLayer\\$setQueryable\(\)](#)
- [GSLayer\\$setAdvertised\(\)](#)
- [GSLayer\\$setDefaultStyle\(\)](#)
- [GSLayer\\$setStyles\(\)](#)
- [GSLayer\\$addStyle\(\)](#)
- [GSLayer\\$delStyle\(\)](#)
- [GSLayer\\$clone\(\)](#)

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

Usage:

`GSLayer$new(xml = NULL)`

Arguments:

xml object of class `xml_node-class`

Method decode(): Decodes from XML

Usage:

GSLayer\$decode(xml)

Arguments:

xml object of class `xml_node-class`

Method setName(): Set name

Usage:

GSLayer\$setName(name)

Arguments:

name name

Method setPath(): Set path

Usage:

GSLayer\$path(path)

Arguments:

path path

Method setEnabled(): Set enabled

Usage:

GSLayer\$setEnabled(enabled)

Arguments:

enabled enabled

Method setQueryable(): Set queryable

Usage:

GSLayer\$queryable(queryable)

Arguments:

queryable queryable

Method setAdvertised(): Set advertised

Usage:

GSLayer\$setAdvertised(advertised)

Arguments:

advertised advertised

Method setDefaultStyle(): Set default style

Usage:

GSLayer\$setDefaultStyle(style)

Arguments:

style object o class [GSStyle](#) or character

Method `setStyles():` Set styles

Usage:

`GSLayer$setStyles(styles)`

Arguments:

styles styles

Method `addStyle():` Adds style

Usage:

`GSLayer$addStyle(style)`

Arguments:

style style, object o class [GSStyle](#) or character

Returns: TRUE if added, FALSE otherwise

Method `delStyle():` Deletes style

Usage:

`GSLayer$delStyle(style)`

Arguments:

style style, object o class [GSStyle](#) or character

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

`GSLayer$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Super class

[geosapi::GSRESTResource](#) -> GSStyle

Public fields

full full

name name

filename filename

Methods

Public methods:

- [GSStyle\\$new\(\)](#)
- [GSStyle\\$decode\(\)](#)
- [GSStyle\\$setName\(\)](#)
- [GSStyle\\$setFilename\(\)](#)
- [GSStyle\\$clone\(\)](#)

Method new(): Initializes a [GSStyle](#)

Usage:

`GSStyle$new(xml = NULL, name = NULL, filename = NULL)`

Arguments:

`xml` an object of class [xml_node-class](#)
`name` name
`filename` filename

Method decode(): Decodes from XML

Usage:

`GSStyle$decode(xml)`

Arguments:

`xml` an object of class [xml_node-class](#)

Method setName(): set name

Usage:

`GSStyle$setName(name)`

Arguments:

`name` name

Method setFilename(): Set filename

Usage:

`GSStyle$setFilename(filename)`

Arguments:

`filename` filename

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

Usage:

`GSStyle$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
lyr <- GSLayer$new()  
lyr <- GSStyle$new()
```

GSLayerGroup

A GeoServer layergroup resource

Description

This class models a GeoServer layer group. This class is to be used for clustering layers into a group.

Format

[R6Class](#) object.

Details

Geoserver REST API LayerGroup

Value

Object of [R6Class](#) for modelling a GeoServer layergroup

Super class

[geosapi::GSRESTResource](#) -> GSLayerGroup

Public fields

```
full full  
name name  
mode mode  
title title  
abstractTxt abstract  
workspace workspace  
publishables publishables  
styles styles  
metadataLinks metadata links  
bounds bounds
```

Methods

Public methods:

- [GSLayerGroup\\$new\(\)](#)
- [GSLayerGroup\\$decode\(\)](#)
- [GSLayerGroup\\$setName\(\)](#)
- [GSLayerGroup\\$setMode\(\)](#)
- [GSLayerGroup\\$setTitle\(\)](#)
- [GSLayerGroup\\$setAbstract\(\)](#)
- [GSLayerGroup\\$setWorkspace\(\)](#)
- [GSLayerGroup\\$addLayer\(\)](#)
- [GSLayerGroup\\$addLayerGroup\(\)](#)
- [GSLayerGroup\\$addPublishable\(\)](#)
- [GSLayerGroup\\$setStyles\(\)](#)
- [GSLayerGroup\\$addStyle\(\)](#)
- [GSLayerGroup\\$setMetadataLinks\(\)](#)
- [GSLayerGroup\\$addMetadataLink\(\)](#)
- [GSLayerGroup\\$deleteMetadataLink\(\)](#)
- [GSLayerGroup\\$setBounds\(\)](#)
- [GSLayerGroup\\$clone\(\)](#)

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

Usage:

`GSLayerGroup$new(xml = NULL)`

Arguments:

`xml` object of class [xml_node-class](#)

Method decode(): Decodes from XML

Usage:

`GSLayerGroup$decode(xml)`

Arguments:

`xml` object of class [xml_node-class](#)

Method setName(): Set name

Usage:

`GSLayerGroup$setName(name)`

Arguments:

`name` name

Method setMode(): Set mode

Usage:

`GSLayerGroup$setMode(mode)`

Arguments:

mode a mode value among "SINGLE", "NAMED", "CONTAINER", "EO"

Method `setTitle()`: Set title

Usage:

`GSLayerGroup$setTitle(title)`

Arguments:

`title` title

Method `setAbstract()`: Set abstract

Usage:

`GSLayerGroup$setAbstract(abstract)`

Arguments:

`abstract` abstract

Method `setWorkspace()`: Set workspace

Usage:

`GSLayerGroup$setWorkspace(workspace)`

Arguments:

`workspace` workspace name, object of class [GSWorkspace](#) or character

Method `addLayer()`: Adds layer

Usage:

`GSLayerGroup$addLayer(layer, style)`

Arguments:

`layer` layer name

`style` style name

Method `addLayerGroup()`: Adds layer group

Usage:

`GSLayerGroup$addLayerGroup(layerGroup)`

Arguments:

`layerGroup` layer group

Method `addPublishable()`: Adds publishable

Usage:

`GSLayerGroup$addPublishable(publishable)`

Arguments:

`publishable` publishable

Returns: TRUE if added, FALSE otherwise

Method `setStyles()`: Set styles

Usage:

`GSLayerGroup$setStyles(styles)`

Arguments:
styles styles

Method addStyle(): Adds a style

Usage:

GSLayerGroup\$addStyle(style)

Arguments:
style style

Returns: TRUE if added, FALSE otherwise

Method setMetadataLinks(): Set metadata links

Usage:

GSLayerGroup\$setMetadataLinks(metadataLinks)

Arguments:
metadataLinks metadata links

Method addMetadataLink(): Adds metadata link

Usage:

GSLayerGroup\$addMetadataLink(metadataLink)

Arguments:
metadataLink object of class [GSMetadataLink](#)

Returns: TRUE if added, FALSE otherwise

Method deleteMetadataLink(): Deletes metadata link

Usage:

GSLayerGroup\$deleteMetadataLink(metadataLink)

Arguments:
metadataLink object of class [GSMetadataLink](#)

Returns: TRUE if deleted, FALSE otherwise

Method setBounds(): Set bounds

Usage:

GSLayerGroup\$setBounds(minx, miny, maxx, maxy, bbox = NULL, crs)

Arguments:
minx minx
miny miny
maxx maxx
maxy maxy
bbox bbox
crs crs

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

Usage:

GSLayerGroup\$clone(deep = FALSE)

Arguments:
deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
lyr <- GSLayerGroup$new()
```

GSLayerManager

Geoserver REST API Layer Manager

Description

Geoserver REST API Layer Manager

Geoserver REST API Layer Manager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for managing GeoServer Layers as results of published feature types or coverages

Super class

[geosapi::GSManager](#) -> GSLayerManager

Methods**Public methods:**

- [GSLayerManager\\$getLayers\(\)](#)
- [GSLayerManager\\$getLayerNames\(\)](#)
- [GSLayerManager\\$getLayer\(\)](#)
- [GSLayerManager\\$createLayer\(\)](#)
- [GSLayerManager\\$updateLayer\(\)](#)
- [GSLayerManager\\$deleteLayer\(\)](#)
- [GSLayerManager\\$getLayerGroups\(\)](#)
- [GSLayerManager\\$getLayerGroupNames\(\)](#)
- [GSLayerManager\\$getLayerGroup\(\)](#)
- [GSLayerManager\\$createLayerGroup\(\)](#)
- [GSLayerManager\\$updateLayerGroup\(\)](#)
- [GSLayerManager\\$deleteLayerGroup\(\)](#)
- [GSLayerManager\\$clone\(\)](#)

Method `getLayers()`: Get the list of layers.

Usage:

`GSLayerManager$getLayers()`

Returns: an object of class `list` giving items of class `GSLayer`

Method `getLayerNames()`: Get the list of layer names.

Usage:

`GSLayerManager$getLayerNames()`

Returns: a vector of class `character`

Method `getLayer()`: Get layer by name

Usage:

`GSLayerManager$getLayer(lyr)`

Arguments:

`lyr` layer name

Returns: an object of class `GSLayer`

Method `createLayer()`: Creates a new layer given an object of class `GSLayer`

Usage:

`GSLayerManager$createLayer(layer)`

Arguments:

`layer` object of class `GSLayer`

Returns: TRUE if created, FALSE otherwise

Method `updateLayer()`: Updates a layer given an object of class `GSLayer`

Usage:

`GSLayerManager$updateLayer(layer)`

Arguments:

`layer` object of class `GSLayer`

Returns: TRUE if updated, FALSE otherwise

Method `deleteLayer()`: Deletes layer given an object of class `GSLayer`

Usage:

`GSLayerManager$deleteLayer(lyr)`

Arguments:

`lyr` layer name

Returns: TRUE if deleted, FALSE otherwise

Method `getLayerGroups()`: Get layer groups

Usage:

`GSLayerManager$getLayerGroups(ws = NULL)`

Arguments:

ws workspace name. Optional

Returns: a list of objects of class [GSLayerGroup](#)

Method `getLayerGroupNames()`: Get layer group names

Usage:

```
GSLayerManager$getLayerGroupNames(ws = NULL)
```

Arguments:

ws workspace name

Returns: a list of layer group names, as vector of class character

Method `getLayerGroup()`: Get layer group

Usage:

```
GSLayerManager$getLayerGroup(lyr, ws = NULL)
```

Arguments:

lyr lyr

ws workspace name

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

Method `createLayerGroup()`: Creates a layer group

Usage:

```
GSLayerManager$createLayerGroup(layerGroup, ws = NULL)
```

Arguments:

layerGroup object of class [GSLayerGroup](#)

ws workspace name. Optional

Returns: TRUE if created, FALSE otherwise

Method `updateLayerGroup()`: Updates a layer group

Usage:

```
GSLayerManager$updateLayerGroup(layerGroup, ws = NULL)
```

Arguments:

layerGroup object of class [GSLayerGroup](#)

ws workspace name. Optional

Returns: TRUE if updated, FALSE otherwise

Method `deleteLayerGroup()`: Deletes a layer group

Usage:

```
GSLayerManager$deleteLayerGroup(lyr, ws = NULL)
```

Arguments:

lyr layer group name

ws workspace name. Optional

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:  
GSLayerManager$new("http://localhost:8080/geoserver", "admin", "geoserver")  
  
## End(Not run)
```

GSManager

Geoserver REST API Manager

Description

Geoserver REST API Manager
Geoserver REST API Manager

Format

[R6Class](#) object.

Value

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

Public fields

verbose.info if geosapi logs have to be printed
verbose.debug if curl logs have to be printed
loggerType the type of logger
url the Base url of GeoServer
version the version of Geoserver. Handled as GSVersion object

Methods

Public methods:

- `GSManager$logger()`
- `GSManager$INFO()`
- `GSManager$WARN()`
- `GSManager$ERROR()`
- `GSManager$new()`
- `GSManager$getUrl()`
- `GSManager$connect()`
- `GSManager$reload()`
- `GSManager$getSystemStatus()`
- `GSManager$monitor()`
- `GSManager$getClassName()`
- `GSManager$getWorkspaceManager()`
- `GSManager$getNamespaceManager()`
- `GSManager$getDataStoreManager()`
- `GSManager$getCoverageStoreManager()`
- `GSManager$getServiceManager()`
- `GSManager$getStyleManager()`
- `GSManager$clone()`

Method `logger()`: Prints a log message

Usage:

`GSManager$logger(type, text)`

Arguments:

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

`text` text

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

Usage:

`GSManager$INFO(text)`

Arguments:

`text` text

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

Usage:

`GSManager$WARN(text)`

Arguments:

`text` text

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

Usage:

```
GSManager$ERROR(text)
```

Arguments:

```
text text
```

Method new(): This method is used to instantiate a GSManager with the url of the GeoServer 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 Geoserver user password with **keyring** (Default value is 'env').

Usage:

```
GSManager$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:

```
GSManager$getUrl()
```

Returns: the Geoserver URL

Method connect(): Connects to geoServer

Usage:

```
GSManager$connect()
```

Returns: TRUE if connected, raises an error otherwise

Method reload(): Reloads the GeoServer catalog

Usage:

```
GSManager$reload()
```

Returns: TRUE if reloaded, FALSE otherwise

Method getSystemStatus(): Get system status

Usage:

```
GSManager$getSystemStatus()
```

Returns: an object of class `data.frame` given the date time and metrics value

Method monitor(): Monitors the Geoserver by launching a small shiny monitoring application

Usage:

```
GSManager$monitor(file = NULL, append = FALSE, sleep = 1)
```

Arguments:

`file` file where to store monitoring results
`append` whether to append results to existing files
`sleep` sleeping interval to trigger a system status call

Method `getClassName()`: Get class name

Usage:

`GSManager$getClassName()`

Returns: the self class name, as character

Method `getWorkspaceManager()`: Get Workspace manager

Usage:

`GSManager$getWorkspaceManager()`

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

Method `getNamespaceManager()`: Get Namespace manager

Usage:

`GSManager$getNamespaceManager()`

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

Method `getDataStoreManager()`: Get Datastore manager

Usage:

`GSManager$getDataStoreManager()`

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

Method `getCoverageStoreManager()`: Get Coverage store manager

Usage:

`GSManager$getCoverageStoreManager()`

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

Method `getServiceManager()`: Get service manager

Usage:

`GSManager$getServiceManager()`

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

Method `getStyleManager()`: Get style manager

Usage:

`GSManager$getStyleManager()`

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

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

Usage:

`GSManager$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel@gmail.com>

Examples

```
## Not run:  
GSManager$new("http://localhost:8080/geoserver", "admin", "geoserver")  
  
## End(Not run)
```

GSMetadataLink

A GeoServer resource metadataLink

Description

This class models a GeoServer resource metadataLink made of a type (free text e.g. text/xml, text/html), a metadataType (Possible values are ISO19115:2003, FGDC, TC211, 19139, other), and a content: an URL that gives the metadataLink

Format

[R6Class](#) object.

Details

Geoserver REST API Metadatalink

Value

Object of [R6Class](#) for modelling a GeoServer resource metadataLink

Super class

[geosapi::GSRESTResource](#) -> GSMetadataLink

Public fields

type type
metadataType metadata type
content content

Methods**Public methods:**

- [GSMetadataLink\\$new\(\)](#)
- [GSMetadataLink\\$decode\(\)](#)
- [GSMetadataLink\\$setType\(\)](#)
- [GSMetadataLink\\$setMetadataType\(\)](#)
- [GSMetadataLink\\$setContent\(\)](#)
- [GSMetadataLink\\$clone\(\)](#)

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

Usage:

`GSMetadataLink$new(xml = NULL, type, metadataType, content)`

Arguments:

`xml` object of class [xml_node-class](#)
`type` type
`metadataType` metadata type
`content` content

Method decode(): Decodes from XML

Usage:

`GSMetadataLink$decode(xml)`

Arguments:

`xml` object of class [xml_node-class](#)

Method setType(): Set type type

Usage:

`GSMetadataLink$setType(type)`

Arguments:

`type` type

Method setMetadataType(): Set metadata type

Usage:

`GSMetadataLink$setMetadataType(metadataType)`

Arguments:

`metadataType` metadata type. Supported values: "ISO19115:2003", "FGDC", "TC211", "19139", "other"

Method setContent(): Set content

Usage:

`GSMetadataLink$setContent(content)`

Arguments:

`content` content

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

Usage:

`GSMetadataLink$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GSMonitorManager

Geoserver REST API Monitor Manager

Description

Geoserver REST API Monitor Manager

Geoserver REST API Monitor Manager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for the GeoServer Monitoring extension.

Super class

`geosapi::GSManager -> GSMonitorManager`

Methods

Public methods:

- `GSMonitorManager$getRequests()`
- `GSMonitorManager$clone()`

Method `getRequests()`: Get the requests

Usage:

`GSMonitorManager$getRequests(offset = 0)`

Arguments:

`offset` offset

Returns: an object of class `data.frame`

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

Usage:

`GSMonitorManager$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:
GSMonitorManager$new("http://localhost:8080/geoserver", "admin", "geoserver")

## End(Not run)
```

GSNamespace

Geoserver REST API Namespace

Description

Geoserver REST API Namespace
Geoserver REST API Namespace

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer namespace

Super class

[geosapi::GSRESTResource](#) -> *GSNamespace*

Public fields

- name namespace name
- prefix namespace prefix
- uri namespace URI
- full completeness of the namespace description

Methods**Public methods:**

- [GSNamespace\\$new\(\)](#)
- [GSNamespace\\$decode\(\)](#)
- [GSNamespace\\$clone\(\)](#)

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

Usage:

```
GSNamespace$new(xml = NULL, prefix, uri)
```

Arguments:

xml object of class [xml_node-class](#)
prefix prefix
uri uri

Method decode(): Decodes from XML

Usage:

```
GSNamespace$decode(xml)
```

Arguments:

xml object of class [xml_node-class](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
GSNamespace$new(prefix = "my_ns", uri = "http://my_ns")
```

GSNamespaceManager

Geoserver REST API Namespace Manager

Description

Geoserver REST API Namespace Manager

Geoserver REST API Namespace Manager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for managing the namespaces of a GeoServer instance.

Super class

`geosapi::GStateManager -> GSNamespaceManager`

Methods

Public methods:

- `GSNamespaceManager$getNamespaces()`
- `GSNamespaceManager$getNamespaceNames()`
- `GSNamespaceManager$getNamespace()`
- `GSNamespaceManager$createNamespace()`
- `GSNamespaceManager$updateNamespace()`
- `GSNamespaceManager$deleteNamespace()`
- `GSNamespaceManager$clone()`

Method `getNamespaces()`: Get the list of available namespace. Re

Usage:

`GSNamespaceManager$getNamespaces()`

Returns: an object of class `list` containing items of class `GSNamespace`

Method `getNamespaceNames()`: Get the list of available namespace names.

Usage:

`GSNamespaceManager$getNamespaceNames()`

Returns: a vector of class `character`

Method `getNamespace()`: Get a `GSNamespace` object given a namespace name.

Usage:

`GSNamespaceManager$getNamespace(ns)`

Arguments:

`ns` namespace

Returns: an object of class `GSNamespace`

Method `createNamespace()`: Creates a GeoServer namespace given a prefix, and an optional URI.

Usage:

`GSNamespaceManager$createNamespace(prefix, uri)`

Arguments:

`prefix` prefix

`uri` uri

Returns: TRUE if the namespace has been successfully created, FALSE otherwise

Method `updateNamespace()`: Updates a GeoServer namespace given a prefix, and an optional URI.

Usage:

```
GSNamespaceManager$updateNamespace(prefix, uri)
```

Arguments:

prefix prefix

uri uri

Returns: TRUE if the namespace has been successfully updated, FALSE otherwise

Method deleteNamespace(): Deletes a GeoServer namespace given a name.

Usage:

```
GSNamespaceManager$deleteNamespace(name, recurse = FALSE)
```

Arguments:

name name

recurse recurse

Returns: TRUE if the namespace has been successfully deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
## Not run:
GSNamespaceManager$new("http://localhost:8080/geoserver", "admin", "geoserver")

## End(Not run)
```

Description

Geoserver REST API OracleNGDataStore

Geoserver REST API OracleNGDataStore

Format

R6Class object.

Value

Object of [R6Class](#) for modelling a GeoServer OracleNG dataStore

Super classes

```
geosapi::GSRESTResource -> geosapi::GSAbstractStore -> geosapi::GSAbstractDataStore
-> geosapi::GSAbstractDBDataStore -> GSOracleNGDataStore
```

Methods**Public methods:**

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

Method `new()`: initializes an Oracle NG data store

Usage:

```
GSOracleNGDataStore$new(
  xml = NULL,
  name = NULL,
  description = "",
  enabled = TRUE
)
```

Arguments:

`xml` an object of class [xml_node-class](#) to create object from XML
`name` coverage store name
`description` coverage store description
`enabled` whether the store should be enabled or not. Default is TRUE

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
GSOracleNGDataStore$new(name = "ds", description = "des", enabled = TRUE)
```

GSPostGISDataStore *Geoserver REST API PostGISDataStore*

Description

Geoserver REST API PostGISDataStore
Geoserver REST API PostGISDataStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer PostGIS dataStore

Super classes

[geosapi::GSRESTResource](#) -> [geosapi::GSAbstractStore](#) -> [geosapi::GSAbstractDataStore](#)
-> [geosapi::GSAbstractDBDataStore](#) -> GSPostGISDataStore

Methods**Public methods:**

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

Method new(): initializes a PostGIS data store

Usage:

```
GSPostGISDataStore$new(  
  xml = NULL,  
  name = NULL,  
  description = "",  
  enabled = TRUE  
)
```

Arguments:

xml an object of class [xml_node-class](#) to create object from XML
name coverage store name
description coverage store description
enabled whether the store should be enabled or not. Default is TRUE

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
GSPostGISDataStore$new(name = "ds", description = "des", enabled = TRUE)
```

GSPublishable

A GeoServer layer group publishable

Description

This class models a GeoServer layer. This class is to be used internally by **geosapi** for configuring layers or layer groups within an object of class **GSLayerGroup**

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer layer group publishable

Super class

[geosapi::GSRESTResource](#) -> **GSPublishable**

Public fields

full	full
name	name
attr_type	type of attribute

Methods**Public methods:**

- [GSPublishable\\$new\(\)](#)
- [GSPublishable\\$decode\(\)](#)
- [GSPublishable\\$setName\(\)](#)
- [GSPublishable\\$setType\(\)](#)
- [GSPublishable\\$clone\(\)](#)

Method new(): Initializes a [GSPublishable](#)

Usage:

```
GSPublishable$new(xml = NULL, name, type)
```

Arguments:

xml an object of class `xml_node-class`
name name
type type

Method decode(): Decodes from XML

Usage:

`GSPublishable$decode(xml1)`

Arguments:

xml an object of class `xml_node-class`

Method setName(): set name

Usage:

`GSPublishable$setName(name)`

Arguments:

name name

Method setType(): Set type

Usage:

`GSPublishable$setType(type)`

Arguments:

type type

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

Usage:

`GSPublishable$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
publishable <- GSPublishable$new(name = "name", type = "layer")
```

GSResource	<i>A GeoServer abstract resource</i>
------------	--------------------------------------

Description

This class models an abstract GeoServer resource. This class is used internally for modelling instances of class GSFeatureType or GSCoverage

Format

[R6Class](#) object.

Details

Geoserver REST API Resource

Value

Object of [R6Class](#) for modelling a GeoServer resource

Super class

[geosapi::GSRESTResource](#) -> GSResource

Public fields

full full
name resource name
nativeName resource native name
title resource title
description resource description
abstract resource abstract
keywords resource keywords
metadataLinks resource metadata links
nativeCRS resource native CRS
srs resource srs
nativeBoundingBox resource lat/lon native bounding box
latLonBoundingBox resource lat/lon bounding box
projectionPolicy resource projection policy
enabled enabled
metadata metadata

Methods

Public methods:

- [GSResource\\$new\(\)](#)
- [GSResource\\$decode\(\)](#)
- [GSResource\\$setEnabled\(\)](#)
- [GSResource\\$setName\(\)](#)
- [GSResource\\$setNativeName\(\)](#)
- [GSResource\\$setTitle\(\)](#)
- [GSResource\\$setDescription\(\)](#)
- [GSResource\\$setAbstract\(\)](#)
- [GSResource\\$setKeywords\(\)](#)
- [GSResource\\$addKeyword\(\)](#)
- [GSResource\\$delKeyword\(\)](#)
- [GSResource\\$setMetadataLinks\(\)](#)
- [GSResource\\$addMetadataLink\(\)](#)
- [GSResource\\$deleteMetadataLink\(\)](#)
- [GSResource\\$setProjectionPolicy\(\)](#)
- [GSResource\\$setSrs\(\)](#)
- [GSResource\\$setNativeCRS\(\)](#)
- [GSResource\\$setLatLonBoundingBox\(\)](#)
- [GSResource\\$setNativeBoundingBox\(\)](#)
- [GSResource\\$setMetadata\(\)](#)
- [GSResource\\$delMetadata\(\)](#)
- [GSResource\\$setMetadataDimension\(\)](#)
- [GSResource\\$clone\(\)](#)

Method new(): Initializes a [GSResource](#)

Usage:

`GSResource$new(rootName = NULL, xml = NULL)`

Arguments:

`rootName` root name

`xml` object of class [xml_node-class](#)

Method decode(): Decodes from XML

Usage:

`GSResource$decode(xml)`

Arguments:

`xml` object of class [xml_node-class](#)

Method setEnabled(): Set enabled

Usage:

`GSResource$setEnabled(enabled)`

Arguments:

enabled enabled

Method setName(): Set name

Usage:

GSResource\$setName(name)

Arguments:

name name

Method setNativeName(): Set native name

Usage:

GSResource\$setNativeName(nativeName)

Arguments:

nativeName native name

Method setTitle(): Set title

Usage:

GSResourcesetTitle(title)

Arguments:

title title

Method setDescription(): Set description

Usage:

GSResourcesetDescription(description)

Arguments:

description description

Method setAbstract(): Set abstract

Usage:

GSResource\$setAbstract(abstract)

Arguments:

abstract abstract

Method setKeywords(): Set keyword(s)

Usage:

GSResource\$setKeywords(keywords)

Arguments:

keywords keywords

Method addKeyword(): Adds keyword

Usage:

GSResource\$addKeyword(keyword)

Arguments:

keyword keyword

Returns: TRUE if added, FALSE otherwise

Method delKeyword(): Deletes keyword

Usage:

GSResource\$delKeyword(keyword)

Arguments:

keyword keyword

Returns: TRUE if deleted, FALSE otherwise

Method setMetadataLinks(): Set metadata links

Usage:

GSResource\$setMetadataLinks(metadataLinks)

Arguments:

metadataLinks metadata links

Method addMetadataLink(): Adds metadata link

Usage:

GSResource\$addMetadataLink(metadataLink)

Arguments:

metadataLink object of class [GSMetadataLink](#)

Returns: TRUE if added, FALSE otherwise

Method deleteMetadataLink(): Deletes metadata link

Usage:

GSResource\$deleteMetadataLink(metadataLink)

Arguments:

metadataLink object of class [GSMetadataLink](#)

Returns: TRUE if deleted, FALSE otherwise

Method setProjectionPolicy(): Set projection policy

Usage:

GSResource\$setProjectionPolicy(projectionPolicy)

Arguments:

projectionPolicy projection policy

Method setSrs(): Set SRS

Usage:

GSResource\$setSrs(srs)

Arguments:

srs srs

Method setNativeCRS(): Set native CRS

Usage:

```
GSResource$setNativeCRS(nativeCRS)
```

Arguments:

```
nativeCRS native crs
```

Method setLatLonBoundingBox(): Set LatLon bounding box

Usage:

```
GSResource$setLatLonBoundingBox(minx, miny, maxx, maxy, bbox = NULL, crs)
```

Arguments:

```
minx minx
```

```
miny miny
```

```
maxx maxx
```

```
maxy maxy
```

```
bbox bbox
```

```
crs crs
```

Method setNativeBoundingBox(): Set native bounding box

Usage:

```
GSResource$setNativeBoundingBox(minx, miny, maxx, maxy, bbox = NULL, crs)
```

Arguments:

```
minx minx
```

```
miny miny
```

```
maxx maxx
```

```
maxy maxy
```

```
bbox bbox
```

```
crs crs
```

Method setMetadata(): Set metadata

Usage:

```
GSResource$setMetadata(key, metadata)
```

Arguments:

```
key key
```

```
metadata metadata
```

Returns: TRUE if added, FALSE otherwise

Method delMetadata(): Deletes metadata

Usage:

```
GSResource$delMetadata(key)
```

Arguments:

```
key key
```

Returns: TRUE if deleted, FALSE otherwise

Method setMetadataDimension(): Set metadata dimension

Usage:

```
GSResource$setMetadataDimension(key, dimension, custom = FALSE)
```

Arguments:

key key

dimension dimension

custom custom

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
res <- GSResource$new(rootName = "featureType")
```

GSRESTEntrySet

Geoserver REST API XML entry set

Description

Geoserver REST API XML entry set

Geoserver REST API XML entry set

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a entry set

Super class

[geosapi::GSRESTResource](#) -> GSRESTEntrySet

Public fields

```
entryset entryset
```

Methods**Public methods:**

- [GSRESTEntrySet\\$new\(\)](#)
- [GSRESTEntrySet\\$decode\(\)](#)
- [GSRESTEntrySet\\$setEntryset\(\)](#)
- [GSRESTEntrySet\\$addEntry\(\)](#)
- [GSRESTEntrySet\\$setEntry\(\)](#)
- [GSRESTEntrySet\\$delEntry\(\)](#)
- [GSRESTEntrySet\\$clone\(\)](#)

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

Usage:

```
GSRESTEntrySet$new(rootName, xml = NULL, entryset)
```

Arguments:

rootName root name

xml object of class [xml_node-class](#)

entryset entry set

Method decode(): Decodes from XML

Usage:

```
GSRESTEntrySet$decode(xml)
```

Arguments:

xml object of class [xml_node-class](#)

Method setEntryset(): Set entry set

Usage:

```
GSRESTEntrySet$setEntryset(entryset)
```

Arguments:

entryset entry set

Method addEntry(): Adds entry set

Usage:

```
GSRESTEntrySet$addEntry(key, value)
```

Arguments:

key key

value value

Returns: TRUE if added, FALSE otherwise

Method setEntry(): Sets entry set

Usage:

```
GSRESTEntrySet$setEntry(key, value)
```

Arguments:

key key

value value

Method delEntry(): Deletes entry set

Usage:

```
GSRESTEntrySet$delEntry(key)
```

Arguments:

key key

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GSRESTResource

Geoserver REST API REST Resource interface

Description

Geoserver REST API REST Resource interface

Geoserver REST API REST Resource interface

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer REST resource interface

Public fields

rootName root name

Methods

Public methods:

- [GSRESTResource\\$new\(\)](#)
- [GSRESTResource\\$decode\(\)](#)
- [GSRESTResource\\$encode\(\)](#)
- [GSRESTResource\\$print\(\)](#)
- [GSRESTResource\\$getClassName\(\)](#)
- [GSRESTResource\\$clone\(\)](#)

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

Usage:

```
GSRESTResource$new(xml, rootName)
```

Arguments:

xml object of class [xml_node-class](#)

rootName root name

Method decode(): Decodes from XML. Abstract method to be implemented by sub-classes

Usage:

```
GSRESTResource$decode(xml)
```

Arguments:

xml object of class [xml_node-class](#)

Method encode(): Encodes as XML

Usage:

```
GSRESTResource$encode()
```

Returns: an object of class [xml_node-class](#)

Method print(): Provides a custom print output (as tree) of the current class

Usage:

```
GSRESTResource$print(..., depth = 1)
```

Arguments:

... args

depth class nesting depth

Method getClassName(): Get class name

Usage:

```
GSRESTResource$getClassName()
```

Returns: an object of class character

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

GSServiceManager

Geoserver REST API Service Manager

Description

Geoserver REST API Service Manager

Geoserver REST API Service Manager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for managing GeoServer services

Super class

[geosapi::GSManager](#) -> GSServiceManager

Methods**Public methods:**

- [GSServiceManager\\$getServiceSettings\(\)](#)
- [GSServiceManager\\$getWmsSettings\(\)](#)
- [GSServiceManager\\$getWfsSettings\(\)](#)
- [GSServiceManager\\$getWcsSettings\(\)](#)
- [GSServiceManager\\$updateServiceSettings\(\)](#)
- [GSServiceManager\\$deleteServiceSettings\(\)](#)
- [GSServiceManager\\$updateWmsSettings\(\)](#)
- [GSServiceManager\\$updateWfsSettings\(\)](#)
- [GSServiceManager\\$updateWcsSettings\(\)](#)
- [GSServiceManager\\$enableWMS\(\)](#)
- [GSServiceManager\\$enableWFS\(\)](#)
- [GSServiceManager\\$enableWCS\(\)](#)
- [GSServiceManager\\$disableServiceSettings\(\)](#)
- [GSServiceManager\\$disableWMS\(\)](#)
- [GSServiceManager\\$disableWFS\(\)](#)
- [GSServiceManager\\$disableWCS\(\)](#)
- [GSServiceManager\\$clone\(\)](#)

Method `getServiceSettings():` Get the service settings. To get the service settings for a specific workspace, specify the workspace name as `ws` parameter, otherwise global settings are retrieved.

Usage:

```
GSServiceManager$getServiceSettings(service, ws = NULL)
```

Arguments:

`service` service

`ws` workspace name

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

Method `getWmsSettings():` Get WMS settings. To get the WMS settings for a specific workspace, specify the workspace name as `ws` parameter, otherwise global settings are retrieved.

Usage:

```
GSServiceManager$getWmsSettings(ws = NULL)
```

Arguments:

`ws` workspace name

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

Method `getWfsSettings():` Get WFS settings. To get the WFS settings for a specific workspace, specify the workspace name as `ws` parameter, otherwise global settings are retrieved.

Usage:

```
GSServiceManager$getWfsSettings(ws = NULL)
```

Arguments:

`ws` workspace name

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

Method `getWcsSettings():` Get WCS settings. To get the WCS settings for a specific workspace, specify the workspace name as `ws` parameter, otherwise global settings are retrieved.

Usage:

```
GSServiceManager$getWcsSettings(ws = NULL)
```

Arguments:

`ws` workspace name

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

Method `updateServiceSettings():` Updates the service settings with an object of class [GSServiceSettings](#). An optional workspace name `ws` can be specified to update service settings applying to a workspace.

Usage:

```
GSServiceManager$updateServiceSettings(serviceSettings, service, ws = NULL)
```

Arguments:

`serviceSettings` serviceSettings object of class [GSServiceSettings](#)

`service` service

ws workspace name

Returns: TRUE if updated, FALSE otherwise

Method deleteServiceSettings(): Deletes the service settings. This method is used internally by **geosapi** for disabling a service setting at workspace level.

Usage:

```
GSServiceManager$deleteServiceSettings(service, ws = NULL)
```

Arguments:

service service

ws workspace name

Returns: TRUE if deleted, FALSE otherwise

Method updateWmsSettings(): Updates the WMS settings with an object of class GSServiceSettings. An optional workspace name ws can be specified to update WMS settings applying to a workspace.

Usage:

```
GSServiceManager$updateWmsSettings(serviceSettings, ws = NULL)
```

Arguments:

serviceSettings service settings object of class **GSServiceSettings**

ws workspace name

Returns: TRUE if deleted, FALSE otherwise

Method updateWfsSettings(): Updates the WFS settings with an object of class GSServiceSettings. An optional workspace name ws can be specified to update WFS settings applying to a workspace.

Usage:

```
GSServiceManager$updateWfsSettings(serviceSettings, ws = NULL)
```

Arguments:

serviceSettings service settings object of class **GSServiceSettings**

ws workspace name

Returns: TRUE if deleted, FALSE otherwise

Method updateWcsSettings(): Updates the WCS settings with an object of class GSServiceSettings. An optional workspace name ws can be specified to update WCS settings applying to a workspace.

Usage:

```
GSServiceManager$updateWcsSettings(serviceSettings, ws = NULL)
```

Arguments:

serviceSettings service settings object of class **GSServiceSettings**

ws workspace name

Returns: TRUE if deleted, FALSE otherwise

Method enableWMS(): Enables WMS service settings

Usage:

```
GSServiceManager$enableWMS(ws = NULL)
```

Arguments:

ws workspace name

Returns: TRUE if enabled, FALSE otherwise

Method enableWFS(): Enables WFS service settings

Usage:

```
GSServiceManager$enableWFS(ws = NULL)
```

Arguments:

ws workspace name

Returns: TRUE if enabled, FALSE otherwise

Method enableWCS(): Enables WCS service settings

Usage:

```
GSServiceManager$enableWCS(ws = NULL)
```

Arguments:

ws workspace name

Returns: TRUE if enabled, FALSE otherwise

Method disableServiceSettings(): Disables service settings

Usage:

```
GSServiceManager$disableServiceSettings(service, ws = NULL)
```

Arguments:

service service

ws workspace name

Returns: TRUE if disabled, FALSE otherwise

Method disableWMS(): Disables WMS service settings

Usage:

```
GSServiceManager$disableWMS(ws = NULL)
```

Arguments:

ws workspace name

Returns: TRUE if disabled, FALSE otherwise

Method disableWFS(): Disables WFS service settings

Usage:

```
GSServiceManager$disableWFS(ws = NULL)
```

Arguments:

ws workspace name

Returns: TRUE if disabled, FALSE otherwise

Method disableWCS(): Disables WCS service settings

Usage:

```
GSServiceManager$disableWCS(ws = NULL)
```

Arguments:

ws workspace name

Returns: TRUE if disabled, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
## Not run:  
GSServiceManager$new("http://localhost:8080/geoserver", "admin", "geoserver")  
  
## End(Not run)
```

GSServiceSettings A *GeoServer service settings resource*

Description

This class models a GeoServer OWS service settings.

Format

[R6Class](#) object.

Details

Geoserver REST API Service Setting

Value

Object of [R6Class](#) for modelling a GeoServer OWS service setting

Super class

[geosapi::GSRESTResource](#) -> GSServiceSettings

Public fields

enabled is service enabled or not?
 citeCompliant is service cite compliant?
 name service name
 title service title
 maintainer service maintainer
 abstrct service abstract
 accessConstraints service access constraints
 fees service fees
 keywords services keywords
 onlineResource service online resource
 schemaBaseURL service schema base URL
 verbose service verbose or not?

Methods

Public methods:

- [GSServiceSettings\\$new\(\)](#)
- [GSServiceSettings\\$decode\(\)](#)
- [GSServiceSettings\\$setEnabled\(\)](#)
- [GSServiceSettings\\$setCiteCompliant\(\)](#)
- [GSServiceSettings\\$setName\(\)](#)
- [GSServiceSettings\\$setTitle\(\)](#)
- [GSServiceSettings\\$setMaintainer\(\)](#)
- [GSServiceSettings\\$setAbstract\(\)](#)
- [GSServiceSettings\\$setAccessConstraints\(\)](#)
- [GSServiceSettings\\$setFees\(\)](#)
- [GSServiceSettings\\$setKeywords\(\)](#)
- [GSServiceSettings\\$addKeyword\(\)](#)
- [GSServiceSettings\\$delKeyword\(\)](#)
- [GSServiceSettings\\$clone\(\)](#)

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

Usage:

`GSServiceSettings$new(xml = NULL, service)`

Arguments:

`xml` object of class [xml_node-class](#)
`service` service service acronym

Method decode(): Decodes from XML

Usage:

GSServiceSettings\$decode(xml)

Arguments:

xml object of class [xml_node-class](#)

Method setEnabled(): Set enabled

Usage:

GSServiceSettings\$setEnabled(enabled)

Arguments:

enabled enabled

Method setCiteCompliant(): Set cite compliant

Usage:

GSServiceSettings\$setCiteCompliant(citeCompliant)

Arguments:

citeCompliant cite compliant

Method setName(): Set name

Usage:

GSServiceSettings\$setName(name)

Arguments:

name name

Method setTitle(): Set title

Usage:

GSServiceSettings\$setTitle(title)

Arguments:

title title

Method setMaintainer(): Set maintainer

Usage:

GSServiceSettings\$setMaintainer(maintainer)

Arguments:

maintainer maintainer

Method setAbstract(): Set abstract

Usage:

GSServiceSettings\$setAbstract(abstract)

Arguments:

abstract abstract

Method setAccessConstraints(): Set access constraints

Usage:

GSServiceSettings\$setAccessConstraints(accessConstraints)

Arguments:

accessConstraints access constraints

Method setFees(): Set fees

Usage:

GSServiceSettings\$setFees(fees)

Arguments:

fees fees

Method setKeywords(): Set keywords

Usage:

GSServiceSettings\$setKeywords(keywords)

Arguments:

keywords keywords

Method addKeyword(): Adds a keyword

Usage:

GSServiceSettings\$addKeyword(keyword)

Arguments:

keyword keyword

Returns: TRUE if added, FALSE otherwise

Method delKeyword(): Deletes a keyword

Usage:

GSServiceSettings\$delKeyword(keyword)

Arguments:

keyword keyword

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GSServiceSettings\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
settings <- GSServiceSettings$new(service = "WMS")
settings$setEnabled(TRUE)
```

GSShapefileDataStore *Geoserver REST API ShapeFileDataStore*

Description

Geoserver REST API ShapeFileDataStore
Geoserver REST API ShapeFileDataStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer Shapefile dataStore

Super classes

[geosapi::GSRESTResource](#) -> [geosapi::GSAbstractStore](#) -> [geosapi::GSAbstractDataStore](#)
-> GSShapefileDataStore

Methods

Public methods:

- [GSShapefileDataStore\\$new\(\)](#)
- [GSShapefileDataStore\\$setUrl\(\)](#)
- [GSShapefileDataStore\\$setCharset\(\)](#)
- [GSShapefileDataStore\\$setCreateSpatialIndex\(\)](#)
- [GSShapefileDataStore\\$setMemoryMappedBuffer\(\)](#)
- [GSShapefileDataStore\\$setCacheReuseMemoryMaps\(\)](#)
- [GSShapefileDataStore\\$setDefaultConnectionParameters\(\)](#)
- [GSShapefileDataStore\\$clone\(\)](#)

Method [new\(\)](#): initializes a shapefile data store

Usage:

```
GSShapefileDataStore$new(  
  xml = NULL,  
  name = NULL,  
  description = "",  
  enabled = TRUE,  
  url  
)
```

Arguments:

`xml` an object of class [xml_node-class](#) to create object from XML
`name` coverage store name

```
description coverage store description
enabled whether the store should be enabled or not. Default is TRUE
url url
```

Method `setUrl()`: Set the spatial files data URL

Usage:

```
GSShapefileDataStore$setUrl(url)
```

Arguments:

```
url url
```

Method `setCharset()`: Set the charset used for DBF file.

Usage:

```
GSShapefileDataStore$setCharset(charset = "ISO-8859-1")
```

Arguments:

```
charset charset. Default value is 'ISO-8859-1'
```

Method `setCreateSpatialIndex()`: Set the 'Create Spatial Index' option

Usage:

```
GSShapefileDataStore$setCreateSpatialIndex(create = TRUE)
```

Arguments:

```
create create. Default is TRUE
```

Method `setMemoryMappedBuffer()`: Set the 'Memory Mapped Buffer' option

Usage:

```
GSShapefileDataStore$setMemoryMappedBuffer(buffer = FALSE)
```

Arguments:

```
buffer buffer. Default is FALSE
```

Method `setCacheReuseMemoryMaps()`: Set the 'Cache & Reuse Memory Maps' option.

Usage:

```
GSShapefileDataStore$setCacheReuseMemoryMaps(maps = TRUE)
```

Arguments:

```
maps maps. Default is TRUE
```

Method `setDefautConnectionParameters()`: Set default connection parameters

Usage:

```
GSShapefileDataStore$setDefautConnectionParameters()
```

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

Usage:

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

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
GSShapefileDataStore$new(name = "ds", description = "des",
                           enabled = TRUE, url = "file://data/shape.shp")
```

GSShapefileDirectoryDataStore

Geoserver REST API ShapeFileDirectoryDataStore

Description

Geoserver REST API ShapeFileDirectoryDataStore

Geoserver REST API ShapeFileDirectoryDataStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer Shapefile directory dataStore

Super classes

```
geosapi::GSRESTResource -> geosapi::GSAbstractStore -> geosapi::GSAbstractDataStore
-> geosapi::GSShapefileDataStore -> GSShapefileDirectoryDataStore
```

Methods**Public methods:**

- [GSShapefileDirectoryDataStore\\$new\(\)](#)
- [GSShapefileDirectoryDataStore\\$setUrl\(\)](#)
- [GSShapefileDirectoryDataStore\\$setCharset\(\)](#)
- [GSShapefileDirectoryDataStore\\$setCreateSpatialIndex\(\)](#)
- [GSShapefileDirectoryDataStore\\$setMemoryMappedBuffer\(\)](#)
- [GSShapefileDirectoryDataStore\\$setCacheReuseMemoryMaps\(\)](#)
- [GSShapefileDirectoryDataStore\\$setDefaultConnectionParameters\(\)](#)
- [GSShapefileDirectoryDataStore\\$clone\(\)](#)

Method `new()`: initializes a shapefile directory data store

Usage:

```
GSShapefileDirectoryDataStore$new(
  xml = NULL,
  name = NULL,
  description = "",
  enabled = TRUE,
  url
)
```

Arguments:

xml an object of class [xml_node-class](#) to create object from XML
 name coverage store name
 description coverage store description
 enabled whether the store should be enabled or not. Default is TRUE
 url url

Method `setUrl()`: Set the spatial files data URL

Usage:

```
GSShapefileDirectoryDataStore$setUrl(url)
```

Arguments:

url url

Method `setCharset()`: Set the charset used for DBF file.

Usage:

```
GSShapefileDirectoryDataStore$setCharset(charset = "ISO-8859-1")
```

Arguments:

charset charset. Default value is 'ISO-8859-1'

Method `setCreateSpatialIndex()`: Set the 'Create Spatial Index' option

Usage:

```
GSShapefileDirectoryDataStore$setCreateSpatialIndex(create = TRUE)
```

Arguments:

create create. Default is TRUE

Method `setMemoryMappedBuffer()`: Set the 'Memory Mapped Buffer' option

Usage:

```
GSShapefileDirectoryDataStore$setMemoryMappedBuffer(buffer = FALSE)
```

Arguments:

buffer buffer. Default is FALSE

Method `setCacheReuseMemoryMaps()`: Set the 'Cache & Reuse Memory Maps' option.

Usage:

```
GSShapefileDirectoryDataStore$setCacheReuseMemoryMaps(maps = TRUE)
```

Arguments:

maps maps. Default is TRUE

Method `setDefaultConnectionParameters()`: Set default connection parameters

Usage:

```
GSShapefileDirectoryDataStore$setDefaultConnectionParameters()
```

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
GSShapefileDirectoryDataStore$new(name = "ds", description = "des",
                                    enabled = TRUE, url = "file://data")
```

GSShinyMonitor

Geoserver REST API DataStore

Description

Geoserver REST API DataStore

Geoserver REST API DataStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for setting a GS Shiny monitoring app

Methods

Public methods:

- [GSShinyMonitor\\$new\(\)](#)
- [GSShinyMonitor\\$getMetric\(\)](#)
- [GSShinyMonitor\\$run\(\)](#)
- [GSShinyMonitor\\$clone\(\)](#)

Method `new()`: Initializes a Geoserver shiny monitoring tool

Usage:

```
GSShinyMonitor$new(manager, file = NULL, append = FALSE, sleep = 1)
```

Arguments:

`manager` object of class [GSManager](#)

`file` file File where to store monitoring results

`append` append. Whether results should be appended to existing file

`sleep` sleep. Interval in seconds to trigger monitor calls

Method `getMetric()`: Get metric

Usage:

```
GSShinyMonitor$getMetric(name)
```

Arguments:

`name` name

Returns: the Geoserver monitored metric

Method `run()`: Runs the application

Usage:

```
GSShinyMonitor$run()
```

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Internal class used for `GSManager$monitor` method

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Description

Geoserver REST API Style Manager

Geoserver REST API Style Manager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for managing the styles of a GeoServer instance.

Super class

`geosapi::GSManager -> GSStyleManager`

Methods**Public methods:**

- `GSStyleManager$getStyles()`
- `GSStyleManager$getStyleNames()`
- `GSStyleManager$getStyle()`
- `GSStyleManager$createStyle()`
- `GSStyleManager$updateStyle()`
- `GSStyleManager$deleteStyle()`
- `GSStyleManager$getSLDVersion()`
- `GSStyleManager$getSLDBody()`
- `GSStyleManager$clone()`

Method `getStyles():` Get the list of available styles.

Usage:

`GSStyleManager$getStyles(ws = NULL)`

Arguments:

`ws` an optional workspace name

Returns: an object of class `list` containing items of class [GSStyle](#)

Method `getStyleNames():` Get the list of available style names

Usage:

`GSStyleManager$getStyleNames(ws = NULL)`

Arguments:

`ws` an optional workspace name

Returns: a vector of class `character`

Method `getStyle():` Get a [GSStyle](#) object given a style name.

Usage:

`GSStyleManager$getStyle(style, ws = NULL)`

Arguments:

`style` style name

`ws` workspace name. Optional

Returns: object of class [GSStyle](#)

Method `createStyle():` Creates a GeoServer style given a name.

Usage:

```
GSStyleManager$createStyle(file, sldBody = NULL, name, raw = FALSE, ws = NULL)
```

Arguments:

file file

sldBody SLD body

name name

raw raw

ws workspace name

Returns: TRUE if the style has been successfully created, FALSE otherwise

Method updateStyle(): Updates a GeoServer style given a name.

Usage:

```
GSStyleManager$updateStyle(file, sldBody = NULL, name, raw = FALSE, ws = NULL)
```

Arguments:

file file

sldBody SLD body

name name

raw raw

ws workspace name

Returns: TRUE if the style has been successfully updated, FALSE otherwise

Method deleteStyle(): Deletes a style given a name. By default, the option recurse is set to FALSE, ie datastore layers are not removed. To remove all coverage store layers, set this option to TRUE. The purge parameter is used to customize the delete of files on disk (in case the underlying reader implements a delete method).

Usage:

```
GSStyleManager$deleteStyle(name, recurse = FALSE, purge = FALSE, ws = NULL)
```

Arguments:

name name

recurse recurse

purge purge

ws workspace name

Returns: TRUE if the style has been successfully deleted, FALSE otherwise

Method getSLDVersion(): Get SLD version

Usage:

```
GSStyleManager$getSLDVersion(sldBody)
```

Arguments:

sldBody SLD body

Method getSLDBody(): Get SLD body

Usage:

```
GSStyleManager$getSLDBody(style, ws = NULL)
```

Arguments:

style style name

ws workspace name

Returns: an object of class [xml_node-class](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
## Not run:  
GSStyleManager$new("http://localhost:8080/geoserver", "admin", "geoserver")  
  
## End(Not run)
```

Description

Geoserver REST API Manager Utils

Geoserver REST API Manager Utils

Format

[R6Class](#) object.

Value

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

Static methods

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

`getUserToken(user, pwd)` This method is used to get the user authentication token for performing GeoServer 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 GeoServer REST API

`PUT(url, user, pwd, path, filename, contentType, verbose)` This method performs a PUT request for a given path to GeoServer 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 GeoServer 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 GeoServer REST API

`parseResponseXML(req)` Convenience method to parse XML response from GeoServer REST API.

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

`setBbox(minx, miny, maxx, maxy, bbox, crs)` Creates an list object representing a bbox. Either from coordinates or from a bbox object (matrix).

Methods

Public methods:

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

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

Usage:

`GSUtils$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

GSVersion*A GeoServer version*

Description

This class allows to grab the GeoServer version. By default, a tentative is made to fetch version from web admin default page, since Geoserver REST API did not support GET operation for the Geoserver version in past releases of Geoserver.

Format

[R6Class](#) object.

Details

Geoserver REST API - Geoserver Version

Value

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

Public fields

version version
value value

Methods**Public methods:**

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

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

Usage:

GSVersion\$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:

`GSVersion$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:

`GSVersion$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:

`GSVersion$equalTo(version)`

Arguments:

`version` version

Returns: TRUE if equal, FALSE otherwise

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

Usage:

`GSVersion$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

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

GSVirtualTable*Geoserver REST API GSVirtualTable*

Description

Geoserver REST API GSVirtualTable
Geoserver REST API GSVirtualTable

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer virtual table

Super class

[geosapi::GSRESTResource](#) -> GSVirtualTable

Public fields

name name
sql SQL statement
escapeSql escape SQL?
keyColumn key column
geometry geometry
parameters list of virtual parameters

Methods**Public methods:**

- [GSVirtualTable\\$new\(\)](#)
- [GSVirtualTable\\$decode\(\)](#)
- [GSVirtualTable\\$setName\(\)](#)
- [GSVirtualTable\\$setSql\(\)](#)
- [GSVirtualTable\\$setEscapeSql\(\)](#)
- [GSVirtualTable\\$setKeyColumn\(\)](#)
- [GSVirtualTable\\$setGeometry\(\)](#)
- [GSVirtualTable\\$addParameter\(\)](#)
- [GSVirtualTable\\$delParameter\(\)](#)
- [GSVirtualTable\\$clone\(\)](#)

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

Usage:

`GVirtualTable$new(xml = NULL)`

Arguments:

`xml` object of class `xml_node-class`

Method `decode()`: Decodes from XML

Usage:

`GVirtualTable$decode(xml)`

Arguments:

`xml` object of class `xml_node-class`

Method `setName()`: Set name

Usage:

`GVirtualTable$setName(name)`

Arguments:

`name` name

Method `setSql()`: Set SQL

Usage:

`GVirtualTable$setSql(sql)`

Arguments:

`sql` sql

Method `setEscapeSql()`: Set escape SQL

Usage:

`GVirtualTable$setEscapeSql(escapeSql)`

Arguments:

`escapeSql` escape SQL

Method `setKeyColumn()`: Set key column

Usage:

`GVirtualTable$setKeyColumn(keyColumn)`

Arguments:

`keyColumn` key column

Method `setGeometry()`: Set geometry

Usage:

`GVirtualTable$setGeometry(vtg)`

Arguments:

`vtg` object of class `GVirtualTableGeometry`

Method `addParameter()`: Adds parameter

Usage:

```
GSVirtualTable$addParameter(parameter)
```

Arguments:

parameter object of class [GSVirtualTableParameter](#)

Returns: TRUE if added, FALSE otherwise

Method delParameter(): Deletes parameter

Usage:

```
GSVirtualTable$delParameter(parameter)
```

Arguments:

parameter object of class [GSVirtualTableParameter](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
GSVirtualTable$new()
```

GSVirtualTableGeometry

Geoserver REST API GSVirtualTableGeometry

Description

Geoserver REST API GSVirtualTableGeometry

Geoserver REST API GSVirtualTableGeometry

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer virtual table geometry

Super class

```
geosapi::GSRESTResource -> GSVirtualTableGeometry
```

Public fields

name	geometry	name
type	geometry	type
srid	geometry	SRID

Methods**Public methods:**

- [GSVirtualTableGeometry\\$new\(\)](#)
- [GSVirtualTableGeometry\\$decode\(\)](#)
- [GSVirtualTableGeometry\\$clone\(\)](#)

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

Usage:

```
GSVirtualTableGeometry$new(xml = NULL, name, type, srid)
```

Arguments:

xml	object of class xml_node-class
name	name
type	type
srid	srid

Method decode(): Decodes from XML

Usage:

```
GSVirtualTableGeometry$decode(xml)
```

Arguments:

xml	object of class xml_node-class
-----	--

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

Usage:

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

Arguments:

deep	Whether to make a deep clone.
------	-------------------------------

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
GSVirtualTableGeometry$new(name = "work", type = "MultiPolygon", srid = 4326)
```

GSVirtualTableParameter

Geoserver REST API GSVirtualTableParameter

Description

Geoserver REST API GSVirtualTableParameter

Geoserver REST API GSVirtualTableParameter

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer virtual table parameter

Super class

[geosapi::GSRESTResource](#) -> GSVirtualTableParameter

Public fields

name parameter name

defaultValue parameter default value

regexpValidator parameter regexp validator

Methods**Public methods:**

- [GSVirtualTableParameter\\$new\(\)](#)
- [GSVirtualTableParameter\\$decode\(\)](#)
- [GSVirtualTableParameter\\$clone\(\)](#)

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

Usage:

GSVirtualTableParameter\$new(xml = NULL, name, defaultValue, regexpValidator)

Arguments:

xml object of class [xml_node-class](#)

name name

defaultValue default value

regexpValidator regexp validator

Method decode(): Decodes from XML

Usage:

```
GSVirtualTableParameter$decode(xml)
```

Arguments:

xml object of class [xml_node-class](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
GSVirtualTableParameter$new(name = "fieldname", defaultValue = "default_value",
                           regexpValidator = "someregexp")
```

GSWorkspace

Geoserver REST API Workspace

Description

Geoserver REST API Workspace

Geoserver REST API Workspace

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer workspace

Super class

[geosapi::GSRESTResource](#) -> GSWorkspace

Public fields

name name

Methods

Public methods:

- [GSWorkspace\\$new\(\)](#)
- [GSWorkspace\\$decode\(\)](#)
- [GSWorkspace\\$clone\(\)](#)

Method new(): initializes a [GSWorkspace](#)

Usage:

```
GSWorkspace$new(xml = NULL, name)
```

Arguments:

xml an object of class [xml_node-class](#)
name name

Method decode(): Decodes from XML

Usage:

```
GSWorkspace$decode(xml)
```

Arguments:

xml an object of class [xml_node-class](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
GSWorkspace$new(name = "work")
```

Description

Geoserver REST API Workspace Manager
Geoserver REST API Workspace Manager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) with methods for managing the workspaces of a GeoServer instance.

Super class

[geosapi::GManager](#) -> GSWorkspaceManager

Methods

Public methods:

- [GSWorkspaceManager\\$getWorkspaces\(\)](#)
- [GSWorkspaceManager\\$getWorkspaceNames\(\)](#)
- [GSWorkspaceManager\\$getWorkspace\(\)](#)
- [GSWorkspaceManager\\$createWorkspace\(\)](#)
- [GSWorkspaceManager\\$updateWorkspace\(\)](#)
- [GSWorkspaceManager\\$deleteWorkspace\(\)](#)
- [GSWorkspaceManager\\$getWorkspaceSettings\(\)](#)
- [GSWorkspaceManager\\$createWorkspaceSettings\(\)](#)
- [GSWorkspaceManager\\$updateWorkspaceSettings\(\)](#)
- [GSWorkspaceManager\\$deleteWorkspaceSettings\(\)](#)
- [GSWorkspaceManager\\$clone\(\)](#)

Method [getWorkspaces\(\)](#): Get the list of available workspace. Returns an object of class `list` containing items of class [GSWorkspace](#)

Usage:

`GSWorkspaceManager$getWorkspaces()`

Arguments:

a list of [GSWorkspace](#)

Method [getWorkspaceNames\(\)](#): Get the list of available workspace names. Returns an vector of class `character`

Usage:

`GSWorkspaceManager$getWorkspaceNames()`

Returns: a list of workspace names

Method [getWorkspace\(\)](#): Get a [GSWorkspace](#) object given a workspace name.

Usage:

`GSWorkspaceManager$getWorkspace(ws)`

Arguments:

`ws` workspace name

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

Method `createWorkspace()`: Creates a GeoServer workspace given a name, and an optional URI. If the URI is not specified, GeoServer will automatically create an associated Namespace with the URI built from the workspace name. If the URI is specified, the method invokes the method `createNamespace(ns, uri)` of the [GSNamespaceManager](#). Returns TRUE if the workspace has been successfully created, FALSE otherwise

Usage:

```
GSWorkspaceManager$createWorkspace(name, uri)
```

Arguments:

name name

uri uri

Returns: TRUE if created, FALSE otherwise

Method `updateWorkspace()`: Updates a GeoServer workspace given a name, and an optional URI. If the URI is not specified, GeoServer will automatically update the associated Namespace with the URI built from the workspace name. If the URI is specified, the method invokes the method `updateNamespace(ns, uri)` of the [GSNamespaceManager](#). Returns TRUE if the workspace has been successfully updated, FALSE otherwise

Usage:

```
GSWorkspaceManager$updateWorkspace(name, uri)
```

Arguments:

name name

uri uri

Returns: TRUE if created, FALSE otherwise

Method `deleteWorkspace()`: Deletes a GeoServer workspace given a name.

Usage:

```
GSWorkspaceManager$deleteWorkspace(name, recurse = FALSE)
```

Arguments:

name name

recurse recurse

Returns: TRUE if the workspace has been successfully deleted, FALSE otherwise

Method `getWorkspaceSettings()`: Updates workspace settings

Usage:

```
GSWorkspaceManager$getWorkspaceSettings(ws)
```

Arguments:

ws workspace name

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

Method `createWorkspaceSettings()`: Creates workspace settings

Usage:

```
GSWorkspaceManager$createWorkspaceSettings(ws, workspaceSettings)
```

Arguments:

ws workspace name

workspaceSettings object of class [GSWorkspaceSettings](#)

Returns: TRUE if created, FALSE otherwise

Method updateWorkspaceSettings(): Updates workspace settings

Usage:

```
GSWorkspaceManager$updateWorkspaceSettings(ws, workspaceSettings)
```

Arguments:

ws workspace name

workspaceSettings object of class [GSWorkspaceSettings](#)

Returns: TRUE if updated, FALSE otherwise

Method deleteWorkspaceSettings(): Deletes workspace settings

Usage:

```
GSWorkspaceManager$deleteWorkspaceSettings(ws)
```

Arguments:

ws workspace name

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blonde11@gmail.com>

Examples

```
## Not run:
GSWorkspaceManager$new("http://localhost:8080/geoserver", "admin", "geoserver")

## End(Not run)
```

GSWorkspaceSettings *Geoserver REST API Workspace Setting*

Description

Geoserver REST API Workspace Setting
Geoserver REST API Workspace Setting

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer workspace settings

Super class

[geosapi::GSRESTResource](#) -> GSWorkspaceSettings

Public fields

contact contact
charset charset
numDecimals number of decimal
onlineResource online resource
verbose verbose
verboseExceptions verbose exceptions
localWorkspaceIncludesPrefix local workspace includes prefix

Methods**Public methods:**

- [GSWorkspaceSettings\\$new\(\)](#)
- [GSWorkspaceSettings\\$decode\(\)](#)
- [GSWorkspaceSettings\\$setCharset\(\)](#)
- [GSWorkspaceSettings\\$setNumDecimals\(\)](#)
- [GSWorkspaceSettings\\$setOnlineResource\(\)](#)
- [GSWorkspaceSettings\\$setVerbose\(\)](#)
- [GSWorkspaceSettings\\$setVerboseExceptions\(\)](#)
- [GSWorkspaceSettings\\$setLocalWorkspaceIncludesPrefix\(\)](#)
- [GSWorkspaceSettings\\$clone\(\)](#)

Method new(): This method is used to instantiate a *GSWorkspaceSettings*. This settings object is required to activate a workspace configuration, using the method *GSManger\$createWorkspaceSettings*. Supported from GeoServer 2.12

Usage:

```
GSWorkspaceSettings$new(xml = NULL)
```

Arguments:

xml object of class [xml_node-class](#)

Method decode(): Decodes from XML

Usage:

```
GSWorkspaceSettings$decode(xml)
```

Arguments:

xml object of class [xml_node-class](#)

Method setCharset(): Set charset

Usage:

```
GSWorkspaceSettings$setCharset(charset)
```

Arguments:

charset charset

Method setNumDecimals(): Set number of decimals

Usage:

```
GSWorkspaceSettings$setNumDecimals(numDecimals)
```

Arguments:

numDecimals number of decimals

Method setOnlineResource(): Set online resource

Usage:

```
GSWorkspaceSettings$setOnlineResource(onlineResource)
```

Arguments:

onlineResource online resource

Method setVerbose(): Set verbose

Usage:

```
GSWorkspaceSettings$setVerbose(verbose)
```

Arguments:

verbose verbose

Method setVerboseExceptions(): Set verbose exceptions

Usage:

```
GSWorkspaceSettings$setVerboseExceptions(verboseExceptions)
```

Arguments:

verboseExceptions verbose exceptions

Method setLocalWorkspaceIncludesPrefix(): Set local workspace includes prefix

Usage:

GSWorkspaceSettings\$setLocalWorkspaceIncludesPrefix(includesPrefix)

Arguments:

includesPrefix includes prefix

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

Usage:

GSWorkspaceSettings\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
settings <- GSWorkspaceSettings$new()
settings$setCharset("UTF-8")
settings$setNumDecimals(5)
```

GSWorldImageCoverageStore

Geoserver REST API WorldImageCoverageStore

Description

Geoserver REST API WorldImageCoverageStore

Geoserver REST API WorldImageCoverageStore

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GeoServer WorldImage CoverageStore

Super classes

```
geosapi:::GSRESTResource -> geosapi:::GSAbstractStore -> geosapi:::GSAbstractCoverageStore
-> GSWorldImageCoverageStore
```

Public fields

url url

Methods**Public methods:**

- *GSWorldImageCoverageStore\$new()*
- *GSWorldImageCoverageStore\$clone()*

Method new(): Initializes an WorldImage coverage store

Usage:

```
GSWorldImageCoverageStore$new(  
    xml = NULL,  
    name = NULL,  
    description = "",  
    enabled = TRUE,  
    url = NULL  
)
```

Arguments:

xml an object of class [xml_node-class](#) to create object from XML
name coverage store name
description coverage store description
enabled whether the store should be enabled or not. Default is TRUE
url url

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

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