

Package ‘geometa’

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Type Package

Title Tools for Reading and Writing ISO/OGC Geographic Metadata

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Description Provides facilities to read, write and validate geographic metadata defined with ISO TC211 / OGC ISO geographic information metadata standards, and encoded using the ISO 19139 and ISO 19115-3 (XML) standard technical specifications. This includes ISO 19110 (Feature cataloguing), 19115 (dataset metadata), 19119 (service metadata) and 19136 (GML). Other interoperable schemas from the OGC are progressively supported as well, such as the Sensor Web Enablement (SWE) Common Data Model, the OGC GML Coverage Implementation Schema (GMLCOV), or the OGC GML Referenceable Grid (GMLR-GRID).

Depends R (>= 3.3.0)

Imports methods, R6, XML, httr, jsonlite, keyring, readr, crayon

Suggests sf, ncd4, EML, emld, units, testthat, roxygen2

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URL <https://github.com/eblondel/geometa/wiki>

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

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cacheISOClasses

*cacheISOClasses***Description**

[cacheISOClasses](#) allows to cache the list of **geometa** classes or extended. This is especially required to fasten the decoding of metadata elements from an XML file. It is called internally by **geometa** the first function [getISOClasses](#) is called and each time the function [readISO19139](#) function is called to integrate eventually new classes added by user to extend **geometa** model (case of ISO profiles).

Usage

```
cacheISOClasses()
```

Author(s)

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

Examples

```
cacheISOClasses()
```

convert_metadata	<i>convert_metadata</i>
------------------	-------------------------

Description

convert_metadata is a tentative generic metadata converter to convert from one source object, represented in a source metadata object model in R (eg eml) to a target metadata object, represented in another target metadata object model (eg **geometa** [ISOMetadata](#)). This function relies on a list of mapping rules defined to operate from the source metadata object to the target metadata object. This list of mapping rules is provided in a tabular format. A version is embedded in **geometa** and can be returned with [getMappings](#).

Usage

```
convert_metadata(obj, from, to, mappings, verbose)
```

Arguments

obj	a metadata object given in one of the mapping formats known by geometa . The object should be a valid id as listed by getMappingFormats , supported as source format (from is TRUE).
from	a valid mapping format id (see getMappingFormats) that indicates the metadata model / format used for the argument obj
to	a valid mapping format id (see getMappingFormats) to convert to
mappings	a data.frame giving the reference mapping rules to convert metadata object. This data.frame is by default the output of getMappings .
verbose	print debugging messages. Default is FALSE

Value

an metadata object in the model specified as to argument

Note

This function is mainly used internally in as generic methods to convert from one metadata format to another. It is exported for extension to user custom metadata formats or for debugging purpose. This converter is still experimental.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

geometa	<i>geometa: Tools for Reading and Writing ISO/OGC Geographic Metadata</i>
---------	---

Description

Provides facilities to read, write and validate geographic metadata defined with ISO TC211 / OGC ISO geographic information metadata standards, and encoded using the ISO 19139 and ISO 19115-3 (XML) standard technical specifications. This includes ISO 19110 (Feature cataloguing), 19115 (dataset metadata), 19119 (service metadata) and 19136 (GML). Other interoperable schemas from the OGC are progressively supported as well, such as the Sensor Web Enablement (SWE) Common Data Model, the OGC GML Coverage Implementation Schema (GMLCOV), or the OGC GML Referenceable Grid (GMLRGRID).

Author(s)

Maintainer: Emmanuel Blondel <emmanuel.blondel1@gmail.com> ([ORCID](#))

Other contributors:

- R Consortium [funder]

See Also

Useful links:

- <https://github.com/eblondel/geometa/wiki>
- Report bugs at <https://github.com/eblondel/geometa/issues>

geometaLogger

geometaLogger

Description

geometaLogger

geometaLogger

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a simple logger

Methods

Public methods:

- [geometaLogger\\$INFO\(\)](#)
- [geometaLogger\\$WARN\(\)](#)
- [geometaLogger\\$ERROR\(\)](#)
- [geometaLogger\\$new\(\)](#)
- [geometaLogger\\$clone\(\)](#)

Method [INFO\(\)](#): Logger to report information. Used internally

Usage:

[geometaLogger\\$INFO\(text\)](#)

Arguments:

text text

Method [WARN\(\)](#): Logger to report warnings Used internally

Usage:

[geometaLogger\\$WARN\(text\)](#)

Arguments:

text text

Method [ERROR\(\)](#): Logger to report errors Used internally

Usage:

[geometaLogger\\$ERROR\(text\)](#)

Arguments:

text text

Method `new()`: Initializes object

Usage:

```
geometaLogger$new()
```

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Logger class used internally by geometa

geometa_coverage	<i>geometa_coverage</i>
------------------	-------------------------

Description

`geometa_coverage` is a function to report coverage of ISO/OGC standard classes in package **geometa**. The function will inspect all classes of the ISO/OGC standards and will scan if **geometa** supports it.

Usage

```
geometa_coverage(version)
```

Arguments

`version` main metadata standard version

Value

an object of class `data.frame`

Note

This function is used as Quality Assurance indicator to assess the percentage of completeness of ISO/OGC standards in **geometa**.

Author(s)

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

Examples

```
cov <- geometa_coverage(version = "19115-3")
```

getClassesInheriting *getClassesInheriting*

Description

get the list of classes inheriting a given super class provided by its name

Usage

```
getClassesInheriting(classname, extended, pretty)
```

Arguments

classname	the name of the superclass for which inheriting sub-classes have to be listed
extended	whether we want to look at user namespace for third-party sub-classes
pretty	prettify the output as data.frame

Examples

```
getClassesInheriting("ISAbstractObject")
```

getGeometaOption *getGeometaOption*

Description

getGeometaOption allows to get an option from **geometa**

Usage

```
getGeometaOption(option)
```

Arguments

option	the name of the option
--------	------------------------

Value

the option

Author(s)

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

Examples

```
getGeometaOption("schemaBaseUrl")
```

getGeometaOptions *getGeometaOptions*

Description

getGeometaOptions allows to get options from **geometa**

Usage

```
getGeometaOptions()
```

Author(s)

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

Examples

```
getGeometaOptions()
```

getIANAMimeTypes *getIANAMimeTypes*

Description

getIANAMimeTypes

Usage

```
getIANAMimeTypes()
```

getISOClasses *getISOClasses*

Description

get the list of ISO classes, ie classes extending [ISOAbstractObject](#) super class, including classes eventually defined outside **geometa**. In case the latter is on the search path, the list of ISO classes will be cached for optimized used by **geometa** encoder/decoder.

Usage

```
getISOClasses()
```

Author(s)

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

Examples

```
getISOClasses()
```

<code>getISOCodelist</code>	<i>getISOCodelist</i>
-----------------------------	-----------------------

Description

`getISOCodelist` allows to get a registered ISO codelist by id registered in **geometa**

Usage

```
getISOCodelist(id)
```

Arguments

<code>id</code>	identifier of the codelist
-----------------	----------------------------

Author(s)

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

Examples

```
getISOCodelist(id = "LanguageCode")
```

<code>getISOCodelists</code>	<i>getISOCodelists</i>
------------------------------	------------------------

Description

`getISOCodelists` allows to get the list of ISO codelists registered in **geometa**, their description and XML definition. The object returned is of class "data.frame"

Usage

```
getISOCodelists(version)
```

Arguments

<code>version</code>	the metadata standard version. If NULL (default), all codelists will be listed
----------------------	--

Author(s)

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

Examples

```
getISOCodelists()
```

```
getISOInternalCodelists  
    getISOInternalCodelists
```

Description

getISOInternalCodelists allows to get the list of ISO codelists registered in **geometa**

Usage

```
getISOInternalCodelists()
```

Author(s)

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

Examples

```
getISOInternalCodelists()
```

```
getISOMetadataNamespace  
    getISOMetadataNamespace
```

Description

getISOMetadataNamespace gets a namespace given its id

Usage

```
getISOMetadataNamespace(id)
```

Arguments

id namespace prefix

Author(s)

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

Examples

```
getISOMetadataNamespace("GMD")
```

```
getISOMetadataNamespaces
```

```
getISOMetadataNamespaces
```

Description

getISOMetadataNamespaces gets the list of namespaces registered

Usage

```
getISOMetadataNamespaces()
```

Author(s)

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

Examples

```
getISOMetadataNamespaces()
```

```
getISOMetadataSchemaFile
```

```
getISOMetadataSchemaFile
```

Description

getISOMetadataSchemaFile allows to get the schema file in **geometa**

Usage

```
getISOMetadataSchemaFile(version)
```

Arguments

version the schema version

Value

the internal path to the schema file

Author(s)

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

`getISOMetadataSchemas` *getISOMetadataSchemas*

Description

`getISOMetadataSchemas` gets the schemas registered in **geometa**

Usage

`getISOMetadataSchemas(version)`

Arguments

`version` the schema version

Examples

`getISOMetadataSchemas(version = "19139")`

`getMappingFormats` *getMappingFormats*

Description

`getMappingFormats` gets the mapping formats registered in **geometa**

Usage

`getMappingFormats(pretty)`

Arguments

`pretty` by default TRUE to return the list of formats as `data.frame`. Set to FALSE to return a list of `pivot_format` objects

Author(s)

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

getMappings	<i>getMappings</i>
-------------	--------------------

Description

List the mappings rules to convert from/to other metadata formats (currently EML/emld objects and NetCDF-CF/ncdf4 objects)

Usage

```
getMappings()
```

Value

a `data.frame` containing the metadata mapping rules

getMetadataStandard	<i>getMetadataStandard</i>
---------------------	----------------------------

Description

`getMetadataStandard` allows to set the standard to use for encoding/decoding in **geometa**.

Usage

```
getMetadataStandard()
```

Author(s)

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

Examples

```
getMetadataStandard()
```

GMLAbstractCoordinateOperation
GMLAbstractCoordinateOperation

Description

GMLAbstractCoordinateOperation
 GMLAbstractCoordinateOperation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLAbstractCoordinateOperation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> GMLAbstractCoordinateOperation

Public fields

domainOfValidity domainOfValidity [0..1]: character
 scope scope [1..*]: character
 operationVersion operationVersion [0..1]: character
 coordinateOperationAccuracy coordinateOperationAccuracy [0..1]: ISOPositionalAccuracy
 sourceCRS sourceCRS [0..1]: subclass of GMLAbstractCRS
 targetCRS targetCRS [0..1]: subclass of GMLAbstractCRS

Methods**Public methods:**

- [GMLAbstractCoordinateOperation\\$new\(\)](#)
- [GMLAbstractCoordinateOperation\\$setDomainOfValidity\(\)](#)
- [GMLAbstractCoordinateOperation\\$addScope\(\)](#)
- [GMLAbstractCoordinateOperation\\$delScope\(\)](#)
- [GMLAbstractCoordinateOperation\\$setVersion\(\)](#)
- [GMLAbstractCoordinateOperation\\$addAccuracy\(\)](#)
- [GMLAbstractCoordinateOperation\\$delAccuracy\(\)](#)
- [GMLAbstractCoordinateOperation\\$setSourceCRS\(\)](#)
- [GMLAbstractCoordinateOperation\\$setTargetCRS\(\)](#)
- [GMLAbstractCoordinateOperation\\$clone\(\)](#)

Method new(): Initializes object

Usage:

GMLAbstractCoordinateOperation\$new(xml = NULL, defaults = list(), id = NULL)

Arguments:

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

defaults list of default values

id id

Method setDomainOfValidity(): Set domain of validity

Usage:

GMLAbstractCoordinateOperation\$setDomainOfValidity(domainOfValidity)

Arguments:

domainOfValidity domain of validity, object extending [ISOExtent](#) class

Method addScope(): Adds scope

Usage:

GMLAbstractCoordinateOperation\$addScope(scope)

Arguments:

scope scope

Returns: TRUE if added, FALSE otherwise

Method delScope(): Removes scope

Usage:

GMLAbstractCoordinateOperation\$delScope(scope)

Arguments:

scope scope

Returns: TRUE if removed, FALSE otherwise

Method setVersion(): Set version

Usage:

GMLAbstractCoordinateOperation\$setVersion(version)

Arguments:

version version

Method addAccuracy(): Adds accuracy

Usage:

GMLAbstractCoordinateOperation\$addAccuracy(accuracy)

Arguments:

accuracy accuracy, object inheriting class [ISOAbstractPositionalAccuracy](#)

Returns: TRUE if added, FALSE otherwise

Method delAccuracy(): Removes accuracy

Usage:

GMLAbstractCoordinateOperation\$delAccuracy(accuracy)

Arguments:

accuracy accuracy, object inheriting class [ISOAbstractPositionalAccuracy](#)

Returns: TRUE if removed, FALSE otherwise

Method setSourceCRS(): Set source CRS

Usage:

GMLAbstractCoordinateOperation\$setSourceCRS(crs)

Arguments:

crs crs, object inheriting class [GMLAbstractSingleCRS](#)

Method setTargetCRS(): Set target CRS

Usage:

GMLAbstractCoordinateOperation\$setTargetCRS(crs)

Arguments:

crs crs, object inheriting class [GMLAbstractSingleCRS](#)

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

Usage:

GMLAbstractCoordinateOperation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractCoordinateSystem

GMLAbstractCoordinateSystem

Description

GMLAbstractCoordinateSystem

GMLAbstractCoordinateSystem

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLAbstractCoordinateSystem

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> GMLAbstractCoordinateSystem

Public fields

axis axis [1..*]: GMLCoordinateSystemAxis

Methods**Public methods:**

- [GMLAbstractCoordinateSystem\\$new\(\)](#)
- [GMLAbstractCoordinateSystem\\$addAxis\(\)](#)
- [GMLAbstractCoordinateSystem\\$delAxis\(\)](#)
- [GMLAbstractCoordinateSystem\\$clone\(\)](#)

Method new(): Initializes object

Usage:

GMLAbstractCoordinateSystem\$new(xml = NULL, defaults = list(), id = NULL)

Arguments:

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

defaults list of default values

id id

Method addAxis(): Adds an axis

Usage:

GMLAbstractCoordinateSystem\$addAxis(axis)

Arguments:

axis object of class GMLCoordinateSystemAxis

Returns: TRUE if added, FALSE otherwise

Method delAxis(): Deletes an axis

Usage:

GMLAbstractCoordinateSystem\$delAxis(axis)

Arguments:

axis object of class GMLCoordinateSystemAxis

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLAbstractCoordinateSystem\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractCoverage *GMLAbstractCoverage*

Description

GMLAbstractCoverage

GMLAbstractCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract coverage

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractFeature](#) -> GMLAbstractCoverage

Public fields

domainSet domainSet

rangeSet rangeSet

Methods**Public methods:**

- [GMLAbstractCoverage\\$new\(\)](#)
- [GMLAbstractCoverage\\$setDomainSet\(\)](#)
- [GMLAbstractCoverage\\$setRangeSet\(\)](#)
- [GMLAbstractCoverage\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
GMLAbstractCoverage$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  wrap = TRUE
)
```

Arguments:

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

`element` element name

`attrs` list of attributes

`defaults` list of default values

`wrap` wrap element?

Method `setDomainSet()`: Set domain set

Usage:

```
GMLAbstractCoverage$setDomainSet(domainSet)
```

Arguments:

`domainSet` object inheriting either [GMLAbstractGeometry](#) or [GMLAbstractTimeObject](#)

Method `setRangeSet()`: Set range set (NOT YET IMPLEMENTED)

Usage:

```
GMLAbstractCoverage$setRangeSet()
```

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Internal binding used with OGC services

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractCRS	<i>GMLAbstractCRS</i>
----------------	-----------------------

Description

GMLAbstractCRS
 GMLAbstractCRS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLAbstractCRS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> GMLAbstractCRS

Public fields

scope scope [1..*]: character

Methods**Public methods:**

- [GMLAbstractCRS\\$new\(\)](#)
- [GMLAbstractCRS\\$addScope\(\)](#)
- [GMLAbstractCRS\\$delScope\(\)](#)
- [GMLAbstractCRS\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`GMLAbstractCRS$new(xml = NULL, defaults = list(), id = NULL)`

Arguments:

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

defaults list of default values
id id

Method addScope(): Adds scope

Usage:

GMLAbstractCRS\$addScope(scope)

Arguments:

scope scope

Returns: TRUE if added, FALSE otherwise

Method delScope(): Removes scope

Usage:

GMLAbstractCRS\$delScope(scope)

Arguments:

scope scope

Returns: TRUE if removed, FALSE otherwise

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

Usage:

GMLAbstractCRS\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractCurve

GMLAbstractCurve

Description

GMLAbstractCurve

GMLAbstractCurve

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract curve

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractGML -> geometa::GMLAbstractGeometry -> geometa::GMLAbstractGeometricPrimitive  
-> GMLAbstractCurve
```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractDiscreteCoverage

GMLAbstractDiscreteCoverage

Description

GMLAbstractDiscreteCoverage

GMLAbstractDiscreteCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract discrete coverage

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractFeature -> geometa::GMLAbstractCoverage -> GMLAbstractDiscreteCoverage
```

Public fields

coverageFunction coverage function

Methods**Public methods:**

- [GMLAbstractDiscreteCoverage\\$new\(\)](#)
- [GMLAbstractDiscreteCoverage\\$setCoverageFunction\(\)](#)
- [GMLAbstractDiscreteCoverage\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
GMLAbstractDiscreteCoverage$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  wrap = TRUE
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
 element element name
 attrs list of attributes
 defaults list of default values
 wrap wrap element?

Method `setCoverageFunction()`: Set coverage function

Usage:

```
GMLAbstractDiscreteCoverage$setCoverageFunction(coverageFunction)
```

Arguments:

coverageFunction object of class [GMLGridFunction](#) (or [GMLCoverageMappingRule](#), not yet supported)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractFeature	<i>GMLAbstractFeature</i>
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Description

GMLAbstractFeature

GMLAbstractFeature

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract feature

Super classes

[geometa: :geometaLogger](#) -> [geometa: :ISOAbstractObject](#) -> [geometa: :GMLAbstractObject](#)
-> [GMLAbstractFeature](#)

Public fields

boundedBy boundedBy envelope

Methods**Public methods:**

- [GMLAbstractFeature\\$new\(\)](#)
- [GMLAbstractFeature\\$setBoundedBy\(\)](#)
- [GMLAbstractFeature\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
GMLAbstractFeature$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

Method `setBoundedBy()`: Sets bounding envelope

Usage:

```
GMLAbstractFeature$setBoundedBy(envelope)
```

Arguments:

envelope envelope, object of class [GMLEnvelope](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractGeneralConversion

GMLAbstractGeneralConversion

Description

GMLAbstractGeneralConversion

GMLAbstractGeneralConversion

Format

R6Class object.

Value

Object of R6Class for modelling an GMLAbstractGeneralConversion

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCoordinateOperation  
-> geometa::GMLAbstractSingleOperation -> GMLAbstractGeneralConversion
```

Methods**Public methods:**

- `GMLAbstractGeneralConversion$clone()`

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractGeneralDerivedCRS

GMLAbstractGeneralDerivedCRS

Description

GMLAbstractGeneralDerivedCRS

GMLAbstractGeneralDerivedCRS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLAbstractGeneralDerivedCRS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCRS](#) ->
[geometa::GMLAbstractSingleCRS](#) -> GMLAbstractGeneralDerivedCRS

Public fields

conversion conversion [1..1]: [GMLConversion](#)

Methods

Public methods:

- [GMLAbstractGeneralDerivedCRS\\$setConversion\(\)](#)
- [GMLAbstractGeneralDerivedCRS\\$clone\(\)](#)

Method [setConversion\(\)](#): Set conversion

Usage:

[GMLAbstractGeneralDerivedCRS\\$setConversion\(conversion\)](#)

Arguments:

conversion, object of class [GMLConversion](#)

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

Usage:

[GMLAbstractGeneralDerivedCRS\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractGeneralOperationParameter

GMLAbstractGeneralOperationParameter

Description

GMLAbstractGeneralOperationParameter

GMLAbstractGeneralOperationParameter

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLAbstractGeneralOperationParameter

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> GMLAbstractGeneralOperationParameter

Public fields

minimumOccurs minimumOccurs [0..1]: integer

Methods**Public methods:**

- [GMLAbstractGeneralOperationParameter\\$setMinimumOccurs\(\)](#)
- [GMLAbstractGeneralOperationParameter\\$clone\(\)](#)

Method [setMinimumOccurs\(\)](#): Set minimum occurs

Usage:

[GMLAbstractGeneralOperationParameter\\$setMinimumOccurs\(minimumOccurs\)](#)

Arguments:

minimumOccurs object of class [integer](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractGeneralParameterValue

GMLAbstractGeneralParameterValue

Description

GMLAbstractGeneralParameterValue

GMLAbstractGeneralParameterValue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract general ParameterValue

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> GMLAbstractGeneralParameterValue

Methods

Public methods:

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

Method new(): Initializes object

Usage:

```
GMLAbstractGeneralParameterValue$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list()  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractGeometricAggregate

GMLAbstractGeometricAggregate

Description

GMLAbstractGeometricAggregate

GMLAbstractGeometricAggregate

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract Geometric Aggregate

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [GMLAbstractGeometricAggregate](#)

Methods**Public methods:**

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

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

Usage:

`GMLAbstractGeometricAggregate$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractGeometricPrimitive

GMLAbstractGeometricPrimitive

Description

GMLAbstractGeometricPrimitive

GMLAbstractGeometricPrimitive

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract Geometric Primitive

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [GMLAbstractGeometricPrimitive](#)

Methods

Public methods:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractGeometry *GMLAbstractGeometry*

Description

GMLAbstractGeometry

GMLAbstractGeometry

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract Geometry

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractGML -> GMLAbstractGeometry
```

Methods

Public methods:

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

Method new(): Initializes object

Usage:

```
GMLAbstractGeometry$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
- OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractGML

GMLAbstractGML

Description

GMLAbstractGML

GMLAbstractGML

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract GML

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> GMLAbstractGML

Public fields

metaDataProperty metaDataProperty [0..*]

description description [0..1]

descriptionReference descriptionReference [0..1]: character

identifier identifier [0..1]: character

name name [0..*]: character

Methods

Public methods:

- [GMLAbstractGML\\$new\(\)](#)
- [GMLAbstractGML\\$setDescription\(\)](#)
- [GMLAbstractGML\\$setDescriptionReference\(\)](#)
- [GMLAbstractGML\\$setIdentifier\(\)](#)
- [GMLAbstractGML\\$addName\(\)](#)
- [GMLAbstractGML\\$delName\(\)](#)
- [GMLAbstractGML\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
GMLAbstractGML$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

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

element element name

attrs list of attributes

defaults list of default values

wrap wrap element?

Method setDescription(): Set description

Usage:

```
GMLAbstractGML$setDescription(description)
```

Arguments:

description description

Method setDescriptionReference(): Set description reference

Usage:

```
GMLAbstractGML$setDescriptionReference(descriptionReference)
```

Arguments:

descriptionReference description reference

Method setIdentifier(): Set identifier

Usage:

```
GMLAbstractGML$setIdentifier(identifier, codeSpace)
```

Arguments:

identifier identifier

codeSpace codespace

Method addName(): Adds name

Usage:

```
GMLAbstractGML$addName(name, codeSpace = NULL)
```

Arguments:

name name

codeSpace codespace

Returns: TRUE if added, FALSE otherwise

Method delName(): Deletes name

Usage:

```
GMLAbstractGML$delName(name, codeSpace = NULL)
```

Arguments:

name name

codeSpace codespace

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractImplicitGeometry

GMLAbstractImplicitGeometry

Description

GMLAbstractImplicitGeometry

GMLAbstractImplicitGeometry

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract implicit Geometry

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)

-> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [GMLAbstractImplicitGeometry](#)

Methods

Public methods:

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

Method new(): Initializes object

Usage:

```
GMLAbstractImplicitGeometry$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
- OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractObject	<i>GMLAbstractObject</i>
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Description

GMLAbstractObject
GMLAbstractObject

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract object

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> GMLAbstractObject

Methods**Public methods:**

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

Method new(): Initializes object

Usage:

```
GMLAbstractObject$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = FALSE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractReferenceableGrid

GMLAbstractReferenceableGrid

Description

GMLAbstractReferenceableGrid

GMLAbstractReferenceableGrid

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML grid

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [geometa::GMLAbstractImplicitGeometry](#)
 -> [geometa::GMLGrid](#) -> GMLAbstractReferenceableGrid

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

```
GMLAbstractReferenceableGrid$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  wrap = TRUE
)
```


Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

GMLAbstractReferenceableGrid\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>
OGC GML 3.3 Schema. <http://schemas.opengis.net/gml/3.3/referenceableGrid.xsd>

GMLAbstractRing

GMLAbstractRing

Description

GMLAbstractRing
GMLAbstractRing

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract ring

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> GMLAbstractRing

Methods

Public methods:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractSingleCRS *GMLAbstractSingleCRS*

Description

GMLAbstractSingleCRS

GMLAbstractSingleCRS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLAbstractSingleCRS

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCRS ->  
GMLAbstractSingleCRS
```

Methods**Public methods:**

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

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

Usage:

GMLAbstractSingleCRS\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractSingleOperation

GMLAbstractSingleOperation

Description

GMLAbstractSingleOperation

GMLAbstractSingleOperation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLAbstractSingleOperation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCoordinateOperation](#)
 -> [GMLAbstractSingleOperation](#)

Methods**Public methods:**

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

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

Usage:

`GMLAbstractSingleOperation$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractSurface	<i>GMLAbstractSurface</i>
--------------------	---------------------------

Description

GMLAbstractSurface

GMLAbstractSurface

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML abstract surface

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [geometa::GMLAbstractGeometricPrimitive](#)
 -> [GMLAbstractSurface](#)

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractTimeGeometricPrimitive

GMLAbstractTimeGeometricPrimitive

Description

GMLAbstractTimeGeometricPrimitive

GMLAbstractTimeGeometricPrimitive

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO GML abstract temporal primitive

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractGML -> geometa::GMLAbstractTimeObject -> geometa::GMLAbstractTimePrimitive  
-> GMLAbstractTimeGeometricPrimitive
```

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`GMLAbstractTimeGeometricPrimitive$new(xml = NULL, defaults = list())`

Arguments:

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

`defaults` list of default values

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

Usage:

`GMLAbstractTimeGeometricPrimitive$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

GMLAbstractTimeObject *GMLAbstractTimeObject*

Description

GMLAbstractTimeObject

GMLAbstractTimeObject

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML AbstractTimeObject

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGML](#) -> GMLAbstractTimeObject

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
GMLAbstractTimeObject$new(xml = NULL, defaults = list())
```

Arguments:

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

`defaults` list of default values

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAbstractTimePrimitive

GMLAbstractTimePrimitive

Description

GMLAbstractTimePrimitive

GMLAbstractTimePrimitive

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML AbstractTimePrimitive

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLAbstractTimeObject -> GMLAbstractTimePrimitive
```

Public fields

relatedTime relatedTime

Methods**Public methods:**

- [GMLAbstractTimePrimitive\\$new\(\)](#)
- [GMLAbstractTimePrimitive\\$addRelatedTime\(\)](#)
- [GMLAbstractTimePrimitive\\$delRelatedTime\(\)](#)
- [GMLAbstractTimePrimitive\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
GMLAbstractTimePrimitive$new(xml = NULL, defaults = list())
```

Arguments:

xml object of class [XMLInternalNode-class](#)
defaults list of default values

Method `addRelatedTime()`: Adds related time

Usage:

```
GMLAbstractTimePrimitive$addRelatedTime(time)
```

Arguments:

time object of class [GMLTimeInstant](#), [GMLTimePeriod](#). (GMLTimeNode or GMLTimeEdge are not yet supported)

Returns: TRUE if added, FALSE otherwise

Method `delRelatedTime()`: Deletes related time

Usage:

```
GMLAbstractTimePrimitive$delRelatedTime(time)
```

Arguments:

time object of class [GMLTimeInstant](#), [GMLTimePeriod](#). (GMLTimeNode or GMLTimeEdge are not yet supported)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLAffineCS

GMLAffineCS

Description

GMLAffineCS

GMLAffineCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLAffineCS

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCoordinateSystem
-> GMLAffineCS
```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLBaseUnit

GMLBaseUnit

Description

GMLBaseUnit

GMLBaseUnit

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML base unit

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLUnitDefinition](#)
 -> GMLBaseUnit

Public fields

unitsSystem unitsSystem [1..1]: character

Methods**Public methods:**

- [GMLBaseUnit\\$new\(\)](#)
- [GMLBaseUnit\\$setUnitsSystem\(\)](#)
- [GMLBaseUnit\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
GMLBaseUnit$new(xml = NULL, defaults = list(), id = NULL)
```

Arguments:

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

defaults list of default values

id id

Method `setUnitsSystem()`: Set unit system

Usage:

```
GMLBaseUnit$setUnitsSystem(unitsSystem)
```

Arguments:

unitsSystem units system

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

Examples

```
gml <- GMLBaseUnit$new()
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name1", "codespace")
gml$addName("name2", "codespace")
gml$setQuantityTypeReference("someref")
gml$setCatalogSymbol("symbol")
gml$setUnitsSystem("somelink")
```

GMLCartesianCS

GMLCartesianCS

Description

GMLCartesianCS

GMLCartesianCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLCartesianCS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCoordinateSystem](#)
-> GMLCartesianCS

Methods

Public methods:

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

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

Usage:

`GMLCartesianCS$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLCodeType

GMLCodeType

Description

GMLCodeType

GMLCodeType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GML code type

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> GMLCodeType

Public fields

value value

attrs attributes

Methods

Public methods:

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

Method [new\(\)](#): Initializes object

Usage:

[GMLCodeType\\$new](#)(xml = NULL, value = NULL, codeSpace = NULL)

Arguments:

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

value value

codeSpace code space

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

Usage:

[GMLCodeType\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLCompoundCRS

GMLCompoundCRS

Description

GMLCompoundCRS

GMLCompoundCRS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLCompoundCRS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCRS](#) ->
 GMLCompoundCRS

Public fields

componentReferenceSystem componentReferenceSystem [2..*]: instance of AbstractSingleCRS

Methods**Public methods:**

- [GMLCompoundCRS\\$new\(\)](#)
- [GMLCompoundCRS\\$addComponentReferenceSystem\(\)](#)
- [GMLCompoundCRS\\$delComponentReferenceSystem\(\)](#)
- [GMLCompoundCRS\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[GMLCompoundCRS\\$new\(xml = NULL, defaults = list\(\), id = NULL\)](#)

Arguments:

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

defaults default values

id id

Method addComponentReferenceSystem(): Adds component reference system

Usage:

GMLCompoundCRS\$addComponentReferenceSystem(referenceSystem)

Arguments:

referenceSystem referenceSystem, object of class [GMLAbstractSingleCRS](#)

Returns: TRUE if added, FALSE otherwise

Method delComponentReferenceSystem(): Deletes component reference system

Usage:

GMLCompoundCRS\$delComponentReferenceSystem(referenceSystem)

Arguments:

referenceSystem referenceSystem, object of class [GMLAbstractSingleCRS](#)

Returns: TRUE if delete, FALSE otherwise

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

Usage:

GMLCompoundCRS\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLConventionalUnit *GMLConventionalUnit*

Description

GMLConventionalUnit

GMLConventionalUnit

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML derived unit

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLUnitDefinition
-> GMLConventionalUnit
```

Public fields

conversionToPreferredUnit conversionToPreferredUnit [1..1]: character/integer

roughConversionToPreferredUnit roughConversionToPreferredUnit [1..1]: character/integer

derivationUnitTerm derivationUnitTerm [1..*]: character

Methods

Public methods:

- [GMLConventionalUnit\\$new\(\)](#)
- [GMLConventionalUnit\\$addDerivationUnitTerm\(\)](#)
- [GMLConventionalUnit\\$delDerivationUnitTerm\(\)](#)
- [GMLConventionalUnit\\$setConversionToPreferredUnit\(\)](#)
- [GMLConventionalUnit\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
GMLConventionalUnit$new(xml = NULL, defaults = list(), id = NULL)
```

Arguments:

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

defaults default values

id id

Method `addDerivationUnitTerm()`: Adds a derivation unit term, made of a uom reference, and an exponent which can be negative/positive but not equal to zero.

Usage:

```
GMLConventionalUnit$addDerivationUnitTerm(uom, exponent)
```

Arguments:

uom unit of measure reference

exponent exponent

Returns: TRUE if added, FALSE otherwise

Method `delDerivationUnitTerm()`: Deletes a derivation unit term

Usage:

```
GMLConventionalUnit$delDerivationUnitTerm(uom, exponent)
```

Arguments:

uom unit of measure reference

exponent exponent

Returns: TRUE if deleted, FALSE otherwise

Method `setConversionToPreferredUnit()`: Sets the conversion to preferred unit.

Usage:

```
GMLConventionalUnit$setConversionToPreferredUnit(uom, factor, rough = FALSE)
```

Arguments:

uom unit of measure reference

factor factor

rough rough . Default is FALSE

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

Examples

```

gml <- GMLConventionalUnit$new()
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name1", "codespace")
gml$addName("name2", "codespace")
gml$setQuantityTypeReference("someref")
gml$setCatalogSymbol("symbol")
gml$addDerivationUnitTerm("uomId", 2L)
gml$setConversionToPreferredUnit("uomId", 2L)

```

GMLConversion

GMLConversion

Description

GMLConversion

GMLConversion

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an GMLConversion**Super classes**

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCoordinateOperation
-> geometa::GMLAbstractSingleOperation -> geometa::GMLAbstractGeneralConversion ->
GMLConversion

```

Public fields

method method [1..1]: GMLOperationMethod

parameterValue parameterValue [0..*]: GMLParameterValue

Methods**Public methods:**

- [GMLConversion\\$setMethod\(\)](#)
- [GMLConversion\\$addParameterValue\(\)](#)
- [GMLConversion\\$delParameterValue\(\)](#)
- [GMLConversion\\$clone\(\)](#)

Method `setMethod()`: Set method

Usage:

`GMLConversion$setMethod(method)`

Arguments:

`method` method, object of class [GMLOperationMethod](#)

Method `addParameterValue()`: Adds parameter value

Usage:

`GMLConversion$addParameterValue(paramValue)`

Arguments:

`paramValue` parameter value, object class inheriting [GMLAbstractGeneralParameterValue](#)

Returns: TRUE if added, FALSE otherwise

Method `delParameterValue()`: Deletes parameter value

Usage:

`GMLConversion$delParameterValue(paramValue)`

Arguments:

`paramValue` parameter value, object class inheriting [GMLAbstractGeneralParameterValue](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

`GMLConversion$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLCoordinateSystemAxis

GMLCoordinateSystemAxis

Description

GMLCoordinateSystemAxis

GMLCoordinateSystemAxis

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLCoordinateSystemAxis

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> GMLCoordinateSystemAxis

Public fields

axisAbbrev axisAbbrev [1..1]: character

axisDirection axisDirection [1..1]: character (with codeSpace)

minimumValue minimumValue [0..1]: double

maximumValue maximumValue [0..1]: double

rangeMeaning rangeMeaning [0..1]: character (with codeSpace)

Methods

Public methods:

- [GMLCoordinateSystemAxis\\$new\(\)](#)
- [GMLCoordinateSystemAxis\\$setAbbrev\(\)](#)
- [GMLCoordinateSystemAxis\\$setDirection\(\)](#)
- [GMLCoordinateSystemAxis\\$setMinimumValue\(\)](#)
- [GMLCoordinateSystemAxis\\$setMaximumValue\(\)](#)
- [GMLCoordinateSystemAxis\\$setRangeMeaning\(\)](#)
- [GMLCoordinateSystemAxis\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[GMLCoordinateSystemAxis\\$new](#)(xml = NULL, defaults = list(), id = NULL, uom = NA)

Arguments:

xml object of class [XMLInternalNode-class](#)
defaults list of default values
id id
uom unit of measure

Method setAbbrev(): Set Abbrev*Usage:*

```
GMLCoordinateSystemAxis$setAbbrev(abbrev)
```

Arguments:

abbrev abbrev

Method setDirection(): Set description*Usage:*

```
GMLCoordinateSystemAxis$setDirection(direction, codeSpace = NULL)
```

Arguments:

direction direction
codeSpace code space

Method setMinimumValue(): Set minimum value*Usage:*

```
GMLCoordinateSystemAxis$setMinimumValue(value)
```

Arguments:

value value

Method setMaximumValue(): Set maximum value*Usage:*

```
GMLCoordinateSystemAxis$setMaximumValue(value)
```

Arguments:

value value

Method setRangeMeaning(): Set range meaning*Usage:*

```
GMLCoordinateSystemAxis$setRangeMeaning(meaning, codeSpace = NULL)
```

Arguments:

meaning meaning
codeSpace code space

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

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLCOVAbstractCoverage

GMLCOVAbstractCoverage

Description

GMLCOVAbstractCoverage

GMLCOVAbstractCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GMLCOV Abstract Coverage

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractFeature](#) -> [geometa::GMLAbstractCoverage](#) -> GMLCOVAbstractCoverage

Public fields

coverageFunction coverage function

rangeType range type

metadata metadata

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
GMLCOVAbstractCoverage$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  wrap = TRUE
)
```

Arguments:

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

element element name

attrs list of attributes

defaults list of default values

wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

GML 3.2.1 Application Schema for Coverages <http://www.opengis.net/gmlcov/1.0>

GMLCOVExtension

GMLCOVExtension

Description

GMLCOVExtension

GMLCOVExtension

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a GMLCOV Extension

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> GMLCOVExtension

Public fields

anyElement anyElement

Methods**Public methods:**

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

Method new(): Initializes object

Usage:

```
GMLCOVExtension$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Internal binding for OGC services

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

GML 3.2.1 Application Schema for Coverages <http://www.opengis.net/gmlcov/1.0>

GMLCylindricalCS	<i>GMLCylindricalCS</i>
------------------	-------------------------

Description

GMLCylindricalCS

GMLCylindricalCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLCylindricalCS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCoordinateSystem](#)
-> GMLCylindricalCS

Methods**Public methods:**

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLDefinition

GMLDefinition

Description

GMLDefinition

GMLDefinition

Format

R6Class object.

Value

Object of R6Class for modelling an GML definition

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> GMLDefinition

```

Public fields

remarks remarks [0..*]: character

Methods**Public methods:**

- [GMLDefinition\\$new\(\)](#)
- [GMLDefinition\\$addRemark\(\)](#)
- [GMLDefinition\\$delRemark\(\)](#)
- [GMLDefinition\\$clone\(\)](#)

Method new(): Initializes object*Usage:*

GMLDefinition\$new(xml = NULL, defaults = list())

*Arguments:*xml object of class [XMLInternalNode-class](#)

defaults default values

Method addRemark(): Adds remark*Usage:*

GMLDefinition\$addRemark(remark)

Arguments:

remark remark

Returns: TRUE if added, FALSE otherwise

Method delRemark(): Deletes remark

Usage:

```
GMLDefinition$delRemark(remark)
```

Arguments:

remark remark

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

Examples

```
gml <- GMLDefinition$new()
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name1", "codespace")
gml$addName("name2", "codespace")
```

GMLDerivedCRS

GMLDerivedCRS

Description

GMLDerivedCRS

GMLDerivedCRS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLDerivedCRS

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCRS ->
geometa::GMLAbstractSingleCRS -> geometa::GMLAbstractGeneralDerivedCRS -> GMLDerivedCRS
```

Public fields

baseCRS baseCRS [1..1]: inherited from GMLAbstractSingleCRS
 derivedCRSType derivedCRSType [1..1]: character
 coordinateSystem coordinateSystem [1..1]: inherited from GMLAbstractCoordinateSystem

Methods**Public methods:**

- [GMLDerivedCRS\\$setBaseCRS\(\)](#)
- [GMLDerivedCRS\\$setDerivedCRSType\(\)](#)
- [GMLDerivedCRS\\$setCoordinateSystem\(\)](#)
- [GMLDerivedCRS\\$clone\(\)](#)

Method [setBaseCRS\(\)](#): Set base CRS

Usage:

`GMLDerivedCRS$setBaseCRS(crs)`

Arguments:

crs object inheriting class [GMLAbstractSingleCRS](#)

Method [setDerivedCRSType\(\)](#): Set derived CRS type

Usage:

`GMLDerivedCRS$setDerivedCRSType(type, codeSpace = NULL)`

Arguments:

type type

codeSpace code space

Method [setCoordinateSystem\(\)](#): set coordinate system

Usage:

`GMLDerivedCRS$setCoordinateSystem(cs)`

Arguments:

cs cs, object inheriting class [GMLAbstractCoordinateSystem](#)

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

Usage:

`GMLDerivedCRS$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLDerivedUnit

GMLDerivedUnit

Description

GMLDerivedUnit

GMLDerivedUnit

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML derived unit

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLUnitDefinition
-> GMLDerivedUnit
```

Public fields

derivationUnitTerm derivationUnitTerm [1..*]: character

Methods**Public methods:**

- [GMLDerivedUnit\\$new\(\)](#)
- [GMLDerivedUnit\\$addDerivationUnitTerm\(\)](#)
- [GMLDerivedUnit\\$delDerivationUnitTerm\(\)](#)
- [GMLDerivedUnit\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
GMLDerivedUnit$new(xml = NULL, defaults = list(), id = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
 defaults default values
 id id

Method `addDerivationUnitTerm()`: Adds a derivation unit term, made of a uom reference, and an exponent which can be negative/positive but not equal to zero.

Usage:

```
GMLDerivedUnit$addDerivationUnitTerm(uom, exponent)
```

Arguments:

uom unit of measure reference

exponent exponent

Returns: TRUE if added, FALSE otherwise

Method `delDerivationUnitTerm()`: Deletes a derivation unit term.

Usage:

```
GMLDerivedUnit$delDerivationUnitTerm(uom, exponent)
```

Arguments:

uom unit of measure reference

exponent exponent

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

Examples

```
gml <- GMLDerivedUnit$new()
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name2", "codespace")
gml$setQuantityTypeReference("someref")
gml$setCatalogSymbol("symbol")
gml$addDerivationUnitTerm("uomId", 2L)
```

GMLElement

GMLElement

Description

GMLElement

GMLElement

Format

R6Class object.

Value

Object of R6Class for modelling an GML element

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> GMLElement

```

Methods**Public methods:**

- GMLElement\$new()
- GMLElement\$decode()
- GMLElement\$clone()

Method new(): Initializes object*Usage:*

```

GMLElement$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  xmlNamespacePrefix = "GML"
)

```

Arguments:

xml object of class XMLInternalNode-class

element element

attrs attrs

defaults default values

xmlNamespacePrefix xmlNamespacePrefix Default is 'GML'

Method decode(): Decodes the XML

Usage:

GMLElement\$decode(xml)

Arguments:

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

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

Usage:

GMLElement\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19103:2005 Geographic information – Conceptual schema language

GMLEllipsoidalCS

GMLEllipsoidalCS

Description

GMLEllipsoidalCS

GMLEllipsoidalCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLEllipsoidalCS

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCoordinateSystem
-> GMLEllipsoidalCS
```


Methods**Public methods:**

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLEnvelope

GMLEnvelope

Description

GMLEnvelope

GMLEnvelope

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML envelope

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> GMLEnvelope
```

Public fields

lowerCorner lower corner

upperCorner upper corner

Methods**Public methods:**

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

Method new(): Initializes a GML envelope. The argument 'bbox' should be a matrix of dim 2,2 giving the x/y min/max values of a bounding box, as returned by bbox function in package **sp**.

Usage:

```
GMLEnvelope$new(  
  xml = NULL,  
  element = NULL,  
  bbox,  
  srsName = NULL,  
  srsDimension = NULL,  
  axisLabels = NULL,  
  uomLabels = NULL  
)
```

Arguments:

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

element element

bbox object of class [matrix](#)

srsName SRS name

srsDimension SRS dimension

axisLabels axis labels

uomLabels uom labels

Method decode(): Decodes an XML representation

Usage:

```
GMLEnvelope$decode(xml)
```

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLEnvelopeWithTimePeriod

GMLEnvelopeWithTimePeriod

Description

GMLEnvelopeWithTimePeriod

GMLEnvelopeWithTimePeriod

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML envelope with time period

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)

-> [geometa::GMLEnvelope](#) -> GMLEnvelopeWithTimePeriod

Public fields

beginPosition begin position

endPosition end position

Methods**Public methods:**

- [GMLEnvelopeWithTimePeriod\\$new\(\)](#)
- [GMLEnvelopeWithTimePeriod\\$decode\(\)](#)
- [GMLEnvelopeWithTimePeriod\\$setBeginPosition\(\)](#)
- [GMLEnvelopeWithTimePeriod\\$setEndPosition\(\)](#)
- [GMLEnvelopeWithTimePeriod\\$clone\(\)](#)

Method `new()`: Initializes a GML envelope with time period. The argument 'bbox' should be a matrix of dim 2,2 giving the x/y min/max values of a bounding box, as returned by `bbox` function in package `sp`.

Usage:

```
GMLEnvelopeWithTimePeriod$new(
  xml = NULL,
  element = NULL,
  bbox,
  beginPosition,
  endPosition,
  srsName = NULL,
  srsDimension = NULL,
  axisLabels = NULL,
  uomLabels = NULL
)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)
`element` element
`bbox` object of class [matrix](#)
`beginPosition` begin position, object of class [Date](#) or [POSIXct-class](#)
`endPosition` end position, object of class [Date](#) or [POSIXct-class](#)
`srsName` SRS name
`srsDimension` SRS dimension
`axisLabels` axis labels
`uomLabels` uom labels

Method `decode()`: Decodes an XML representation

Usage:

```
GMLEnvelopeWithTimePeriod$decode(xml)
```

Arguments:

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

Method `setBeginPosition()`: Set begin position

Usage:

```
GMLEnvelopeWithTimePeriod$setBeginPosition(beginPosition)
```

Arguments:

beginPosition object of class [Date](#) or [POSIXct-class](#)

Method setEndPosition(): Set end position

Usage:

```
GMLEnvelopeWithTimePeriod$setEndPosition(endPosition)
```

Arguments:

endPosition object of class [Date](#) or [POSIXct-class](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLGeneralGridAxis *GMLGeneralGridAxis*

Description

GMLGeneralGridAxis

GMLGeneralGridAxis

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML GeneralGridAxis

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> GMLGeneralGridAxis
```

Public fields

offsetVector offset vector
coefficients coefficients
gridAxesSpanned grid axes spanned
sequenceRule sequence rule

Methods**Public methods:**

- [GMLGeneralGridAxis\\$new\(\)](#)
- [GMLGeneralGridAxis\\$decode\(\)](#)
- [GMLGeneralGridAxis\\$setOffsetVector\(\)](#)
- [GMLGeneralGridAxis\\$setCoefficients\(\)](#)
- [GMLGeneralGridAxis\\$setGridAxesSpanned\(\)](#)
- [GMLGeneralGridAxis\\$setSequenceRule\(\)](#)
- [GMLGeneralGridAxis\\$clone\(\)](#)

Method new(): Initializes object

Usage:

GMLGeneralGridAxis\$new(xml = NULL)

Arguments:

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

Method decode(): Decodes XML

Usage:

GMLGeneralGridAxis\$decode(xml)

Arguments:

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

Method setOffsetVector(): Set offset vector

Usage:

GMLGeneralGridAxis\$setOffsetVector(offsetVector)

Arguments:

offsetVector offset vector object of class [vector](#)

Method setCoefficients(): Set coefficients

Usage:

GMLGeneralGridAxis\$setCoefficients(coefficients)

Arguments:

coefficients coefficients object of class [vector](#)

Method setGridAxesSpanned(): Set grid axes spanned

Usage:

GMLGeneralGridAxis\$setGridAxesSpanned(spanned)

Arguments:

spanned spanned

Method setSequenceRule(): Set sequence rule

Usage:

GMLGeneralGridAxis\$setSequenceRule(sequenceRule)

Arguments:

sequenceRule sequence rule

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

Usage:

GMLGeneralGridAxis\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

OGC GML 3.3 Schema. <http://schemas.opengis.net/gml/3.3/referenceableGrid.xsd>

GMLGeodeticCRS

GMLGeodeticCRS

Description

GMLGeodeticCRS

GMLGeodeticCRS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLGeodeticCRS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCRS](#) ->
 GMLGeodeticCRS

Public fields

ellipsoidalCS ellipsoidalCS [1..1]: [GMLEllipsoidalCS](#)
 cartesianCS cartesianCS [1..1]: [GMLCartesianCS](#)
 sphericalCS sphericalCS [1..1]: [GMLSphericalCS](#)
 geodeticDatum geodeticDatum [1..1]: [GMLGeodeticDatum](#)

Methods**Public methods:**

- [GMLGeodeticCRS\\$setEllipsoidalCS\(\)](#)
- [GMLGeodeticCRS\\$setCartesianCS\(\)](#)
- [GMLGeodeticCRS\\$setSphericalCS\(\)](#)
- [GMLGeodeticCRS\\$setGeodeticDatum\(\)](#)
- [GMLGeodeticCRS\\$clone\(\)](#)

Method [setEllipsoidalCS\(\)](#): Set ellipsoidal CS

Usage:

[GMLGeodeticCRS\\$setEllipsoidalCS\(cs\)](#)

Arguments:

cs cs, object of class [GMLEllipsoidalCS](#)

Method [setCartesianCS\(\)](#): Set cartesian CS

Usage:

[GMLGeodeticCRS\\$setCartesianCS\(cs\)](#)

Arguments:

cs cs, object of class [GMLCartesianCS](#)

Method [setSphericalCS\(\)](#): Set spherical CS

Usage:

[GMLGeodeticCRS\\$setSphericalCS\(cs\)](#)

Arguments:

cs cs, object of class [GMLSphericalCS](#)

Method [setGeodeticDatum\(\)](#): Set geodetic datum. Currently not supported

Usage:

[GMLGeodeticCRS\\$setGeodeticDatum\(datum\)](#)

Arguments:

datum object of class GMLGeodeticDatum

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

Usage:

GMLGeodeticCRS\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLGrid

GMLGrid

Description

GMLGrid

GMLGrid

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML grid

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [geometa::GMLAbstractImplicitGeometry](#)
 -> GMLGrid

Public fields

limits limits

axisLabels axis labels

axisName axis name

Methods

Public methods:

- [GMLGrid\\$new\(\)](#)
- [GMLGrid\\$setGridEnvelope\(\)](#)
- [GMLGrid\\$setAxisLabels\(\)](#)
- [GMLGrid\\$addAxisName\(\)](#)
- [GMLGrid\\$delAxisName\(\)](#)
- [GMLGrid\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
GMLGrid$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

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

`element` element name

`attrs` list of attributes

`defaults` list of default values

`wrap` wrap element?

Method `setGridEnvelope()`: Set grid envelope

Usage:

```
GMLGrid$setGridEnvelope(m)
```

Arguments:

`m` object of class [matrix](#)

Method `setAxisLabels()`: Set axis labels

Usage:

```
GMLGrid$setAxisLabels(labels)
```

Arguments:

`labels` labels

Method `addAxisName()`: Adds axis name

Usage:

```
GMLGrid$addAxisName(axisName)
```

Arguments:

`axisName` axis name

Returns: TRUE if added, FALSE otherwise

Method delAxisName(): Deletes axis name

Usage:

GMLGrid\$delAxisName(axisName)

Arguments:

axisName axis name

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLGrid\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLGridCoverage

GMLGridCoverage

Description

GMLGridCoverage

GMLGridCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML grid coverage

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractFeature -> geometa::GMLAbstractCoverage -> geometa::GMLAbstractDiscreteCoverage
-> GMLGridCoverage

Methods**Public methods:**

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

Method new(): Initializes object

Usage:

```
GMLGridCoverage$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLGridEnvelope	<i>GMLGridEnvelope</i>
-----------------	------------------------

Description

GMLGridEnvelope

GMLGridEnvelope

Format

R6Class object.

Value

Object of R6Class for modelling an GML grid envelope

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> GMLGridEnvelope

```

Public fields

low low value [matrix]

high high value [matrix]

Methods**Public methods:**

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

Method new(): This method is used to instantiate a GML envelope. The argument 'bbox' should be a matrix of dim 2,2 giving the x/y min/max values of a bounding box, as returned by bbox function in package **sp**

Usage:

GMLGridEnvelope\$new(xml = NULL, bbox)

*Arguments:*xml object of class XMLInternalNode-class from **XML**

bbox object of class matrix

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

Usage:

GMLGridEnvelope\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLGridFunction	<i>GMLGridFunction</i>
-----------------	------------------------

Description

GMLGridFunction
 GMLGridFunction

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML grid function

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [GMLGridFunction](#)

Public fields

sequenceRule sequence rule
 startPoint start point

Methods**Public methods:**

- [GMLGridFunction\\$new\(\)](#)
- [GMLGridFunction\\$setSequenceRule\(\)](#)
- [GMLGridFunction\\$setStartPoint\(\)](#)
- [GMLGridFunction\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
GMLGridFunction$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

Method setSequenceRule(): Set sequence rule

Usage:

```
GMLGridFunction$setSequenceRule(sequenceRule)
```

Arguments:

sequenceRule sequence rule, a value among: Linear,Boustrophedonic, Cantor-diagonal,Spiral,Morton,Hilbert

Method setStartPoint(): Set start point

Usage:

```
GMLGridFunction$setStartPoint(x, y)
```

Arguments:

x x
y y

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLLinearCS

GMLLinearCS

Description

GMLLinearCS

GMLLinearCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLLinearCS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCoordinateSystem](#)
-> GMLLinearCS

Methods

Public methods:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLLinearRing	<i>GMLLinearRing</i>
---------------	----------------------

Description

GMLLinearRing

GMLLinearRing

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an GML LinearRing**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractRing](#) -> GMLLinearRing**Public fields**

attrs gml attributes

posList list of positions

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object*Usage:*[GMLLinearRing\\$new](#)(xml = NULL, m)*Arguments:*xml object of class [XMLInternalNode-class](#)m simple object of class [matrix](#)**Method** [clone\(\)](#): The objects of this class are cloneable with this method.*Usage:*[GMLLinearRing\\$clone](#)(deep = FALSE)*Arguments:*

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLLineString

GMLLineString

Description

GMLLineString

GMLLineString

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML linestring

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLAbstractGeometry -> geometa::GMLAbstractGeometricPrimitive
-> geometa::GMLAbstractCurve -> GMLLineString

```

Public fields

posList list of positions

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

```
GMLLineString$new(xml = NULL, sfg)
```

Arguments:

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

sfg simple feature geometry resulting from **sf**

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLMultiCurve

GMLMultiCurve

Description

GMLMultiCurve

GMLMultiCurve

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML multicurve

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)

-> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [geometa::GMLAbstractGeometricAggregate](#)

-> GMLMultiCurve

Public fields

attrs gml attributes
curveMember curve members

Methods**Public methods:**

- [GMLMultiCurve\\$new\(\)](#)
- [GMLMultiCurve\\$addCurveMember\(\)](#)
- [GMLMultiCurve\\$delCurveMember\(\)](#)
- [GMLMultiCurve\\$clone\(\)](#)

Method new(): Initializes object

Usage:

GMLMultiCurve\$new(xml = NULL, sfg = NULL)

Arguments:

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

sfg simple feature geometry resulting from **sf**

Method addCurveMember(): Adds curve member

Usage:

GMLMultiCurve\$addCurveMember(curve)

Arguments:

curve curve object of class inheriting [GMLAbstractCurve](#)

Returns: TRUE if added, FALSE otherwise

Method delCurveMember(): Deletes curve member

Usage:

GMLMultiCurve\$delCurveMember(curve)

Arguments:

curve curve object of class inheriting [GMLAbstractCurve](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLMultiCurve\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLMultiCurveCoverage *GMLMultiCurveCoverage*

Description

GMLMultiCurveCoverage

GMLMultiCurveCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML multicurve coverage

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractFeature](#) -> [geometa::GMLAbstractCoverage](#) -> [geometa::GMLAbstractDiscreteCoverage](#)
-> [GMLMultiCurveCoverage](#)

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
GMLMultiCurveCoverage$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
 element element name
 attrs list of attributes
 defaults list of default values
 wrap wrap element?

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

Usage:

GMLMultiCurveCoverage\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLMultiPoint

GMLMultiPoint

Description

GMLMultiPoint

GMLMultiPoint

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML multipoint

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [geometa::GMLAbstractGeometricAggregate](#)
 -> GMLMultiPoint

Public fields

pointMember point members

Methods**Public methods:**

- [GMLMultiPoint\\$new\(\)](#)
- [GMLMultiPoint\\$addPointMember\(\)](#)
- [GMLMultiPoint\\$delPointMember\(\)](#)
- [GMLMultiPoint\\$clone\(\)](#)

Method new(): Initializes object

Usage:

GMLMultiPoint\$new(xml = NULL, sfg = NULL)

Arguments:

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

sfg simple feature geometry resulting from **sf**

Method addPointMember(): Adds point member

Usage:

GMLMultiPoint\$addPointMember(point)

Arguments:

point point object of class [GMLPoint](#)

Returns: TRUE if added, FALSE otherwise

Method delPointMember(): Deletes point member

Usage:

GMLMultiPoint\$delPointMember(point)

Arguments:

point point object of class [GMLPoint](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLMultiPoint\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLMultiPointCoverage *GMLMultiPointCoverage*

Description

GMLMultiPointCoverage

GMLMultiPointCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML multipoint coverage

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractFeature](#) -> [geometa::GMLAbstractCoverage](#) -> [geometa::GMLAbstractDiscreteCoverage](#)
-> [GMLMultiPointCoverage](#)

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
GMLMultiPointCoverage$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```


Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

GMLMultiPointCoverage\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLMultiSolidCoverage *GMLMultiSolidCoverage*

Description

GMLMultiSolidCoverage

GMLMultiSolidCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML multisolid coverage

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractFeature](#) -> [geometa::GMLAbstractCoverage](#) -> [geometa::GMLAbstractDiscreteCoverage](#)
-> [GMLMultiSolidCoverage](#)

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
GMLMultiSolidCoverage$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

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

`element` element name

`attrs` list of attributes

`defaults` list of default values

`wrap` wrap element?

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLMultiSurface	<i>GMLMultiSurface</i>
-----------------	------------------------

Description

GMLMultiSurface

GMLMultiSurface

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an GML multisurface**Super classes**

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLAbstractGeometry -> geometa::GMLAbstractGeometricAggregate
-> GMLMultiSurface

```

Public fields

attrs gml attributes

surfaceMember surface members

Methods**Public methods:**

- [GMLMultiSurface\\$new\(\)](#)
- [GMLMultiSurface\\$addSurfaceMember\(\)](#)
- [GMLMultiSurface\\$delSurfaceMember\(\)](#)
- [GMLMultiSurface\\$clone\(\)](#)

Method [new\(\)](#): Initializes object*Usage:*[GMLMultiSurface\\$new\(xml = NULL, sfg = NULL\)](#)*Arguments:*xml object of class [XMLInternalNode-class](#)sfg simple feature geometry resulting from **sf****Method** [addSurfaceMember\(\)](#): Adds surface member*Usage:*[GMLMultiSurface\\$addSurfaceMember\(surface\)](#)

Arguments:

surface surface object of class inheriting [GMLAbstractSurface](#)

Returns: TRUE if added, FALSE otherwise

Method delSurfaceMember(): Deletes surface member

Usage:

GMLMultiSurface\$delSurfaceMember(surface)

Arguments:

surface surface object of class inheriting [GMLAbstractSurface](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLMultiSurface\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLMultiSurfaceCoverage

GMLMultiSurfaceCoverage

Description

GMLMultiSurfaceCoverage

GMLMultiSurfaceCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML multisurface coverage

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractFeature -> geometa::GMLAbstractCoverage -> geometa::GMLAbstractDiscreteCoverage  
-> GMLMultiSurfaceCoverage
```

Methods**Public methods:**

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

Method new(): Initializes object

Usage:

```
GMLMultiSurfaceCoverage$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLObliqueCartesianCS *GMLObliqueCartesianCS*

Description

GMLObliqueCartesianCS

GMLObliqueCartesianCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLObliqueCartesianCS

Inherited Methods

`new(xml, defaults, id)` This method is used to instantiate a GML Abstract CRS

`addAxis(axis)` Adds an axis, object of class GMLCoordinateSystemAxis

`delAxis(axis)` Deletes an axis, object of class GMLCoordinateSystemAxis

Super classes

`geometa::geometaLogger` -> `geometa::ISOAbstractObject` -> `geometa::GMLAbstractObject`

-> `geometa::GMLAbstractGML` -> `geometa::GMLDefinition` -> `geometa::GMLAbstractCoordinateSystem`

-> GMLObliqueCartesianCS

Methods**Public methods:**

- `GMLObliqueCartesianCS$clone()`

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

Usage:

`GMLObliqueCartesianCS$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
- OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLOperationMethod *GMLOperationMethod*

Description

GMLOperationMethod
GMLOperationMethod

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLOperationMethod

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> GMLOperationMethod

Public fields

formulaCitation [[ISOCitation](#)]
formula [[GMLElement](#)]
sourceDimensions [[GMLElement](#)]
targetDimensions [[GMLElement](#)]
parameter [list of [[GMLOperationParameter](#) or [GMLOperationParameterGroup](#)]]

Methods

Public methods:

- [GMLOperationMethod\\$setFormulaCitation\(\)](#)
- [GMLOperationMethod\\$setFormula\(\)](#)
- [GMLOperationMethod\\$setSourceDimensions\(\)](#)
- [GMLOperationMethod\\$setTargetDimensions\(\)](#)
- [GMLOperationMethod\\$addParameter\(\)](#)
- [GMLOperationMethod\\$delParameter\(\)](#)
- [GMLOperationMethod\\$clone\(\)](#)

Method setFormulaCitation(): Sets the formula citation

Usage:

GMLOperationMethod\$setFormulaCitation(citation)

Arguments:

citation object of class ISOCitation

Method setFormula(): Set formula

Usage:

GMLOperationMethod\$setFormula(formula)

Arguments:

formula formula, object of class [character](#)

Method setSourceDimensions(): Set source dimensions

Usage:

GMLOperationMethod\$setSourceDimensions(value)

Arguments:

value value, object of class [integer](#)

Method setTargetDimensions(): Set target dimensions

Usage:

GMLOperationMethod\$setTargetDimensions(value)

Arguments:

value value, object of class [integer](#)

Method addParameter(): Adds a parameter

Usage:

GMLOperationMethod\$addParameter(param)

Arguments:

param object of class [GMLOperationParameter](#) or [GMLOperationParameterGroup](#)

Returns: TRUE if added, FALSE otherwise

Method delParameter(): Deletes a parameter

Usage:

GMLOperationMethod\$delParameter(param)

Arguments:

param object of class [GMLOperationParameter](#) or [GMLOperationParameterGroup](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLOperationMethod\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLOperationParameter *GMLOperationParameter*

Description

GMLOperationParameter

GMLOperationParameter

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLOperationParameter

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractGeneralOperationParameter  
-> GMLOperationParameter
```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLOperationParameterGroup
GMLOperationParameterGroup

Description

GMLOperationParameterGroup
 GMLOperationParameterGroup

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLOperationParameterGroup

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractGeneralOperationParameter](#)
 -> GMLOperationParameterGroup

Public fields

maximumOccurs maximumOccurs [0..1]: integer
 parameter parameter [2..*]: GMLOperationParameter / GMLOperationParameterGroup

Methods**Public methods:**

- [GMLOperationParameterGroup\\$setMaximumOccurs\(\)](#)
- [GMLOperationParameterGroup\\$addParameter\(\)](#)
- [GMLOperationParameterGroup\\$delParameter\(\)](#)
- [GMLOperationParameterGroup\\$clone\(\)](#)

Method [setMaximumOccurs\(\)](#): Set maximum occurs

Usage:

[GMLOperationParameterGroup\\$setMaximumOccurs\(maximumOccurs\)](#)

Arguments:

maximumOccurs maximumOccurs, object of class [integer](#)

Method addParameter(): Adds a parameter

Usage:

GMLOperationParameterGroup\$addParameter(param)

Arguments:

param object of class [GMLOperationParameter](#) or [GMLOperationParameterGroup](#)

Returns: TRUE if added, FALSE otherwise

Method delParameter(): Deletes a parameter

Usage:

GMLOperationParameterGroup\$delParameter(param)

Arguments:

param object of class [GMLOperationParameter](#) or [GMLOperationParameterGroup](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLOperationParameterGroup\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLParameterValue	<i>GMLParameterValue</i>
-------------------	--------------------------

Description

GMLParameterValue

GMLParameterValue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML parameter value

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGeneralParameterValue](#) -> [GMLParameterValue](#)

Public fields

value value
 stringValue string value
 integerValue integer value
 booleanValue boolean value
 valueList value list
 integerValueList integer value list
 valueFile value file
 operationParameter operation parameter

Methods**Public methods:**

- [GMLParameterValue\\$new\(\)](#)
- [GMLParameterValue\\$setValue\(\)](#)
- [GMLParameterValue\\$setStringValue\(\)](#)
- [GMLParameterValue\\$setIntegerValue\(\)](#)
- [GMLParameterValue\\$setBooleanValue\(\)](#)
- [GMLParameterValue\\$setValueFile\(\)](#)
- [GMLParameterValue\\$setOperationParameter\(\)](#)
- [GMLParameterValue\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`GMLParameterValue$new(xml = NULL, defaults = list())`

Arguments:

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

defaults default values

Method [setValue\(\)](#): Set value

Usage:

`GMLParameterValue$setValue(value, uom)`

Arguments:

value value, object of class [numeric](#)

uom uom

Method [setStringValue\(\)](#): Set string value

Usage:

GMLParameterValue\$setStringValue(value)

Arguments:

value value

Method setIntegerValue(): Set integer value

Usage:

GMLParameterValue\$setIntegerValue(value)

Arguments:

value value, object of class [integer](#)

Method setBooleanValue(): Set boolean value

Usage:

GMLParameterValue\$setBooleanValue(value)

Arguments:

value object of class [logical](#)

Method setValueFile(): Set value file

Usage:

GMLParameterValue\$setValueFile(value)

Arguments:

value value

Method setOperationParameter(): Set operation parameter

Usage:

GMLParameterValue\$setOperationParameter(operationParameter)

Arguments:

operationParameter object of class [GMLOperationParameter](#)

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

Usage:

GMLParameterValue\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.openeospatial.org/standards/gml>

Examples

```

gml <- GMLParameterValue$new()
gml$setValue(1.1, "test")
op <- GMLOperationParameter$new()
op$setDescriptionReference("someref")
op$setIdentifier("identifier", "codespace")
op$addName("name1", "codespace")
op$addName("name2", "codespace")
op$setMinimumOccurs(2L)
gml$setOperationParameter(op)
xml <- gml$encode()

```

GMLParameterValueGroup

GMLParameterValueGroup

Description

GMLParameterValueGroup

GMLParameterValueGroup

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML parameter value group

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGeneralParameterValue](#) -> GMLParameterValueGroup

Public fields

parameterValue parameter value list

group group

Methods**Public methods:**

- [GMLParameterValueGroup\\$new\(\)](#)
- [GMLParameterValueGroup\\$addParameterValue\(\)](#)
- [GMLParameterValueGroup\\$delParameterValue\(\)](#)
- [GMLParameterValueGroup\\$setOperationParameterGroup\(\)](#)

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

Method new(): Initializes object

Usage:

GMLParameterValueGroup\$new(xml = NULL, defaults = list())

Arguments:

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

defaults default values

Method addParameterValue(): Adds parameter value

Usage:

GMLParameterValueGroup\$addParameterValue(parameterValue)

Arguments:

parameterValue parameter value, object of class [GMLParameterValue](#)

Returns: TRUE if added, FALSE otherwise

Method delParameterValue(): Deletes parameter value

Usage:

GMLParameterValueGroup\$delParameterValue(parameterValue)

Arguments:

parameterValue parameter value, object of class [GMLParameterValue](#)

Returns: TRUE if deleted, FALSE otherwise

Method setOperationParameterGroup(): Set operation parameter group

Usage:

GMLParameterValueGroup\$setOperationParameterGroup(operationParameterGroup)

Arguments:

operationParameterGroup operation parameter group

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

Usage:

GMLParameterValueGroup\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

Examples

```
gml <- GMLParameterValueGroup$new()
```

GMLPoint

*GMLPoint***Description**

GMLPoint

GMLPoint

Format

R6Class object.

Value

Object of R6Class for modelling an GML point

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLAbstractGeometry -> geometa::GMLAbstractGeometricPrimitive
-> GMLPoint

```

Public fields

pos matrix of positions

Methods**Public methods:**

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

Method new(): Initializes object*Usage:*

GMLPoint\$new(xml = NULL, sfg = NULL, m = NULL)

*Arguments:*xml object of class [XMLInternalNode-class](#)sfg simple feature geometry from **sf**m simple object of class [matrix](#)**Method** clone(): The objects of this class are cloneable with this method.*Usage:*

GMLPoint\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLPolarCS

GMLPolarCS

Description

GMLPolarCS

GMLPolarCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLPolarCS

Inherited Methods

`new(xml, defaults, id)` This method is used to instantiate a GML Abstract CRS

`addAxis(axis)` Adds an axis, object of class `GMLCoordinateSystemAxis`

`delAxis(axis)` Deletes an axis, object of class `GMLCoordinateSystemAxis`

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCoordinateSystem  
-> GMLPolarCS
```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLPolygon

GMLPoint

Description

GMLPoint

GMLPoint

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML point

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLAbstractGeometry -> geometa::GMLAbstractGeometricPrimitive
-> geometa::GMLAbstractSurface -> GMLPolygon
```

Public fields

`exterior` list of exterior polygons

`interior` list of interior polygons

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
GMLPolygon$new(xml = NULL, sfg)
```

Arguments:

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

`sfg` simple object from `sf`

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLProjectedCRS

GMLProjectedCRS

Description

GMLProjectedCRS

GMLProjectedCRS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLProjectedCRS

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCRS ->
geometa::GMLAbstractSingleCRS -> geometa::GMLAbstractGeneralDerivedCRS -> GMLProjectedCRS

```

Public fields

```

baseGeodeticCRS baseGeodeticCRS [1..1]: GMLGeodeticCRS
cartesianCS cartesianCS [1..1]: GMLCartesianCS

```

Methods**Public methods:**

- [GMLProjectedCRS\\$setBaseGeodeticCRS\(\)](#)
- [GMLProjectedCRS\\$setCartesianCS\(\)](#)
- [GMLProjectedCRS\\$clone\(\)](#)

Method [setBaseGeodeticCRS\(\)](#): Set base Geodetic CRS

Usage:

```
GMLProjectedCRS$setBaseGeodeticCRS(crs)
```

Arguments:

crs crs, object of class [GMLGeodeticCRS](#)

Method [setCartesianCS\(\)](#): Set cartesian CRS. Not yet supported

Usage:

```
GMLProjectedCRS$setCartesianCS(cs)
```

Arguments:

cs cs, object of class [GMLCartesianCRS](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLRectifiedGrid	<i>GMLRectifiedGrid</i>
------------------	-------------------------

Description

GMLRectifiedGrid
GMLRectifiedGrid

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML rectified grid

Methods

`new(xml, element)` This method is used to instantiate a GML rectified grid
`setOrigin(x,y)` Set the origin of the rectified grid

Super classes

`geometa::geometaLogger` -> `geometa::ISOAbstractObject` -> `geometa::GMLAbstractObject`
-> `geometa::GMLAbstractGML` -> `geometa::GMLAbstractGeometry` -> `geometa::GMLAbstractImplicitGeometry`
-> `geometa::GMLGrid` -> `GMLRectifiedGrid`

Public fields

`origin` origin
`offsetVector` offset vector

Methods**Public methods:**

- `GMLRectifiedGrid$new()`
- `GMLRectifiedGrid$setOrigin()`
- `GMLRectifiedGrid$addOffsetVector()`
- `GMLRectifiedGrid$delOffsetVector()`
- `GMLRectifiedGrid$clone()`

Method `new()`: Initializes object

Usage:

`GMLRectifiedGrid$new(xml = NULL)`

Arguments:

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

Method setOrigin(): Set origin

Usage:

GMLRectifiedGrid\$setOrigin(x, y)

Arguments:

x x

y y

Method addOffsetVector(): Adds offset vector

Usage:

GMLRectifiedGrid\$addOffsetVector(vec)

Arguments:

vec vec, object of class [vector](#)

Returns: TRUE if added, FALSE otherwise

Method delOffsetVector(): Deletes offset vector

Usage:

GMLRectifiedGrid\$delOffsetVector(vec)

Arguments:

vec vec, object of class [vector](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLRectifiedGrid\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLRectifiedGridCoverage
GMLRectifiedGridCoverage

Description

GMLRectifiedGridCoverage
GMLRectifiedGridCoverage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML rectified grid coverage

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractFeature](#) -> [geometa::GMLAbstractCoverage](#) -> [geometa::GMLAbstractDiscreteCoverage](#)
-> [GMLRectifiedGridCoverage](#)

Methods

Public methods:

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

Method [new\(\)](#): Initializes object

Usage:

```
GMLRectifiedGridCoverage$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
element element name
attrs list of attributes
defaults list of default values
wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLReferenceableGridByArray

GMLReferenceableGridByArray

Description

GMLReferenceableGridByArray

GMLReferenceableGridByArray

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML ReferenceableGridByArray

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLAbstractGeometry -> geometa::GMLAbstractImplicitGeometry
-> geometa::GMLGrid -> geometa::GMLAbstractReferenceableGrid -> GMLReferenceableGridByArray
```

Public fields

generalGridAxis general grid axis

Methods

Public methods:

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

Method new(): Initializes object

Usage:

```
GMLReferenceableGridByArray$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE  
)
```

Arguments:

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

element element name

attrs list of attributes

defaults list of default values

wrap wrap element?

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

OGC GML 3.3 Schema. <http://schemas.opengis.net/gml/3.3/referenceableGrid.xsd>

GMLReferenceableGridByTransformation
GMLReferenceableGridByTransformation

Description

GMLReferenceableGridByTransformation
 GMLReferenceableGridByTransformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML ReferenceableGridByTransformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [geometa::GMLAbstractImplicitGeometry](#)
 -> [geometa::GMLGrid](#) -> [geometa::GMLAbstractReferenceableGrid](#) -> [GMLReferenceableGridByTransformation](#)

Public fields

transformation transformation
 concatenatedOperation concatenated operation

Methods**Public methods:**

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

Method new(): Initializes object

Usage:

```
GMLReferenceableGridByTransformation$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  wrap = TRUE
)
```

Arguments:

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

element element name
 attrs list of attributes
 defaults list of default values
 wrap wrap element?

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

Usage:

GMLReferenceableGridByTransformation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

OGC GML 3.3 Schema. <http://schemas.opengis.net/gml/3.3/referenceableGrid.xsd>

GMLReferenceableGridByVectors

GMLReferenceableGridByVectors

Description

GMLReferenceableGridByVectors

GMLReferenceableGridByVectors

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML ReferenceableGridByVectors

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractGeometry](#) -> [geometa::GMLAbstractImplicitGeometry](#)
 -> [geometa::GMLGrid](#) -> [geometa::GMLAbstractReferenceableGrid](#) -> GMLReferenceableGridByVectors

Public fields

origin origin
 generalGridAxis general grid axis

Methods**Public methods:**

- [GMLReferenceableGridByVectors\\$new\(\)](#)
- [GMLReferenceableGridByVectors\\$setOrigin\(\)](#)
- [GMLReferenceableGridByVectors\\$addGeneralGridAxis\(\)](#)
- [GMLReferenceableGridByVectors\\$delGeneralGridAxis\(\)](#)
- [GMLReferenceableGridByVectors\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
GMLReferenceableGridByVectors$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  wrap = TRUE
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
 element element name
 attrs list of attributes
 defaults list of default values
 wrap wrap element?

Method setOrigin(): Set origin

Usage:

```
GMLReferenceableGridByVectors$setOrigin(coords)
```

Arguments:

coords coords, object of class [list](#)

Method addGeneralGridAxis(): Adds general grid axis

Usage:

```
GMLReferenceableGridByVectors$addGeneralGridAxis(axis)
```

Arguments:

axis object of class [GMLGeneralGridAxis](#)

Returns: TRUE if added, FALSE otherwise

Method delGeneralGridAxis(): Deletes general grid axis

Usage:

GMLReferenceableGridByVectors\$delGeneralGridAxis(axis)

Arguments:

axis object of class [GMLGeneralGridAxis](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

GMLReferenceableGridByVectors\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

OGC GML 3.3 Schema. <http://schemas.opengis.net/gml/3.3/referenceableGrid.xsd>

GMLSphericalCS

GMLSphericalCS

Description

GMLSphericalCS

GMLSphericalCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLSphericalCS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCoordinateSystem](#)
-> GMLSphericalCS

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLTemporalCRS

GMLTemporalCRS

Description

GMLTemporalCRS

GMLTemporalCRS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLTemporalCRS

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCRS ->
geometa::GMLAbstractSingleCRS -> GMLTemporalCRS
```

Public fields

`timeCS` time CS

`temporalDatum` temporal datum

Methods**Public methods:**

- [GMLTemporalCRS\\$setTimeCS\(\)](#)
- [GMLTemporalCRS\\$setTemporalDatum\(\)](#)
- [GMLTemporalCRS\\$clone\(\)](#)

Method setTimeCS(): Set time CS

Usage:

```
GMLTemporalCRS$setTimeCS(timeCS)
```

Arguments:

timeCS time CS, object of class [GMLTimeCS](#)

Method setTemporalDatum(): Set temporal datum

Usage:

```
GMLTemporalCRS$setTemporalDatum(temporalDatum)
```

Arguments:

temporalDatum temporal datum

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLTemporalCS

GMLTemporalCS

Description

GMLTemporalCS

GMLTemporalCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLTemporalCS

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCoordinateSystem
-> GMLTemporalCS

```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t
 OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLTimeCS

GMLTimeCS

Description

GMLTimeCS

GMLTimeCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLTimeCS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCoordinateSystem](#)
 -> GMLTimeCS

Methods**Public methods:**

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

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

Usage:

`GMLTimeCS$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLTimeInstant

GMLTimeInstant

Description

GMLTimeInstant

GMLTimeInstant

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLTimeInstant

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
 -> [geometa::GMLAbstractGML](#) -> [geometa::GMLAbstractTimeObject](#) -> [geometa::GMLAbstractTimePrimitive](#)
 -> [geometa::GMLAbstractTimeGeometricPrimitive](#) -> GMLTimeInstant

Public fields

timePosition [[numeric](#)|[character](#)|[Date](#)|[POSIXt](#)]

Methods**Public methods:**

- [GMLTimeInstant\\$new\(\)](#)
- [GMLTimeInstant\\$setTimePosition\(\)](#)
- [GMLTimeInstant\\$toISOFormat\(\)](#)
- [GMLTimeInstant\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
GMLTimeInstant$new(xml = NULL, timePosition)
```

Arguments:

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

timePosition time position

Method [setTimePosition\(\)](#): Sets the position (date or date and time of the resource contents),

Usage:

```
GMLTimeInstant$setTimePosition(timePosition)
```

Arguments:

timePosition object of class "numeric", "POSIXct"/"POSIXt" or "Date"

Method [toISOFormat\(\)](#): Export to ISO format ([character](#))

Usage:

```
GMLTimeInstant$toISOFormat()
```

Returns: a [character](#) in ISO format

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
time <- ISOdate(2000, 1, 12, 12, 59, 45)
md <- GMLTimeInstant$new(timePosition = time)
xml <- md$encode()
```

GMLTimePeriod	<i>GMLTimePeriod</i>
---------------	----------------------

Description

GMLTimePeriod

GMLTimePeriod

Format

R6Class object.

Value

Object of R6Class for modelling an GMLTimePeriod

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLAbstractTimeObject -> geometa::GMLAbstractTimePrimitive
-> geometa::GMLAbstractTimeGeometricPrimitive -> GMLTimePeriod

```

Public fields

beginPosition beginPosition [1]: 'POSIXct','POSIXt'

endPosition endPosition [1]: 'POSIXct','POSIXt'

duration duration [0..1]: character

Methods**Public methods:**

- GMLTimePeriod\$new()
- GMLTimePeriod\$setBeginPosition()
- GMLTimePeriod\$setEndPosition()
- GMLTimePeriod\$computeInterval()
- GMLTimePeriod\$setDuration()
- GMLTimePeriod\$clone()

Method new(): Initializes object*Usage:*

GMLTimePeriod\$new(xml = NULL, beginPosition = NULL, endPosition = NULL)

Arguments:

xml object of class XMLInternalNode-class

beginPosition object of class numeric, Date or POSIXct-class

endPosition object of class [numeric](#), [Date](#) or [POSIXct-class](#)

Method setBeginPosition(): Set begin position

Usage:

```
GMLTimePeriod$setBeginPosition(beginPosition)
```

Arguments:

beginPosition object of class [numeric](#), [Date](#) or [POSIXct-class](#)

Method setEndPosition(): Set end position

Usage:

```
GMLTimePeriod$setEndPosition(endPosition)
```

Arguments:

endPosition object of class [numeric](#), [Date](#) or [POSIXct-class](#)

Method computeInterval(): Compute interval (ISO defined duration) and set proper attribute for XML encoding. The method calls the static function `GMLTimePeriod$computeISODuration`

Usage:

```
GMLTimePeriod$computeInterval()
```

Method setDuration(): Set ISO duration

Usage:

```
GMLTimePeriod$setDuration(
  years = 0,
  months = 0,
  days = 0,
  hours = 0,
  mins = 0,
  secs = 0
)
```

Arguments:

years years

months months

days days

hours hours

mins mins

secs secs

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
start <- ISOdate(2000, 1, 12, 12, 59, 45)
end <- ISOdate(2010, 8, 22, 13, 12, 43)
md <- GMLTimePeriod$new(beginPosition = start, endPosition = end)
xml <- md$encode()
```

GMLUnitDefinition	<i>GMLUnitDefinition</i>
-------------------	--------------------------

Description

GMLUnitDefinition

GMLUnitDefinition

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML unit definition

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> GMLUnitDefinition

Public fields

quantityTypeReference quantityTypeReference [0..1]: character

catalogSymbol catalogSymbol [0..1]: character

Methods**Public methods:**

- [GMLUnitDefinition\\$new\(\)](#)
- [GMLUnitDefinition\\$setQuantityTypeReference\(\)](#)
- [GMLUnitDefinition\\$setCatalogSymbol\(\)](#)
- [GMLUnitDefinition\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
GMLUnitDefinition$new(xml = NULL, defaults = list(), id = NULL)
```

Arguments:

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

defaults list of default values

id id

Method `setQuantityTypeReference()`: Set quantity type reference. Content is reference to a remote value

Usage:

```
GMLUnitDefinition$setQuantityTypeReference(quantityTypeReference)
```

Arguments:

quantityTypeReference quantity type reference

Method `setCatalogSymbol()`: Set catalog symbol

Usage:

```
GMLUnitDefinition$setCatalogSymbol(catalogSymbol)
```

Arguments:

catalogSymbol catalog symbol, preferred lexical symbol used for this unit of measure

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

Examples

```
gml <- GMLUnitDefinition$new()
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name1", "codespace")
gml$addName("name2", "codespace")
gml$setQuantityTypeReference("someref")
gml$setCatalogSymbol("symbol")
```

GMLUserDefinedCS	<i>GMLUserDefinedCS</i>
------------------	-------------------------

Description

GMLUserDefinedCS

GMLUserDefinedCS

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an GMLUserDefinedCS**Super classes**

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject  
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCoordinateSystem  
-> GMLUserDefinedCS
```

Methods**Public methods:**

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

Method `clone()`: The objects of this class are cloneable with this method.*Usage:*`GMLUserDefinedCS$clone(deep = FALSE)`*Arguments:*`deep` Whether to make a deep clone.**Author(s)**

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

ReferencesISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_tOGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLVerticalCRS

GMLVerticalCRS

Description

GMLVerticalCRS

GMLVerticalCRS

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an GMLVerticalCRS**Super classes**

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::GMLAbstractObject
-> geometa::GMLAbstractGML -> geometa::GMLDefinition -> geometa::GMLAbstractCRS ->
geometa::GMLAbstractSingleCRS -> GMLVerticalCRS

```

Public fieldsverticalCS [[GMLVerticalCS](#)]verticalDatum [[GMLVerticalDatum](#)]**Methods****Public methods:**

- [GMLVerticalCRS\\$setVerticalCS\(\)](#)
- [GMLVerticalCRS\\$setVerticalDatum\(\)](#)
- [GMLVerticalCRS\\$clone\(\)](#)

Method [setVerticalCS\(\)](#): Set vertical CS*Usage:*

GMLVerticalCRS\$setVerticalCS(verticalCS)

*Arguments:*verticalCS object of class [GMLVerticalCS](#)**Method** [setVerticalDatum\(\)](#): Set vertical datum. not yet supported*Usage:*

GMLVerticalCRS\$setVerticalDatum(verticalDatum)

*Arguments:*verticalDatum object of class [GMLVerticalDatum](#)

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

Usage:

GMLVerticalCRS\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

GMLVerticalCS

GMLVerticalCS

Description

GMLVerticalCS

GMLVerticalCS

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GMLVerticalCS

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)

-> [geometa::GMLAbstractGML](#) -> [geometa::GMLDefinition](#) -> [geometa::GMLAbstractCoordinateSystem](#)

-> GMLVerticalCS

Methods

Public methods:

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

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

Usage:

GMLVerticalCS\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19136:2007 Geographic Information – Geographic Markup Language. http://www.iso.org/iso/iso_catalogue/catalogue_t

OGC Geography Markup Language. <http://www.opengeospatial.org/standards/gml>

INSPIREMetadataValidator

INSPIREMetadataValidator

Description

INSPIREMetadataValidator

INSPIREMetadataValidator

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for setting an INSPIREMetadataValidator

Super class

[geometa::geometaLogger](#) -> INSPIREMetadataValidator

Public fields

url url of the INSPIRE metadata validator

running wether the service is up and running

status status

Methods**Public methods:**

- [INSPIREMetadataValidator\\$new\(\)](#)
- [INSPIREMetadataValidator\\$uploadFile\(\)](#)
- [INSPIREMetadataValidator\\$getAPIKey\(\)](#)
- [INSPIREMetadataValidator\\$getValidationReport\(\)](#)
- [INSPIREMetadataValidator\\$clone\(\)](#)

Method new(): Method used to instantiate an INSPIRE Metadata validator. To check metadata with the INSPIRE metadata validator, a user API key is now required, and should be specified with the apiKey. By default, the url will be the INSPIRE production service <https://inspire.ec.europa.eu/validator/swagger-ui.html>.

The keyring_backend can be set to use a different backend for storing the INSPIRE metadata validator API key with **keyring** (Default value is 'env').

Usage:

```
INSPIREMetadataValidator$new(
  url = "https://inspire.ec.europa.eu/validator-api",
  apiKey,
  keyring_backend = "env"
)
```

Arguments:

url url

apiKey API key

keyring_backend backend name to use with **keyring** to store API key

Method uploadFile(): Uploads a file. Upload a XML metadata file to INSPIRE web-service. Method called internally through getValidationReport.

Usage:

```
INSPIREMetadataValidator$uploadFile(path)
```

Arguments:

path path

Returns: the response from the web-service

Method getAPIKey(): Retrieves the API key

Usage:

```
INSPIREMetadataValidator$getAPIKey()
```

Returns: the API key as [character](#)

Method getValidationReport(): Get validation report for a metadata specified either as R object of class [ISOMetadata](#) (from **geometa** package) or [XMLInternalNode-class](#) (from **XML** package), or as XML file, providing the path of the XML file to be sent to the INSPIRE metadata validator web-service. By default, a summary report is returned. To append the raw response of INSPIRE validation web-service to the summary report, set raw = TRUE.

Usage:

```
INSPIREMetadataValidator$getValidationReport(
  obj = NULL,
  file = NULL,
  raw = FALSE
)
```

Arguments:

obj obj

file file

raw raw

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

INSPIRE Reference Validator Web Service (<https://inspire.ec.europa.eu/validator/swagger-ui.html>)

Examples

```
apiKey <- ""
if(nzchar(apiKey)){
  inspireValidator <- INSPIREMetadataValidator$new(apiKey = apiKey)
  inspireReport <- inspireValidator$getValidationReport(obj = ISOMetadata$new())
}
```

ISOAbsoluteExternalPositionalAccuracy

ISOAbsoluteExternalPositionalAccuracy

Description

ISOAbsoluteExternalPositionalAccuracy

ISOAbsoluteExternalPositionalAccuracy

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbsoluteExternalPositionalAccuracy

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractPositionalAccuracy
-> ISOAbsoluteExternalPositionalAccuracy

```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_AbsoluteExternalPositionalAccuracy
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_AbsoluteExternalPositionalAccuracy

Examples

```

#encoding
dq <- ISOAbsoluteExternalPositionalAccuracy$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)

```

```
xml <- dq$encode()
```

ISOAbstractAcquisitionInformation

ISOAbstractAcquisitionInformation

Description

ISOAbstractAcquisitionInformation

ISOAbstractAcquisitionInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO acquisition information

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractAcquisitionInformation

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_AcquisitionInformation

ISOAbstractAggregate *ISOAbstractAggregate*

Description

ISOAbstractAggregate

ISOAbstractAggregate

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstractAggregate

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractAggregate

Public fields

composedOf composedOf [1..*]

seriesMetadata seriesMetadata [1..*]

subset subset [0..*]

superset superset [0..*]

Methods

Public methods:

- [ISOAbstractAggregate\\$new\(\)](#)
- [ISOAbstractAggregate\\$addComposedOf\(\)](#)
- [ISOAbstractAggregate\\$delComposedOf\(\)](#)
- [ISOAbstractAggregate\\$addSeriesMetadata\(\)](#)
- [ISOAbstractAggregate\\$delSeriesMetadata\(\)](#)
- [ISOAbstractAggregate\\$addSubset\(\)](#)
- [ISOAbstractAggregate\\$delSubset\(\)](#)
- [ISOAbstractAggregate\\$addSuperset\(\)](#)
- [ISOAbstractAggregate\\$delSuperset\(\)](#)
- [ISOAbstractAggregate\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOAbstractAggregate\$new(xml = NULL)

Arguments:

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

Method addComposedOf(): Adds a dataset 'composedOf' relationship

Usage:

ISOAbstractAggregate\$addComposedOf(composedOf)

Arguments:

composedOf object of class [ISODataset](#)

Returns: TRUE if added, FALSE otherwise

Method delComposedOf(): Deletes a dataset 'composedOf' relationship

Usage:

ISOAbstractAggregate\$delComposedOf(composedOf)

Arguments:

composedOf object of class [ISODataset](#)

Returns: TRUE if deleted, FALSE otherwise

Method addSeriesMetadata(): Adds a series metadata

Usage:

ISOAbstractAggregate\$addSeriesMetadata(metadata)

Arguments:

metadata object of class [ISOMetadata](#)

Returns: TRUE if added, FALSE otherwise

Method delSeriesMetadata(): Deletes a series metadata

Usage:

ISOAbstractAggregate\$delSeriesMetadata(metadata)

Arguments:

metadata object of class [ISOMetadata](#)

Returns: TRUE if added, FALSE otherwise

Method addSubset(): Adds subset

Usage:

ISOAbstractAggregate\$addSubset(subset)

Arguments:

subset object of class inheriting [ISOAbstractAggregate](#)

Returns: TRUE if added, FALSE otherwise

Method delSubset(): Deletes subset

Usage:

ISOAbstractAggregate\$delSubset(subset)

Arguments:

subset object of class inheriting [ISOAbstractAggregate](#)

Returns: TRUE if deleted, FALSE otherwise

Method addSuperset(): Adds superset

Usage:

ISOAbstractAggregate\$addSuperset(superset)

Arguments:

superset object of class inheriting [ISOAbstractAggregate](#)

Returns: TRUE if added, FALSE otherwise

Method delSuperset(): Deletes superset

Usage:

ISOAbstractAggregate\$delSuperset(superset)

Arguments:

superset object of class inheriting [ISOAbstractAggregate](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOAbstractAggregate\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

abstract class

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOAbstractApplicationSchemaInformation
ISOAbstractApplicationSchemaInformation

Description

ISOAbstractApplicationSchemaInformation
ISOAbstractApplicationSchemaInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ApplicationSchemaInformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractApplicationSchemaInformation

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractApplicationSchemaInformation$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractApplicationSchemaInformation$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 [element_Abstract_ApplicationSchemaInformation](#)

ISOAbstractCarrierOfCharacteristics
ISOAbstractCarrierOfCharacteristics

Description

ISOAbstractCarrierOfCharacteristics
ISOAbstractCarrierOfCharacteristics

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an abstract ISOCarrierOfCharacteristics

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractCarrierOfCharacteristics

Public fields

featureType featureType [0..1]: ISOFeatureType
constrainedBy constrainedBy [0..*]: ISOConstraint

Methods**Public methods:**

- [ISOAbstractCarrierOfCharacteristics\\$new\(\)](#)
- [ISOAbstractCarrierOfCharacteristics\\$setFeatureType\(\)](#)
- [ISOAbstractCarrierOfCharacteristics\\$addConstraint\(\)](#)
- [ISOAbstractCarrierOfCharacteristics\\$delConstraint\(\)](#)
- [ISOAbstractCarrierOfCharacteristics\\$clone\(\)](#)

Method new(): Initializes object

Usage:

[ISOAbstractCarrierOfCharacteristics\\$new](#)(xml = NULL, defaults = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)
defaults default values

Method setFeatureType(): Set feature type

Usage:

[ISOAbstractCarrierOfCharacteristics\\$setFeatureType](#)(featureType)

Arguments:

featureType feature type, object of class [ISOFeatureType](#)

Method addConstraint(): Adds constraint

Usage:

```
ISOAbstractCarrierOfCharacteristics$addConstraint(constraint)
```

Arguments:

constraint, object of class [ISOConstraint](#)

Returns: TRUE if added, [FALSE](#) otherwise

Method delConstraint(): Deletes constraint

Usage:

```
ISOAbstractCarrierOfCharacteristics$delConstraint(constraint)
```

Arguments:

constraint, object of class [ISOConstraint](#)

Returns: TRUE if deleted, [FALSE](#) otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

abstract class

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOAbstractCatalogue *ISOAbstractCatalogue*

Description

ISOAbstractCatalogue

ISOAbstractCatalogue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstracCatalogue

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractCatalogue

Public fields

name name [1..1]: character

scope scope [1..*]: character

fieldOfApplication fieldOfApplication [0..*]: character

versionNumber versionNumber [1..1]: character

versionDate versionDate [1..1]: Date/Posix

language language [0..1]: character

characterSet character set [0..1]: character

locale locale [0..*]: ISOLocale

subCatalogue subCatalogue [0..*]: ISOAbstractCatalogue (=> 19139)

Methods

Public methods:

- [ISOAbstractCatalogue\\$new\(\)](#)
- [ISOAbstractCatalogue\\$setName\(\)](#)
- [ISOAbstractCatalogue\\$addScope\(\)](#)
- [ISOAbstractCatalogue\\$delScope\(\)](#)
- [ISOAbstractCatalogue\\$addFieldOfApplication\(\)](#)
- [ISOAbstractCatalogue\\$delFieldOfApplication\(\)](#)
- [ISOAbstractCatalogue\\$setVersionNumber\(\)](#)
- [ISOAbstractCatalogue\\$setVersionDate\(\)](#)

- `ISOAbstractCatalogue$setLanguage()`
- `ISOAbstractCatalogue$setCharacterSet()`
- `ISOAbstractCatalogue$addLocale()`
- `ISOAbstractCatalogue$delLocale()`
- `ISOAbstractCatalogue$addSubCatalogue()`
- `ISOAbstractCatalogue$delSubCatalogue()`
- `ISOAbstractCatalogue$clone()`

Method `new()`: Initializes object

Usage:

`ISOAbstractCatalogue$new(xml = NULL)`

Arguments:

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

Method `setName()`: Sets the name. Locale names can be specified as

Usage:

`ISOAbstractCatalogue$setName(name, locales = NULL)`

Arguments:

`name` name

`locales` locales, object of class [list](#)

Method `addScope()`: Adds scope

Usage:

`ISOAbstractCatalogue$addScope(scope, locales = NULL)`

Arguments:

`scope` scope

`locales` locales, object of class [list](#)

Returns: TRUE if added, FALSE otherwise

Method `delScope()`: Deletes scope

Usage:

`ISOAbstractCatalogue$delScope(scope, locales = NULL)`

Arguments:

`scope` scope

`locales` locales, object of class [list](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addFieldOfApplication()`: Adds field of application

Usage:

`ISOAbstractCatalogue$addFieldOfApplication(fieldOfApplication, locales = NULL)`

Arguments:

`fieldOfApplication` field of application

locales locales, object of class [list](#)

Returns: TRUE if added, FALSE otherwise

Method delFieldOfApplication(): Deletes field of application

Usage:

ISOAbstractCatalogue\$delFieldOfApplication(fieldOfApplication)

Arguments:

fieldOfApplication field of application

locales locales, object of class [list](#)

Returns: TRUE if deleted, FALSE otherwise

Method setVersionNumber(): Set version number

Usage:

ISOAbstractCatalogue\$setVersionNumber(versionNumber)

Arguments:

versionNumber version number

Method setVersionDate(): Set version date

Usage:

ISOAbstractCatalogue\$setVersionDate(versionDate)

Arguments:

versionDate version date

Method setLanguage(): Set language

Usage:

ISOAbstractCatalogue\$setLanguage(locale)

Arguments:

locale object of class [ISOLanguage](#) or any [character](#) from values returned by [ISOLanguages\\$values\(\)](#)

Method setCharacterSet(): Set charset

Usage:

ISOAbstractCatalogue\$setCharacterSet(charset)

Arguments:

charset object of class [ISOCharacterSet](#) or any [character](#) from values returned by [ISOCharacterSet\\$values\(\)](#)

Method addLocale(): Adds locale

Usage:

ISOAbstractCatalogue\$addLocale(locale)

Arguments:

locale object of class [ISOLocale](#)

Returns: TRUE if added, FALSE otherwise

Method delLocale(): Deletes locale

Usage:

ISOAbstractCatalogue\$delLocale(locale)

Arguments:

locale object of class [ISOLocale](#)

Returns: TRUE if deleted, FALSE otherwise

Method addSubCatalogue(): Add sub catalogue

Usage:

ISOAbstractCatalogue\$addSubCatalogue(subCatalogue)

Arguments:

subCatalogue object of class [ISOAbstractCatalogue](#)

Returns: TRUE if added, FALSE otherwise

Method delSubCatalogue(): Deletes sub catalogue

Usage:

ISOAbstractCatalogue\$delSubCatalogue(subCatalogue)

Arguments:

subCatalogue object of class [ISOAbstractCatalogue](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOAbstractCatalogue\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/cat/1.2.0/cat/#element_AbstractCT_Catalogue

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cat/1.0/cat/#element_AbstractCT_Catalogue

ISOAbstractCitation *ISOAbstractCitation*

Description

ISOAbstractCitation
ISOAbstractCitation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract citation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractCitation

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractCitation$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractCitation$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Citation

ISOAbstractCompleteness

ISOAbstractCompleteness

Description

ISOAbstractCompleteness

ISOAbstractCompleteness

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstractCompleteness

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractQualityElement](#)
-> [geometa::ISODataQualityAbstractElement](#) -> ISOAbstractCompleteness

Methods

Public methods:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractDQ_Completeness

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_Completeness

ISOAbstractConstraints

ISOAbstractConstraints

Description

ISOAbstractConstraints

ISOAbstractConstraints

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract constraints

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractConstraints

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

`ISOAbstractConstraints$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractConstraints$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Constraints

ISOAbstractContentInformation
ISOAbstractContentInformation

Description

ISOAbstractContentInformation
ISOAbstractContentInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract content information

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractContentInformation

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractContentInformation\\$new](#)(xml = NULL)

Arguments:

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

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

Usage:

[ISOAbstractContentInformation\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_ContentInformation

ISOAbstractDataEvaluation
ISOAbstractDataEvaluation

Description

ISOAbstractDataEvaluation
ISOAbstractDataEvaluation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract data evaluation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractDataEvaluation

Public fields

dateTime dateTime
evaluationMethodDescription evaluationMethodDescription
evaluationProcedure evaluationProcedure
referenceDoc referenceDoc
evaluationMethodType evaluationMethodType

Methods

Public methods:

- [ISOAbstractDataEvaluation\\$new\(\)](#)
- [ISOAbstractDataEvaluation\\$setDateTime\(\)](#)
- [ISOAbstractDataEvaluation\\$setEvaluationMethodDescription\(\)](#)
- [ISOAbstractDataEvaluation\\$setEvaluationProcedure\(\)](#)
- [ISOAbstractDataEvaluation\\$addReferenceDoc\(\)](#)
- [ISOAbstractDataEvaluation\\$delReferenceDoc\(\)](#)
- [ISOAbstractDataEvaluation\\$setEvaluationMethodType\(\)](#)
- [ISOAbstractDataEvaluation\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractDataEvaluation\\$new\(xml = NULL\)](#)

Arguments:

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

Method setDateDateTime(): Set date time*Usage:*

```
ISOAbstractDataEvaluation$setDateDateTime(dateTime)
```

Arguments:

dateTime dateTime object of class [ISOBaseDateTime](#)

Method setEvaluationMethodDescription(): Set evaluation method description*Usage:*

```
ISOAbstractDataEvaluation$setEvaluationMethodDescription(
  description,
  locales = NULL
)
```

Arguments:

description description

locales list of localized descriptions. Default is NULL

Method setEvaluationProcedure(): Set evaluation procedure*Usage:*

```
ISOAbstractDataEvaluation$setEvaluationProcedure(procedure)
```

Arguments:

procedure procedure, object of class [ISOCitation](#)

Method addReferenceDoc(): Adds reference doc*Usage:*

```
ISOAbstractDataEvaluation$addReferenceDoc(referenceDoc)
```

Arguments:

referenceDoc object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method delReferenceDoc(): Deletes reference doc*Usage:*

```
ISOAbstractDataEvaluation$delReferenceDoc(referenceDoc)
```

Arguments:

referenceDoc object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method setEvaluationMethodType(): Set evaluation method type*Usage:*

```
ISOAbstractDataEvaluation$setEvaluationMethodType(type)
```

Arguments:

type object of class [ISOEvaluationMethodType](#) or any [character](#) value from those returned by `ISOEvaluationMethodType$values()`

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_DataEvaluation

ISOAbstractDataQuality

ISOAbstractDataQuality

Description

ISOAbstractDataQuality

ISOAbstractDataQuality

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract data quality

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [ISOAbstractDataQuality](#)

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/dqc/1.2/dqc/#element_Abstract_DataQuality

ISOAbstractDistribution

ISOAbstractDistribution

Description

ISOAbstractDistribution

ISOAbstractDistribution

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract distribution

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [ISOAbstractDistribution](#)

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Distribution

ISOAbstractExtent	<i>ISOAbstractExtent</i>
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Description

ISOAbstractExtent

ISOAbstractExtent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract extent

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractExtent

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Extent

ISOAbstractFeatureCatalogue

ISOAbstractFeatureCatalogue

Description

ISOAbstractFeatureCatalogue

ISOAbstractFeatureCatalogue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a ISO abstract feature catalogue

Super classes

`geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractCatalogue
-> ISOAbstractFeatureCatalogue`

Methods**Public methods:**

- `ISOAbstractFeatureCatalogue$new()`
- `ISOAbstractFeatureCatalogue$clone()`

Method `new()`: Initializes object

Usage:

`ISOAbstractFeatureCatalogue$new(xml = NULL)`

Arguments:

`xml` object of class `XMLInternalNode-class`

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

Usage:

`ISOAbstractFeatureCatalogue$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19110/-/fcc/2.2/fcc/#element_Abstract_FeatureCatalogue

ISOAbstractFeatureType

ISOAbstractFeatureType

Description

ISOAbstractFeatureType

ISOAbstractFeatureType

Format

`R6Class` object.

Value

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

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractFeatureType

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractFeatureType$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractFeatureType$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19110/-/fcc/2.2/fcc/#element_Abstract_FeatureType

ISOAbstractFormat

ISOAbstractFormat

Description

ISOAbstractFormat

ISOAbstractFormat

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract format

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [ISOAbstractFormat](#)

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractFormat\\$new](#)(xml = NULL)

Arguments:

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

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

Usage:

[ISOAbstractFormat\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Format

ISOAbstractGenericName

ISOAbstractGenericName

Description

ISOAbstractGenericName

ISOAbstractGenericName

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract GenericName

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLCodeType](#) -> ISOAbstractGenericName

Public fields

value value

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractGenericName$new(xml = NULL, value = NULL, codeSpace = NULL)`

Arguments:

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

`value` value

`codeSpace` code space

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

Usage:

`ISOAbstractGenericName$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19103:2005 Geographic information – Conceptual schema language

ISOAbstractLineageInformation
ISOAbstractLineageInformation

Description

ISOAbstractLineageInformation
ISOAbstractLineageInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract lineage information

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractLineageInformation

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractLineageInformation\\$new\(xml = NULL\)](#)

Arguments:

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

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

Usage:

[ISOAbstractLineageInformation\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_LineageInformation

ISOAbstractLogicalConsistency
ISOAbstractLogicalConsistency

Description

ISOAbstractLogicalConsistency
ISOAbstractLogicalConsistency

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstractLogicalConsistency

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractQualityElement](#)
-> [geometa::ISODataQualityAbstractElement](#) -> ISOAbstractLogicalConsistency

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractDQ_LogicalConsistency
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_LogicalConsistency

ISOAbstractMaintenanceInformation
ISOAbstractMaintenanceInformation

Description

ISOAbstractMaintenanceInformation
ISOAbstractMaintenanceInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract maintenance information

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractMaintenanceInformation

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractMaintenanceInformation\\$new\(xml = NULL\)](#)

Arguments:

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

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

Usage:

[ISOAbstractMaintenanceInformation\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_MaintenanceInformation

ISOAbstractMDContentInformation

ISOAbstractMDContentInformation

Description

ISOAbstractMDContentInformation

ISOAbstractMDContentInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstractMDContentInformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractMDContentInformation

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

`ISOAbstractMDContentInformation$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractMDContentInformation$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Note

Abstract class. Used internally by **geometa**

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractMD_ContentInformation
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_AbstractMD_ContentInformation

ISOAbstractMetadata *ISOAbstractMetadata*

Description

ISOAbstractMetadata
ISOAbstractMetadata

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract metadata

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractMetadata

Methods

Public methods:

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

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractMetadata\\$new\(xml = NULL\)](#)

Arguments:

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

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

Usage:

[ISOAbstractMetadata\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Metadata

ISOAbstractMetadataExtension

ISOAbstractMetadataExtension

Description

ISOAbstractMetadataExtension

ISOAbstractMetadataExtension

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract metadata extension

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractMetadataExtension

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractMetadataExtension$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractMetadataExtension$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_MetadataExtension

ISOAbstractMetaquality

ISOAbstractMetaquality

Description

ISOAbstractMetaquality

ISOAbstractMetaquality

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract meta quality

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractQualityElement](#)
-> [geometa::ISODataQualityAbstractElement](#) -> ISOAbstractMetaquality

Public fields

relatedElement relatedElement [0..*]: ISODataQualityAbstractElement

Methods**Public methods:**

- [ISOAbstractMetaquality\\$new\(\)](#)
- [ISOAbstractMetaquality\\$addRelatedElement\(\)](#)
- [ISOAbstractMetaquality\\$delRelatedElement\(\)](#)
- [ISOAbstractMetaquality\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractMetaquality\\$new\(xml = NULL\)](#)

Arguments:

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

Method addRelatedElement(): Adds related element

Usage:

ISOAbstractMetaquality\$addRelatedElement(element)

Arguments:

element object of class [ISODataQualityAbstractElement](#)

Returns: TRUE if added, FALSE otherwise

Method delRelatedElement(): Deletes related element

Usage:

ISOAbstractMetaquality\$delRelatedElement(element)

Arguments:

element object of class [ISODataQualityAbstractElement](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOAbstractMetaquality\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_Metaquality

ISOAbstractObject *ISOAbstractObject*

Description

ISOAbstractObject

ISOAbstractObject

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Metadata Element

Static Methods

`getISOStandardByPrefix(prefix)` Inherit the ISO (and/or OGC) standard reference for a given standard prefix (e.g. GMD). The object returned is a `data.frame` containing the specification reference and title.

`getISOStandard(clazz, version)` Inherit the ISO (and/or OGC) standard reference for a given **geometa** class. The object returned is a `data.frame` containing the specification reference and title.

`getISOClasses(extended, pretty)` Get the list of classes supported by **geometa**. By default, `extended` is set to `FALSE` (restrained to **geometa** environment). If `TRUE`, this allows to list eventual classes loaded in your global environment and that extend **geometa** classes. The argument `pretty` gives a the list of classes and associated ISO/OGC standard information as `data.frame`.

`getISOClassByNode(node)` Inherit the ISO class matching an XML document or node

`compare(metadataElement1, metadataElement2)` Compares two metadata elements objects. Returns `TRUE` if they are equal, `FALSE` otherwise. The comparison of object is done by comparing the XML representation of the objects (since no R6 object comparison method seems to exist)

Super class

`geometa::geometaLogger` -> `ISOAbstractObject`

Public fields

`wrap` `wrap`

`element` `element`

`namespace` `namespace`

`defaults` `defaults`

`attrs` `attributes`

`printAttrs` `attributes to print`

`parentAttrs` `parent attributes`

`value` `value`

`value_as_field` `value as field?`

`isNull` `is null?`

`anyElement` `any element?`

Methods**Public methods:**

- ISOAbstractObject\$new()
- ISOAbstractObject\$checkMetadataStandardCompliance()
- ISOAbstractObject\$stopIfMetadataStandardIsNot()
- ISOAbstractObject\$print()
- ISOAbstractObject\$decode()
- ISOAbstractObject\$encode()
- ISOAbstractObject\$validate()
- ISOAbstractObject\$save()
- ISOAbstractObject\$getNamespaceDefinition()
- ISOAbstractObject\$getClassName()
- ISOAbstractObject\$getClass()
- ISOAbstractObject\$wrapBaseElement()
- ISOAbstractObject\$setIsNull()
- ISOAbstractObject\$contains()
- ISOAbstractObject\$addListElement()
- ISOAbstractObject\$delListElement()
- ISOAbstractObject\$setAttr()
- ISOAbstractObject\$addFieldAttrs()
- ISOAbstractObject\$setId()
- ISOAbstractObject\$setHref()
- ISOAbstractObject\$setCodeList()
- ISOAbstractObject\$setCodeListValue()
- ISOAbstractObject\$setCodeSpace()
- ISOAbstractObject\$setValue()
- ISOAbstractObject\$isDocument()
- ISOAbstractObject\$isFieldInheritedFrom()
- ISOAbstractObject\$createLocalisedProperty()

Method new(): Initializes object

Usage:

```
ISOAbstractObject$new(
  xml = NULL,
  element = NULL,
  namespace = NULL,
  attrs = list(),
  defaults = list(),
  wrap = TRUE,
  value_as_field = FALSE
)
```

Arguments:

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

element element name
 namespace namespace
 attrs attrs
 defaults defaults
 wrap wrap?
 value_as_field value as field?

Method `checkMetadataStandardCompliance()`: Check if object can be instantiated vs. the current metadata standard

Usage:

`ISOAbstractObject$checkMetadataStandardCompliance()`

Method `stopIfMetadataStandardIsNot()`: Utility to stop in case a the current metadata standard does not match the one required for the code. This utility can be used to check applicability of a certain method, depending on on the current metadata standard.

Usage:

`ISOAbstractObject$stopIfMetadataStandardIsNot(version)`

Arguments:

version version

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

Usage:

`ISOAbstractObject$print(..., depth = 1, add_codelist_description = TRUE)`

Arguments:

... args

depth class nesting depth

add_codelist_description Add codelist description. Default is TRUE

Method `decode()`: Decodes object from XML

Usage:

`ISOAbstractObject$decode(xml)`

Arguments:

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

Method `encode()`: Encodes object as XML.

By default, namespace definition will be added to XML root (`addNS = TRUE`), and validation of object will be performed (`validate = TRUE`) prior to its XML encoding. The argument `strict` allows to stop the encoding in case object is not valid, with a default value set to `FALSE`.

The argument `setSerialID` is used by **geometa** to generate automatically serial IDs associated to XML elements, in particular for GML, default value is `TRUE` (recommended value).

The argument `resetSerialID` is used by **geometa** for resetting mandatory IDs associated to XML elements, such as GML objects, default value is `TRUE` (recommended value).

Setting `inspire` to `TRUE` (default `FALSE`), the metadata will be checked with the INSPIRE metadata validator (online web-service provided by INSPIRE). To check metadata with the INSPIRE metadata validator, setting an INSPIRE metadata validator is now required, and should be specified with the `inspireValidator`. See [INSPIREMetadataValidator](#) for more details

Usage:

```
ISOAbstractObject$encode(
  addNS = TRUE,
  validate = TRUE,
  strict = FALSE,
  inspire = FALSE,
  inspireValidator = NULL,
  resetSerialID = TRUE,
  setSerialID = TRUE,
  encoding = "UTF-8"
)
```

Arguments:

addNS add namespace? Default is TRUE
 validate validate XML output against schemas?
 strict strict validation? Default is FALSE.
 inspire perform INSPIRE validation? Default is FALSE
 inspireValidator an object of class [INSPIREMetadataValidator](#) to perform INSPIRE meta-
 data validation
 resetSerialID reset Serial ID? Default is TRUE
 setSerialID set serial ID? Default is TRUE
 encoding encoding. Default is UTF-8

Method validate(): Validates an XML object resulting from object encoding

Usage:

```
ISOAbstractObject$validate(
  xml = NULL,
  strict = FALSE,
  inspire = FALSE,
  inspireValidator = NULL
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
 strict strict validation? If TRUE, a invalid XML will return an error
 inspire perform INSPIRE validation? Default is FALSE
 inspireValidator an object of class [INSPIREMetadataValidator](#) to perform INSPIRE meta-
 data validation

Returns: TRUE if valid, FALSE otherwise

Method save(): Save XML representation resulting from \$encode(...) method to a file

Usage:

```
ISOAbstractObject$save(file, ...)
```

Arguments:

file file
 ... any other argument from \$encode(...) method

Method getNamespaceDefinition(): Get namespace definition

Usage:

ISOAbstractObject\$getNamespaceDefinition(recursive = FALSE)

Arguments:

recursive recursive namespace definitions? Default is FALSE

Returns: the list of XML namespace definitions

Method getClassName(): Get class name

Usage:

ISOAbstractObject\$getClassName(level = 1L)

Arguments:

level level of class

Returns: the class name

Method getClass(): Get class

Usage:

ISOAbstractObject\$getClass()

Returns: the corresponding class, as [R6Class](#) reference object generator

Method wrapBaseElement(): Wraps base element

Usage:

ISOAbstractObject\$wrapBaseElement(field, fieldObj)

Arguments:

field field name

fieldObj field object

an object of class [R6Class](#)

Method setIsNull(): Set Is Null

Usage:

ISOAbstractObject\$setIsNull(isNull, reason = "missing")

Arguments:

isNull object of class [logical](#)

reason reason why object is Null

Method contains(): Util to know if a field contain a metadata element

Usage:

ISOAbstractObject\$contains(field, metadataElement)

Arguments:

field field name

metadataElement metadata element

Returns: TRUE if contains, FALSE otherwise

Method `addListElement()`: Util to add an element to a list of elements for N cardinality of a target element name

Usage:

```
ISOAbstractObject$addListElement(field, metadataElement)
```

Arguments:

field field

metadataElement metadata element

Returns: TRUE if added, FALSE otherwise

Method `delListElement()`: Util to deleted an element to a list of elements for N cardinality of a target element name

Usage:

```
ISOAbstractObject$delListElement(field, metadataElement)
```

Arguments:

field field

metadataElement metadata element

Returns: TRUE if deleted, FALSE otherwise

Method `setAttr()`: Util to set an attribute

Usage:

```
ISOAbstractObject$setAttr(attrKey, attrValue)
```

Arguments:

attrKey attribute key

attrValue attribute value

Method `addFieldAttrs()`: Util add field attributes, over the XML field wrapping element instead of the element itself

Usage:

```
ISOAbstractObject$addFieldAttrs(field, ...)
```

Arguments:

field field

... list of attributes

Method `setId()`: Set id

Usage:

```
ISOAbstractObject$setId(id, addNS = FALSE)
```

Arguments:

id id

addNS add namespace definition? Default is FALSE

Method `setHref()`: Set Href attribute

Usage:

ISOAbstractObject\$setHref(href)

Arguments:

href href

Method setCodeList(): Set codelist attribute

Usage:

ISOAbstractObject\$setCodeList(codeList)

Arguments:

codeList codelist

Method setCodeListValue(): Set codelist value

Usage:

ISOAbstractObject\$setCodeListValue(codeListValue)

Arguments:

codeListValue codelist value

Method setCodeSpace(): Set codeSpace

Usage:

ISOAbstractObject\$setCodeSpace(codeSpace)

Arguments:

codeSpace codespace

Method setValue(): Set value

Usage:

ISOAbstractObject\$setValue(value)

Arguments:

value value

Method isDocument(): Util to check where object refers to a emetadata document (eg. [ISOMeta-data](#) or [ISOFeatureCatalogue](#))

Usage:

ISOAbstractObject\$isDocument()

Returns: TRUE if a document, FALSE otherwise

Method isFieldInheritedFrom(): Indicates the class a field inherits from

Usage:

ISOAbstractObject\$isFieldInheritedFrom(field)

Arguments:

field field

Returns: an object generator of class [R6Class](#)

Method createLocalisedProperty(): Creates a localised property

Usage:

ISOAbstractObject\$createLocalisedProperty(text, locales)

Arguments:

text text

locales a list of localized names

Note

Abstract ISO Metadata class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

ISOAbstractOnlineResource

ISOAbstractOnlineResource

Description

ISOAbstractOnlineResource

ISOAbstractOnlineResource

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract online resource

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [ISOAbstractOnlineResource](#)

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractOnlineResource\\$new\(xml = NULL\)](#)

Arguments:

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

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

Usage:

[ISOAbstractOnlineResource\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_OnlineResource

ISOAbstractParameter *ISOAbstractParameter*

Description

ISOAbstractParameter

ISOAbstractParameter

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract parameter

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractParameter

Public fields

name name [1..1]: character|ISOMemberName

direction direction [0..1]: ISOParameterDirection

description description [0..1]: character

optionality optionality [1..1]: logical

repeatability repeatability [1..1]: logical

valueType valueType [1..1]: ISORecordType

value value [0..*]: ISORecord

resource resource [0..*]: ISOSource

Methods**Public methods:**

- [ISOAbstractParameter\\$new\(\)](#)
- [ISOAbstractParameter\\$setName\(\)](#)
- [ISOAbstractParameter\\$setDirection\(\)](#)
- [ISOAbstractParameter\\$setDescription\(\)](#)
- [ISOAbstractParameter\\$setOptionality\(\)](#)
- [ISOAbstractParameter\\$setRepeatability\(\)](#)
- [ISOAbstractParameter\\$setValueType\(\)](#)
- [ISOAbstractParameter\\$addValue\(\)](#)
- [ISOAbstractParameter\\$delValue\(\)](#)
- [ISOAbstractParameter\\$addResource\(\)](#)
- [ISOAbstractParameter\\$delResource\(\)](#)
- [ISOAbstractParameter\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setName()`: Set name

Usage:

```
ISOAbstractParameter$setName(name, attributeType, locales = NULL)
```

Arguments:

name name

attributeType attribute type

locales list of localized texts. Default is NULL

Method `setDirection()`: Set direction

Usage:

```
ISOAbstractParameter$setDirection(direction)
```

Arguments:

direction object of class [ISOPParameterDirection](#) or `character` among values returned by `ISOPParameterDirection$values`

Method `setDescription()`: Set description

Usage:

```
ISOAbstractParameter$setDescription(description, locales = NULL)
```

Arguments:

description description

locales list of localized texts. Default is NULL

Method setOptionality(): Set optionality

Usage:

ISOAbstractParameter\$setOptionality(optional)

Arguments:

optional object of class [logical](#)

Method setRepeatability(): Set repeatability

Usage:

ISOAbstractParameter\$setRepeatability(repeatable)

Arguments:

repeatable object of class [logical](#)

Method setValueType(): Set value type

Usage:

ISOAbstractParameter\$setValueType(valueType)

Arguments:

valueType object of class [ISORecordType](#)

Method addValue(): Adds value

Usage:

ISOAbstractParameter\$addValue(value)

Arguments:

value object of class [ISORecord](#)

Returns: TRUE if added, FALSE otherwise

Method delValue(): Deletes value

Usage:

ISOAbstractParameter\$delValue(value)

Arguments:

value object of class [ISORecord](#)

Returns: TRUE if deleted, FALSE otherwise

Method addResource(): Adds resource

Usage:

ISOAbstractParameter\$addResource(resource)

Arguments:

resource object of class [ISOSource](#)

Returns: TRUE if added, FALSE otherwise

Method delResource(): Deletes resource

Usage:

ISOAbstractParameter\$delResource(resource)

Arguments:

resource object of class [ISOSource](#)

Returns: TRUE if added, FALSE otherwise

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

Usage:

ISOAbstractParameter\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Parameter

ISOAbstractParty

ISOAbstractParty

Description

ISOAbstractParty

ISOAbstractParty

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract Party

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractParty

Public fields

name name

contactInfo contactInfo

partyIdentifier partyIdentifier

Methods**Public methods:**

- [ISOAbstractParty\\$new\(\)](#)
- [ISOAbstractParty\\$setName\(\)](#)
- [ISOAbstractParty\\$addContactInfo\(\)](#)
- [ISOAbstractParty\\$delContactInfo\(\)](#)
- [ISOAbstractParty\\$addPartyIdentifier\(\)](#)
- [ISOAbstractParty\\$delPartyIdentifier\(\)](#)
- [ISOAbstractParty\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOAbstractParty$new(xml = NULL)`

Arguments:

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

Method `setName()`: Set name

Usage:

`ISOAbstractParty$setName(name, locales = NULL)`

Arguments:

`name` name

`locales` list of localized texts. Default is NULL

Method `addContactInfo()`: Adds `contactInfo`

Usage:

`ISOAbstractParty$addContactInfo(contactInfo)`

Arguments:

`contactInfo` object of class [ISOContact](#)

Returns: TRUE if added, FALSE otherwise

Method `delContactInfo()`: Deletes `contactInfo`

Usage:

`ISOAbstractParty$delContactInfo(contactInfo)`

Arguments:

`contactInfo` object of class [ISOContact](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addPartyIdentifier()`: Adds party identifier

Usage:

`ISOAbstractParty$addPartyIdentifier(partyIdentifier)`

Arguments:

partyIdentifier partyIdentifier

Returns: TRUE if added, FALSE otherwise

Method delPartyIdentifier(): Deletes party identifier

Usage:

ISOAbstractParty\$delPartyIdentifier(partyIdentifier)

Arguments:

partyIdentifier partyIdentifier

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOAbstractParty\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115-1:2014 Geographic information — Metadata Part 1: Fundamentals

ISOAbstractPlatform *ISOAbstractPlatform*

Description

ISOAbstractPlatform

ISOAbstractPlatform

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract platform

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractPlatform

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Platform

ISOAbstractPortrayalCatalogueInformation

ISOAbstractPortrayalCatalogueInformation

Description

ISOAbstractPortrayalCatalogueInformation

ISOAbstractPortrayalCatalogueInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract portrayal catalogue information

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [ISOAbstractPortrayalCatalogueInformation](#)

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractPortrayalCatalogueInformation\\$new\(xml = NULL\)](#)

Arguments:

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

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

Usage:

[ISOAbstractPortrayalCatalogueInformation\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_PortrayalCatalogueInformation

ISOAbstractPositionalAccuracy

ISOAbstractPositionalAccuracy

Description

ISOAbstractPositionalAccuracy

ISOAbstractPositionalAccuracy

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstractPositionalAccuracy

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractQualityElement](#)
-> [geometa::ISODataQualityAbstractElement](#) -> ISOAbstractPositionalAccuracy

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractDQ_PositionalAccuracy

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_PositionalAccuracy

ISOAbstractPropertyType

ISOAbstractPropertyType

Description

ISOAbstractPropertyType

ISOAbstractPropertyType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstractPropertyType

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractCarrierOfCharacteristics
 -> ISOAbstractPropertyType

Public fields

memberName typeName [1..1]: ISOLocalName
 definition definition [0..1]: character
 cardinality cardinality [1..1]: ISOMultiplicity
 designation designatio [0..1]: character (=> ISO 19115-3)
 definitionReference definitionReference [0..1]
 featureCatalogue featureCatalogue [0..1]

Methods**Public methods:**

- ISOAbstractPropertyType\$new()
- ISOAbstractPropertyType\$setMemberName()
- ISOAbstractPropertyType\$setDefinition()
- ISOAbstractPropertyType\$setCardinality()
- ISOAbstractPropertyType\$setDesignation()
- ISOAbstractPropertyType\$setDefinitionReference()
- ISOAbstractPropertyType\$setFeatureCatalogue()
- ISOAbstractPropertyType\$clone()

Method new(): Initializes object

Usage:

ISOAbstractPropertyType\$new(xml = NULL, defaults = NULL)

Arguments:

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

defaults default values

Method setMemberName(): Set member name

Usage:

ISOAbstractPropertyType\$setMemberName(memberName)

Arguments:

memberName member name object of class [character](#) (in ISO 19139 and 19115-3) or [ISOLocalName](#) (in ISO 19139 only)

Method setDefinition(): Set definition

Usage:

ISOAbstractPropertyType\$setDefinition(definition, locales = NULL)

Arguments:

definition definition
locales locale definitions, as [list](#)

Method setCardinality(): Set cardinality

Usage:

ISOAbstractPropertyType\$setCardinality(lower, upper)

Arguments:

lower lower

upper upper

Method setDesignation(): Set designation

Usage:

ISOAbstractPropertyType\$setDesignation(designation, locales = NULL)

Arguments:

designation designation

locales locale designations, as [list](#)

Method setDefinitionReference(): Set definition reference

Usage:

ISOAbstractPropertyType\$setDefinitionReference(definitionReference)

Arguments:

definitionReference object of class [ISODefinitionReference](#)

Method setFeatureCatalogue(): Set feature catalogue

Usage:

ISOAbstractPropertyType\$setFeatureCatalogue(featureCatalogue)

Arguments:

featureCatalogue object of class [ISOFeatureCatalogue](#)

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

Usage:

ISOAbstractPropertyType\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOAbstractQualityElement
ISOAbstractQualityElement

Description

ISOAbstractQualityElement
ISOAbstractQualityElement

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract quality element

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractQualityElement

Public fields

dateTime dateTime

Methods

Public methods:

- [ISOAbstractQualityElement\\$new\(\)](#)
- [ISOAbstractQualityElement\\$setDateTime\(\)](#)
- [ISOAbstractQualityElement\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractQualityElement\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setDateTime\(\)](#): Set date time

Usage:

[ISOAbstractQualityElement\\$setDateTime\(dateTime\)](#)

Arguments:

dateTime dateTime object of class [ISOBaseDateTime](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/dqc/1.2/dqc/#element_Abstract_QualityElement

ISOAbstractReferenceSystem

ISOAbstractReferenceSystem

Description

ISOAbstractReferenceSystem

ISOAbstractReferenceSystem

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract parameter

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractReferenceSystem

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_ReferenceSystem

ISOAbstractResourceDescription
ISOAbstractResourceDescription

Description

ISOAbstractResourceDescription

ISOAbstractResourceDescription

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract resource description

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractResourceDescription

Methods

Public methods:

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

Method new(): Initializes object

Usage:

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

Arguments:

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

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

Usage:

ISOAbstractResourceDescription\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_ResourceDescription

ISOAbstractResponsibility
ISOAbstractResponsibility

Description

ISOAbstractResponsibility

ISOAbstractResponsibility

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract responsibility

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractResponsibility

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractResponsibility$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractResponsibility$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_Responsibility

ISOAbstractResult	<i>ISOAbstractResult</i>
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Description

ISOAbstractResult

ISOAbstractResult

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Result

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractResult

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractResult$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractResult$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Note

abstract class

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractDQ_Result

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_Result

ISOAbstractRSReferenceSystem

ISOAbstractRSReferenceSystem

Description

ISOAbstractRSReferenceSystem

ISOAbstractRSReferenceSystem

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract RS Reference system

Super classes

[geometa: :geometaLogger](#) -> [geometa: :ISOAbstractObject](#) -> ISOAbstractRSReferenceSystem

Public fields

name name

domainOfValidity domain of validity

Methods**Public methods:**

- [ISOAbstractRSReferenceSystem\\$new\(\)](#)
- [ISOAbstractRSReferenceSystem\\$setName\(\)](#)
- [ISOAbstractRSReferenceSystem\\$addDomainOfValidity\(\)](#)
- [ISOAbstractRSReferenceSystem\\$delDomainOfValidity\(\)](#)
- [ISOAbstractRSReferenceSystem\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractRSReferenceSystem\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setName\(\)](#): Set name

Usage:

[ISOAbstractRSReferenceSystem\\$setName\(name\)](#)

Arguments:

name name, object of class [ISOReferenceIdentifier](#)

Method [addDomainOfValidity\(\)](#): Adds domain of validity

Usage:

[ISOAbstractRSReferenceSystem\\$addDomainOfValidity\(domainOfValidity\)](#)

Arguments:

domainOfValidity object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method [delDomainOfValidity\(\)](#): Deletes domain of validity

Usage:

[ISOAbstractRSReferenceSystem\\$delDomainOfValidity\(domainOfValidity\)](#)

Arguments:

domainOfValidity object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

abstract class

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOAbstractSpatialRepresentation
ISOAbstractSpatialRepresentation

Description

ISOAbstractSpatialRepresentation

ISOAbstractSpatialRepresentation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract spatial representation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractSpatialRepresentation

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_SpatialRepresentation

ISOAbstractSpatialResolution

ISOAbstractSpatialResolution

Description

ISOAbstractSpatialResolution

ISOAbstractSpatialResolution

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract spatial resolution

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [ISOAbstractSpatialResolution](#)

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractSpatialResolution$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractSpatialResolution$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_SpatialResolution

ISOAbstractStandardOrderProcess

ISOAbstractStandardOrderProcess

Description

ISOAbstractStandardOrderProcess

ISOAbstractStandardOrderProcess

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract standard order process

Super classes

[geometa: :geometaLogger](#) -> [geometa: :ISOAbstractObject](#) -> [ISOAbstractStandardOrderProcess](#)

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

[ISOAbstractStandardOrderProcess\\$new\(xml = NULL\)](#)

Arguments:

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

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

Usage:

[ISOAbstractStandardOrderProcess\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_StandardOrderProcess

ISOAbstractTemporalAccuracy

ISOAbstractTemporalAccuracy

Description

ISOAbstractTemporalAccuracy

ISOAbstractTemporalAccuracy

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstractTemporalAccuracy

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement  
-> geometa::ISODataQualityAbstractElement -> ISOAbstractTemporalAccuracy
```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractDQ_TemporalAccuracy
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_TemporalAccuracy

ISOAbstractTemporalQuality

ISOAbstractTemporalQuality

Description

ISOAbstractTemporalQuality

ISOAbstractTemporalQuality

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract temporal quality

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> ISOAbstractTemporalQuality

Methods**Public methods:**

- ISOAbstractTemporalQuality\$new()
- ISOAbstractTemporalQuality\$clone()

Method new(): Initializes object

Usage:

ISOAbstractTemporalQuality\$new(xml = NULL)

Arguments:

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

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

Usage:

ISOAbstractTemporalQuality\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_TemporalQuality

ISOAbstractThematicAccuracy

ISOAbstractThematicAccuracy

Description

ISOAbstractThematicAccuracy

ISOAbstractThematicAccuracy

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAbstractThematicAccuracy

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractQualityElement](#)
-> [geometa::ISODataQualityAbstractElement](#) -> ISOAbstractThematicAccuracy

Methods**Public methods:**

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

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

Usage:

`ISOAbstractThematicAccuracy$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractDQ_ThematicAccuracy

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_ThematicAccuracy

ISOAbstractTypedDate *ISOAbstractTypedDate*

Description

ISOAbstractTypedDate

ISOAbstractTypedDate

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract typed date

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAbstractTypedDate

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAbstractTypedDate$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAbstractTypedDate$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_Abstract_TypedDate

ISOAccuracyOfATimeMeasurement

ISOAccuracyOfATimeMeasurement

Description

ISOAccuracyOfATimeMeasurement

ISOAccuracyOfATimeMeasurement

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAccuracyOfATimeMeasurement

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractTemporalAccuracy
-> ISOAccuracyOfATimeMeasurement
```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_AccuracyOfATimeMeasurement
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_AccuracyOfATimeMeasurement

Examples

```
#encoding
dq <- ISOAccuracyOfATimeMeasurement$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
```

```

result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()

```

ISOAddress

ISOAddress

Description

ISOAddress

ISOAddress

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Address

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAddress

Public fields

deliveryPoint delivery point

city city

postalCode postal code

country country

electronicMailAddress email

Methods

Public methods:

- [ISOAddress\\$new\(\)](#)
- [ISOAddress\\$setDeliveryPoint\(\)](#)
- [ISOAddress\\$addDeliveryPoint\(\)](#)
- [ISOAddress\\$delDeliveryPoint\(\)](#)
- [ISOAddress\\$setCity\(\)](#)
- [ISOAddress\\$setPostalCode\(\)](#)
- [ISOAddress\\$setCountry\(\)](#)

- [ISOAddress\\$setEmail\(\)](#)
- [ISOAddress\\$addEmail\(\)](#)
- [ISOAddress\\$delEmail\(\)](#)
- [ISOAddress\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOAddress\$new(xml = NULL)

Arguments:

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

Method setDeliveryPoint(): Set delivery point

Usage:

ISOAddress\$setDeliveryPoint(deliveryPoint, locales = NULL)

Arguments:

deliveryPoint delivery point

locales list of localized names

Method addDeliveryPoint(): Adds delivery point

Usage:

ISOAddress\$addDeliveryPoint(deliveryPoint, locales = NULL)

Arguments:

deliveryPoint delivery point

locales list of localized names

Returns: TRUE if added, FALSE otherwise

Method delDeliveryPoint(): Deletes delivery point

Usage:

ISOAddress\$delDeliveryPoint(deliveryPoint, locales = NULL)

Arguments:

deliveryPoint delivery point

locales list of localized names

Returns: TRUE if added, FALSE otherwise

Method setCity(): Set city

Usage:

ISOAddress\$setCity(city, locales = NULL)

Arguments:

city city

locales list of localized names

Method setPostalCode(): Set postal code

Usage:

```
ISOAddress$setPostalCode(postalCode, locales = NULL)
```

Arguments:

postalCode postal code

locales list of localized names

Method setCountry(): Set country*Usage:*

```
ISOAddress$setCountry(country, locales = NULL)
```

Arguments:

country country

locales list of localized names

Method setEmail(): Set email*Usage:*

```
ISOAddress$setEmail(email, locales = NULL)
```

Arguments:

email email

locales list of localized names

Method addEmail(): Adds email*Usage:*

```
ISOAddress$addEmail(email, locales = NULL)
```

Arguments:

email email

locales list of localized names

Returns: TRUE if added, FALSE otherwise

Method delEmail(): Deletes email*Usage:*

```
ISOAddress$delEmail(email, locales = NULL)
```

Arguments:

email email

locales list of localized names

Returns: TRUE if deleted, FALSE otherwise

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

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_Address
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Address

Examples

```
md <- ISOAddress$new()
md$setDeliveryPoint("theaddress")
md$setCity("thecity")
md$setPostalCode("111")
md$setCountry("France")
md$setEmail("someone@theorg.org")
xml <- md$encode()
```

ISOAggregateInformation

ISOAggregateInformation

Description

ISOAggregateInformation

ISOAggregateInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a ISO AggregateInformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAggregateInformation

Public fields

aggregateDataSetName aggregate dataset name

aggregateDataSetIdentifier aggregate dataset identifier

associationType association type

initiativeType initiative type

Methods**Public methods:**

- [ISOAggregateInformation\\$new\(\)](#)
- [ISOAggregateInformation\\$setAggregateDataSetName\(\)](#)
- [ISOAggregateInformation\\$setAggregateDataSetIdentifier\(\)](#)
- [ISOAggregateInformation\\$setAssociationType\(\)](#)
- [ISOAggregateInformation\\$setInitiativeType\(\)](#)
- [ISOAggregateInformation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOAggregateInformation$new(xml = NULL)`

Arguments:

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

Method `setAggregateDataSetName()`: Set aggregate dataset name

Usage:

`ISOAggregateInformation$setAggregateDataSetName(datasetName)`

Arguments:

`datasetName` object of class [ISOCitation](#)

Method `setAggregateDataSetIdentifier()`: Set aggregate dataset identifier

Usage:

`ISOAggregateInformation$setAggregateDataSetIdentifier(datasetIdentifier)`

Arguments:

`datasetIdentifier` object of class [ISOMetaIdentifier](#)

Method `setAssociationType()`: Set association type

Usage:

`ISOAggregateInformation$setAssociationType(associationType)`

Arguments:

`associationType` object of class [ISOAssociationType](#) or **character** value among values from `ISOAssociationType$values()`

Method `setInitiativeType()`: Set association type

Usage:

`ISOAggregateInformation$setInitiativeType(initiativeType)`

Arguments:

`initiativeType` object of class [ISOInitiativeType](#) or **character** value among values from `ISOInitiativeType$values()`

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

Usage:

`ISOAggregateInformation$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
#encoding
md <- ISOAggregateInformation$new()

#adding a point of contact
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp)
md$setAggregateDataSetName(ct)

md$setAssociationType("source")
md$setInitiativeType("investigation")
```

```
xml <- md$encode()
```

ISOAggregationDerivation

ISOAggregationDerivation

Description

ISOAggregationDerivation

ISOAggregationDerivation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO aggregation derivation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOEvaluationMethod](#)
-> [ISOAggregationDerivation](#)

Methods

Public methods:

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

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_AggregationDerivation

ISOAnchor

ISOAnchor

Description

ISOAnchor

ISOAnchor

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Anchor

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAnchor

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

`ISOAnchor$new(xml = NULL, name = NULL, ...)`

Arguments:

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

`name` name

`...` attributes for XML encoding

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

Usage:

`ISOAnchor$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmx/1.0/gmx/#element_Anchor
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gcx/1.0/gcx/#element_Anchor

Examples

```
md <- ISOAnchor$new(name = "some entity name", href = "someentityuri")
xml <- md$encode()
```

ISOAngle

ISOAngle

Description

ISOAngle

ISOAngle

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAngle measure

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOMeasure](#) -> ISOAngle

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

`ISOAngle$new(xml = NULL, value, uom, useUomURI = FALSE)`

Arguments:

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

value value

uom uom symbol of unit of measure used
 useUomURI use uom URI. Default is FALSE

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

Usage:

ISOAngle\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Angle
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Angle

ISOApplicationSchemaInformation

ISOApplicationSchemaInformation

Description

ISOApplicationSchemaInformation

ISOApplicationSchemaInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ApplicationSchemaInformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOApplicationSchemaInformation

Public fields

name name [1..1]

schemaLanguage chemaLanguage [1..1]

constraintLanguage constraintLanguage [1..1]

schemaAscii schemaAscii [0..1]

graphicsFile graphicsFile [0..1]: ISOOnlineResource

softwareDevelopmentFile softwareDevelopmentFile [0..1]: ISOOnlineResource

softwareDevelopmentFileFormat softwareDevelopmentFileFormat [0..1]

Methods**Public methods:**

- [ISOApplicationSchemaInformation\\$new\(\)](#)
- [ISOApplicationSchemaInformation\\$setName\(\)](#)
- [ISOApplicationSchemaInformation\\$setSchemaLanguage\(\)](#)
- [ISOApplicationSchemaInformation\\$setConstraintLanguage\(\)](#)
- [ISOApplicationSchemaInformation\\$setSchemaAscii\(\)](#)
- [ISOApplicationSchemaInformation\\$setGraphicsFile\(\)](#)
- [ISOApplicationSchemaInformation\\$setSoftwareDevelopmentFile\(\)](#)
- [ISOApplicationSchemaInformation\\$setSoftwareDevelopmentFileFormat\(\)](#)
- [ISOApplicationSchemaInformation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setName()`: Set name

Usage:

```
ISOApplicationSchemaInformation$setName(name)
```

Arguments:

name name

Method `setSchemaLanguage()`: Set schema language

Usage:

```
ISOApplicationSchemaInformation$setSchemaLanguage(schemaLanguage)
```

Arguments:

schemaLanguage schema language

Method `setConstraintLanguage()`: Set constraint language

Usage:

```
ISOApplicationSchemaInformation$setConstraintLanguage(constraintLanguage)
```

Arguments:

constraintLanguage constraint language

Method `setSchemaAscii()`: Set schema Ascii

Usage:

```
ISOApplicationSchemaInformation$setSchemaAscii(schemaAscii)
```

Arguments:

schemaAscii schema Ascii

Method setGraphicsFile(): Set graphics file

Usage:

ISOApplicationSchemaInformation\$setGraphicsFile(graphicsFile)

Arguments:

graphicsFile graphics file

Method setSoftwareDevelopmentFile(): Set software development file

Usage:

ISOApplicationSchemaInformation\$setSoftwareDevelopmentFile(file)

Arguments:

file file

Method setSoftwareDevelopmentFileFormat(): Set software development file format

Usage:

ISOApplicationSchemaInformation\$setSoftwareDevelopmentFileFormat(format)

Arguments:

format file format

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

Usage:

ISOApplicationSchemaInformation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_ApplicationSchemaInformation

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mas/1.0/mas/#element_MD_ApplicationSchemaInformation

ISOAssociatedResource *ISOAssociatedResource*

Description

ISOAssociatedResource

ISOAssociatedResource

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO associated resource

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAssociatedResource

Public fields

name name [0..1]: ISOAbstractCitation
 associationType associationType [1..1]: ISOAssociationType
 initiativeType initiativeType [0..1]: ISOInitiativeType
 metadataReference metadataReference [0..1]: ISOAbstractCitation

Methods**Public methods:**

- [ISOAssociatedResource\\$new\(\)](#)
- [ISOAssociatedResource\\$setName\(\)](#)
- [ISOAssociatedResource\\$setAssociationType\(\)](#)
- [ISOAssociatedResource\\$setInitiativeType\(\)](#)
- [ISOAssociatedResource\\$setMetadatReference\(\)](#)
- [ISOAssociatedResource\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOAssociatedResource\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setName\(\)](#): Set name

Usage:

[ISOAssociatedResource\\$setName\(name\)](#)

Arguments:

name name object of class [ISOAbstractCitation](#)

Method [setAssociationType\(\)](#): Set association type

Usage:

[ISOAssociatedResource\\$setAssociationType\(associationType\)](#)

Arguments:

associationType associationType object of class [ISOAssociationType](#) or any value among values listed by [ISOAssociationType\\$values\(\)](#)

Method [setInitiativeType\(\)](#): Set initiative type

Usage:

ISOAssociatedResource\$setInitiativeType(initiativeType)

Arguments:

initiativeType initiativeType object of class [ISOInitiativeType](#) or any value among values listed by ISOInitiativeType\$values()

Method setMetadatReference(): Set metadata reference

Usage:

ISOAssociatedResource\$setMetadatReference(metadataReference)

Arguments:

metadataReference metadataReference object of class [ISOAbstractCitation](#)

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

Usage:

ISOAssociatedResource\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_AssociatedResource

ISOAssociation

ISOAssociation

Description

ISOAssociation

ISOAssociation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAssociation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAssociation

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOAssociation$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOAssociation$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOAssociationRole	<i>ISOAssociationRole</i>
--------------------	---------------------------

Description

ISOAssociationRole

ISOAssociationRole

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOAssociationRole

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractCarrierOfCharacteristics](#)
 -> [geometa::ISOAbstractPropertyType](#) -> [geometa::ISOPropertyType](#) -> ISOAssociationRole

Public fields

type type: ISORoleType
isOrdered isOrdered: logical
isNavigable isNavigable: logical
relation relation: ISOAssociationRole
rolePlayer rolePlayer: ISOFeatureType

Methods**Public methods:**

- [ISOAssociationRole\\$new\(\)](#)
- [ISOAssociationRole\\$setRoleType\(\)](#)
- [ISOAssociationRole\\$setIsOrdered\(\)](#)
- [ISOAssociationRole\\$setIsNavigable\(\)](#)
- [ISOAssociationRole\\$setRelation\(\)](#)
- [ISOAssociationRole\\$addRolePlayer\(\)](#)
- [ISOAssociationRole\\$delRolePlayer\(\)](#)
- [ISOAssociationRole\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

Method [setRoleType\(\)](#): Set role type

Usage:

```
ISOAssociationRole$setRoleType(roleType)
```

Arguments:

roleType role type, object of class [ISORoleType](#) or any [character](#) among values returned by [ISORoleType\\$values\(\)](#)

Method [setIsOrdered\(\)](#): Set is ordered

Usage:

```
ISOAssociationRole$setIsOrdered(isOrdered)
```

Arguments:

isOrdered object of class [logical](#)

Method [setIsNavigable\(\)](#): Set is navigable

Usage:

```
ISOAssociationRole$setIsNavigable(isNavigable)
```

Arguments:

isNavigable object of class [logical](#)

Method setRelation(): Set relation

Usage:

ISOAssociationRole\$setRelation(relation)

Arguments:

relation relation

Method addRolePlayer(): Adds role player

Usage:

ISOAssociationRole\$addRolePlayer(rolePlayer)

Arguments:

rolePlayer object of class [ISOFeatureType](#)

Returns: TRUE if added, FALSE otherwise

Method delRolePlayer(): Deletes role player

Usage:

ISOAssociationRole\$delRolePlayer(rolePlayer)

Arguments:

rolePlayer object of class [ISOFeatureType](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOAssociationRole\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOAssociationType *ISOAssociationType*

Description

ISOAssociationType

ISOAssociationType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO AssociationType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOAssociationType

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISOAssociationType$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DS_AssociationTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_DS_AssociationTypeCode

Examples

```
#possible values
values <- ISOAssociationType$values(labels = TRUE)

#geomOnly
geomOnly <- ISOAssociationType$new(value = "source")
```

ISOAttributeGroup	<i>ISOAttributeGroup</i>
-------------------	--------------------------

Description

ISOAttributeGroup
 ISOAttributeGroup

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a ISO attribute group

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOAttributeGroup

Public fields

contentType contentType [1..*]: ISOCoverageContentType
 attribute attribute [0..*]: ISORangeDimension

Methods**Public methods:**

- [ISOAttributeGroup\\$new\(\)](#)
- [ISOAttributeGroup\\$addContentType\(\)](#)
- [ISOAttributeGroup\\$delContentType\(\)](#)
- [ISOAttributeGroup\\$addAttribute\(\)](#)
- [ISOAttributeGroup\\$delAttribute\(\)](#)

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

Method new(): Initializes object

Usage:

ISOAttributeGroup\$new(xml = NULL)

Arguments:

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

Method addContentType(): Adds coverage content type

Usage:

ISOAttributeGroup\$addContentType(contentType)

Arguments:

contentType contentType object of class [ISOCoverageContentType](#) or any value among values listed in [ISOCoverageContentType\\$values\(\)](#)

Returns: TRUE if added, FALSE otherwise

Method delContentType(): Deletes coverage content type

Usage:

ISOAttributeGroup\$delContentType(contentType)

Arguments:

contentType contentType object of class [ISOCoverageContentType](#) or any value among values listed in [ISOCoverageContentType\\$values\(\)](#)

Returns: TRUE if deleted, FALSE otherwise

Method addAttribute(): Adds attribute

Usage:

ISOAttributeGroup\$addAttribute(attribute)

Arguments:

attribute object of class [ISORangeDimension](#)

Returns: TRUE if added, FALSE otherwise

Method delAttribute(): Deletes attribute

Usage:

ISOAttributeGroup\$delAttribute(attribute)

Arguments:

attribute object of class [ISORangeDimension](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOAttributeGroup\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_AttributeGroup

ISOAttributes

ISOAttributes

Description

ISOAttributes

ISOAttributes

Format

[R6Class](#) object.

Value

Spatial object of [R6Class](#) for modelling a list of ISO xml attributes

Public fields

attrs attrs

Methods**Public methods:**

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

Method `new()`: method is used to instantiate a vector of attributes to be used for empty element properties.

Usage:

```
ISOAttributes$new(...)
```

Arguments:

... list of attributes

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
attrs <- ISOAttributes$new(href = "http://somelink", title = "sometitle")
```

 ISOBand

ISOBand

Description

ISOBand

ISOBand

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOBand

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISORangeDimension](#)
-> ISOBand

Public fields

maxValue maxValue [0..1]: numeric

minValue minValue [0..1]: numeric

units units [0..1]: GMLUnitDefinition

peakResponse peakResponse [0..1]: numeric

bitsPerValue bitsPerValue [0..1]: integer

toneGradation toneGradation [0..1]: integer

scaleFactor scaleFactor [0..1]: numeric

offset offset [0..1]: numeric

Methods

Public methods:

- [ISOBand\\$new\(\)](#)
- [ISOBand\\$setMaxValue\(\)](#)
- [ISOBand\\$setMinValue\(\)](#)
- [ISOBand\\$setUnits\(\)](#)
- [ISOBand\\$setPeakResponse\(\)](#)
- [ISOBand\\$setBitsPerValue\(\)](#)
- [ISOBand\\$setToneGradation\(\)](#)
- [ISOBand\\$setScaleFactor\(\)](#)
- [ISOBand\\$setOffset\(\)](#)
- [ISOBand\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setMaxValue()`: Set max value

Usage:

```
ISOBand$setMaxValue(maxValue)
```

Arguments:

`maxValue` max value, object of class [numeric](#)

Method `setMinValue()`: Set min value

Usage:

```
ISOBand$setMinValue(minValue)
```

Arguments:

`minValue` min value, object of class [numeric](#)

Method `setUnits()`: Set unit definition

Usage:

```
ISOBand$setUnits(uom)
```

Arguments:

`uom` object of class [GMLUnitDefinition](#)

Method `setPeakResponse()`: Set peak response

Usage:

```
ISOBand$setPeakResponse(peakResponse)
```

Arguments:

`peakResponse` object of class [numeric](#)

Method `setBitsPerValue()`: Set bits per value

Usage:

`ISOBand$setBitsPerValue(bitsPerValue)`

Arguments:

`bitsPerValue` object of class `numeric`

Method `setToneGradation()`: Set tone gradation

Usage:

`ISOBand$setToneGradation(toneGradation)`

Arguments:

`toneGradation` object of class `numeric`

Method `setScaleFactor()`: Set scale factor

Usage:

`ISOBand$setScaleFactor(scaleFactor)`

Arguments:

`scaleFactor` object of class `numeric`

Method `setOffset()`: Set offset

Usage:

`ISOBand$setOffset(offset)`

Arguments:

`offset` object of class `numeric`

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

Usage:

`ISOBand$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Band
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_Band

Examples

```

#create band range dimension
md <- ISOBand$new()
md$setSequenceIdentifier(ISOMemberName$new(aName = "name", attributeType = "type"))
md$setDescriptor("descriptor")
md$setMaxValue(10)
md$setMinValue(1)
gml <- GMLBaseUnit$new(id = "ID")
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name1", "codespace")
gml$addName("name2", "codespace")
gml$setQuantityTypeReference("someref")
gml$setCatalogSymbol("symbol")
gml$setUnitsSystem("somelink")
md$setUnits(gml)
md$setPeakResponse(9)
md$setBitsPerValue(5)
md$setToneGradation(100)
md$setScaleFactor(1)
md$setOffset(4)
xml <- md$encode()

```

ISOBaseBoolean

ISOBaseBoolean

Description

ISOBaseBoolean

ISOBaseBoolean

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO Boolean**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOBaseBoolean**Public fields**

value value

Methods**Public methods:**

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

Method `new()`: Initializes a base boolean object

Usage:

```
ISOBaseBoolean$new(xml = NULL, value)
```

Arguments:

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

value value

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Boolean
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Boolean

ISOBaseCharacterString

ISOBaseCharacterString

Description

ISOBaseCharacterString

ISOBaseCharacterString

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO BaseCharacterString

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOBaseCharacterString

Public fields

value value

Methods**Public methods:**

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

Method [new\(\)](#): Initializes a base character object

Usage:

```
ISOBaseCharacterString$new(xml = NULL, value)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
value value

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_CharacterString

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_CharacterString

ISOBaseDate

ISOBaseDate

Description

ISOBaseDate

ISOBaseDate

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Date

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOBaseDate

Public fields

value value

Methods

Public methods:

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

Method `new()`: Initializes a base date object

Usage:

```
ISOBaseDate$new(xml = NULL, value = NULL)
```

Arguments:

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

value value

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Date
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Date

ISOBaseDateTime	<i>ISOBaseDateTime</i>
-----------------	------------------------

Description

ISOBaseDateTime
ISOBaseDateTime

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DateTime

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOBaseDateTime

Public fields

value value

Methods**Public methods:**

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

Method new(): Initializes a base datetime object

Usage:

ISOBaseDateTime\$new(xml = NULL, value = NULL)

Arguments:

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

value value

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_DateTime
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_DateTime

ISOBaseDecimal

ISOBaseDecimal

Description

ISOBaseDecimal

ISOBaseDecimal

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Decimal

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOBaseDecimal

Public fields

value value

Methods**Public methods:**

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

Method `new()`: Initializes a base decimal object

Usage:

```
ISOBaseDecimal$new(xml = NULL, value)
```

Arguments:

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

`value` value

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Decimal
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Decimal

ISOBaseInteger

ISOBaseInteger

Description

ISOBaseInteger

ISOBaseInteger

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Integer

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOBaseInteger

Public fields

value value

Methods**Public methods:**

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

Method [new\(\)](#): Initializes a base integer object

Usage:

[ISOBaseInteger\\$new\(xml = NULL, value\)](#)

Arguments:

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

value value

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

Usage:

[ISOBaseInteger\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Integer
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Integer

 ISOBaseReal

ISOBaseReal

Description

ISOBaseReal

ISOBaseReal

Format

R6Class object.

Value

Object of R6Class for modelling an ISO Real

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> ISOBaseReal
```

Public fields

value value

Methods**Public methods:**

- `ISOBaseReal$new()`
- `ISOBaseReal$clone()`

Method `new()`: Initializes a base real object*Usage:*`ISOBaseReal$new(xml = NULL, value)`*Arguments:*xml object of class `XMLInternalNode-class`

value value

Method `clone()`: The objects of this class are cloneable with this method.*Usage:*`ISOBaseReal$clone(deep = FALSE)`*Arguments:*

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Real
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Real

ISOBinary

ISOBinary

Description

ISOBinary

ISOBinary

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO UnlimitedInteger

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOBinary

Public fields

value value

attrs attrs

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOBinary$new(xml = NULL, value)`

Arguments:

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

value value

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Binary
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Binary

Examples

```
bin <- ISOBinary$new(value = "http://someuri")
```

ISOBinding

ISOBinding

Description

ISOBinding

ISOBinding

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOBinding

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractCarrierOfCharacteristics
-> ISOBinding
```

Public fields

description description [0..1]: character

globalProperty globalProperty [1..1]: ISOPropertyType

Methods**Public methods:**

- [ISOBinding\\$setDescription\(\)](#)
- [ISOBinding\\$setPropertyType\(\)](#)
- [ISOBinding\\$clone\(\)](#)

Method setDescription(): Set description

Usage:

ISOBinding\$setDescription(description, locales = NULL)

Arguments:

description description

locales list of localized descriptions

Method setPropertyType(): Set property type.

Usage:

ISOBinding\$setPropertyType(propertyType)

Arguments:

propertyType property type, object of class [ISOPropertyType](#)

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

Usage:

ISOBinding\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOBoundAssociationRole

ISOBoundAssociationRole

Description

ISOBoundAssociationRole

ISOBoundAssociationRole

Format

R6Class object.

Value

Object of R6Class for modelling an ISOBoundAssociationRole

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractCarrierOfCharacteristics
-> geometa::ISOBinding -> ISOBoundAssociationRole

Public fields

rolePlayer rolePlayer [0..1]: ISOFeatureType

Methods**Public methods:**

- ISOBoundAssociationRole\$setRolePlayer()
- ISOBoundAssociationRole\$clone()

Method setRolePlayer(): set role player

Usage:

ISOBoundAssociationRole\$setRolePlayer(rolePlayer)

Arguments:

rolePlayer object of class ISOFeatureType

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

Usage:

ISOBoundAssociationRole\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOBoundFeatureAttribute
ISOBoundFeatureAttribute

Description

ISOBoundFeatureAttribute
ISOBoundFeatureAttribute

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOBoundFeatureAttribute

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractCarrierOfCharacteristics](#)
-> [geometa::ISOBinding](#) -> ISOBoundFeatureAttribute

Public fields

valueType valueType [0..1]: [ISOTypeName](#)

Methods

Public methods:

- [ISOBoundFeatureAttribute\\$setTypeNames\(\)](#)
- [ISOBoundFeatureAttribute\\$clone\(\)](#)

Method [setTypeNames\(\)](#): Set type name

Usage:

[ISOBoundFeatureAttribute\\$setTypeNames\(typeName\)](#)

Arguments:

typeName object of class [ISOTypeName](#) or character

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

Usage:

[ISOBoundFeatureAttribute\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOBoundingPolygon *ISOBoundingPolygon*

Description

ISOBoundingPolygon

ISOBoundingPolygon

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO BoundingPolygon

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOGeographicExtent](#)
-> [ISOBoundingPolygon](#)

Public fields

polygon list of polygons

Methods**Public methods:**

- [ISOBoundingPolygon\\$new\(\)](#)
- [ISOBoundingPolygon\\$addPolygon\(\)](#)
- [ISOBoundingPolygon\\$delPolygon\(\)](#)
- [ISOBoundingPolygon\\$clone\(\)](#)

Method new(): Initializes object

Usage:

[ISOBoundingPolygon\\$new](#)(xml = NULL)

Arguments:

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

Method addPolygon(): Adds polygon

Usage:

ISOBoundingPolygon\$addPolygon(x)

Arguments:

x geometry object from **sf** or object of class inheriting [GMLAbstractGeometry](#)

Returns: TRUE if added, FALSE otherwise

Method delPolygon(): Deletes polygon

Usage:

ISOBoundingPolygon\$delPolygon(x)

Arguments:

x geometry object from **sf** or object of class inheriting [GMLAbstractGeometry](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOBoundingPolygon\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Experimental

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_EX_BoundingPolygon
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gex/1.0/gex/#element_EX_BoundingPolygon

ISOBrowseGraphic

ISOBrowseGraphic

Description

ISOBrowseGraphic

ISOBrowseGraphic

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO BrowseGraphic

Super classes

[geometal::geometalLogger](#) -> [geometal::ISOAbstractObject](#) -> [ISOBrowseGraphic](#)

Public fields

fileName file name

fileDescription file description

fileType file type

Methods**Public methods:**

- [ISOBrowseGraphic\\$new\(\)](#)
- [ISOBrowseGraphic\\$setFileName\(\)](#)
- [ISOBrowseGraphic\\$setFileDescription\(\)](#)
- [ISOBrowseGraphic\\$setFileType\(\)](#)
- [ISOBrowseGraphic\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOBrowseGraphic$new(  
  xml = NULL,  
  fileName = NULL,  
  fileDescription = NULL,  
  fileType = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
fileName file name
fileDescription file description
fileType file type

Method setFileName(): Set file name

Usage:

```
ISOBrowseGraphic$setFileName(fileName, locales = NULL)
```

Arguments:

fileName file name
locales a list of localized names. Default is NULL

Method setFileDescription(): Set file description

Usage:

```
ISOBrowseGraphic$setFileDescription(fileDescription, locales = NULL)
```

Arguments:

fileDescription file description

locales a list of localized descriptions. Default is NULL

Method setFileType(): Set file type

Usage:

```
ISOBrowseGraphic$setFileType(fileType, locales = NULL)
```

Arguments:

fileType file type

locales a list of localized types. Default is NULL

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_BrowseGraphic

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_MD_BrowseGraphic

Examples

```
md <- ISOBrowseGraphic$new(  
  fileName = "http://www.somefile.org/png",  
  fileDescription = "Map Overview",  
  fileType = "image/png"  
)  
xml <- md$encode()
```

ISOCarrierOfCharacteristics
ISOCarrierOfCharacteristics

Description

ISOCarrierOfCharacteristics
ISOCarrierOfCharacteristics

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOCarrierOfCharacteristics

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractCarrierOfCharacteristics](#)
-> ISOCarrierOfCharacteristics

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISOCarrierOfCharacteristics$new(xml = NULL, defaults = NULL)
```

Arguments:

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

defaults defaults

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOCellGeometry	<i>ISOCellGeometry</i>
-----------------	------------------------

Description

ISOCellGeometry

ISOCellGeometry

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO CellGeometryCode

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> [ISOCellGeometry](#)

Methods

Public methods:

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

Method [new\(\)](#): Initializes object

Usage:

```
ISOCellGeometry$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_CellGeometryCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_CellGeometryCode

Examples

```
#possible values
values <- ISOCellGeometry$values(labels = TRUE)

#example of 'point' cell geometry code
pointCode <- ISOCellGeometry$new(value = "point")
```

ISOCharacterSet	<i>ISOCharacterSet</i>
-----------------	------------------------

Description

ISOCharacterSet
ISOCharacterSet

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO CharacterSet

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue
-> ISOCharacterSet
```

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
ISOCharacterSet$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
 value value
 description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_CharacterSetCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/lan/1.0/lan/#element_MD_CharacterSetCode

Examples

```
#possible values
values <- ISOCharacterSet$values(labels = TRUE)

#some charset
charset <- ISOCharacterSet$new(value = "utf8")
```

 ISOCitation

ISOCitation

Description

ISOCitation

ISOCitation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Citation

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractCitation  
-> ISOCitation
```

Public fields

```
title title  
alternateTitle alternate title  
date date list  
edition edition  
editionDate edition date  
identifier identifier list  
citedResponsibleParty list of cited responsible parties  
presentationForm list of presentation forms  
series series  
otherCitationDetails other citation details  
collectiveTitle collective title (for ISO 19139)  
ISBN ISBN  
ISSN ISSN  
onlineResource online resource (for ISO 19115-3)  
graphic graphic (for ISO 19115-3)
```

Methods**Public methods:**

- `ISOCitation$new()`
- `ISOCitation$setTitle()`
- `ISOCitation$addAlternateTitle()`
- `ISOCitation$delAlternateTitle()`
- `ISOCitation$addDate()`
- `ISOCitation$setEdition()`
- `ISOCitation$setEditionDate()`
- `ISOCitation$addIdentifier()`
- `ISOCitation$delIdentifier()`
- `ISOCitation$addCitedResponsibleParty()`
- `ISOCitation$delCitedResponsibleParty()`
- `ISOCitation$addPresentationForm()`
- `ISOCitation$delPresentationForm()`
- `ISOCitation$setSeries()`
- `ISOCitation$setOtherCitationDetails()`
- `ISOCitation$setCollectiveTitle()`

- `ISOCitation$setISBN()`
- `ISOCitation$setISSN()`
- `ISOCitation$addOnlineResource()`
- `ISOCitation$delOnlineResource()`
- `ISOCitation$addGraphic()`
- `ISOCitation$delGraphic()`
- `ISOCitation$clone()`

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setTitle()`: Set title

Usage:

```
ISOCitation$setTitle(title, locales = NULL)
```

Arguments:

`title` title

`locales` list of localized names. Default is NULL

Method `addAlternateTitle()`: Adds alternate title

Usage:

```
ISOCitation$addAlternateTitle(alternateTitle, locales = NULL)
```

Arguments:

`alternateTitle` alternate title

`locales` list of localized titles. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method `delAlternateTitle()`: Deletes alternate title

Usage:

```
ISOCitation$delAlternateTitle(alternateTitle, locales = NULL)
```

Arguments:

`alternateTitle` alternate title

`locales` list of localized titles. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method `addDate()`: Adds date

Usage:

```
ISOCitation$addDate(date)
```

Arguments:

`date` date

Returns: TRUE if added, FALSE otherwise

Method `setEdition()`: Set edition

Usage:

```
ISOCitation$setEdition(edition, locales = NULL)
```

Arguments:

`edition` edition

`locales` list of localized editions. Default is NULL

Method `setEditionDate()`: Sets the edition date, either an ISODate object containing date and dateType or a simple R date "POSIXct"/"POSIXt" object. For thesaurus citations, an ISODate should be used while for the general citation of [ISODataIdentification](#), a simple R date should be used.

Usage:

```
ISOCitation$setEditionDate(editionDate)
```

Arguments:

`editionDate` object of class [Date](#) or [POSIXct](#)

Method `addIdentifier()`: Adds identifier

Usage:

```
ISOCitation$addIdentifier(identifier)
```

Arguments:

`identifier` identifier, object of class [ISOMetaIdentifier](#)

`locales` list of localized identifiers. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method `delIdentifier()`: Deletes identifier

Usage:

```
ISOCitation$delIdentifier(identifier)
```

Arguments:

`identifier` identifier, object of class [ISOMetaIdentifier](#)

`locales` list of localized identifiers. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method `addCitedResponsibleParty()`: Adds cited responsible party

Usage:

```
ISOCitation$addCitedResponsibleParty(rp)
```

Arguments:

`rp` cited responsible party, object of class [ISOResponsibleParty](#) (in ISO 19139) or [ISOResponsibility](#) (in ISO 19115-3)

`locales` list of localized responsible parties. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method delCitedResponsibleParty(): Deletes cited responsible party

Usage:

```
ISOCitation$delCitedResponsibleParty(rp)
```

Arguments:

rp cited responsible party, object of class [ISOResponsibleParty](#) (in ISO 19139) or [ISOResponsibility](#) (in ISO 19115-3)

locales list of localized responsible parties. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method addPresentationForm(): Adds presentation form

Usage:

```
ISOCitation$addPresentationForm(presentationForm)
```

Arguments:

presentationForm presentation form, object of class [ISOPresentationForm](#) or [character](#) among values returned by [ISOPresentationForm\\$values\(\)](#)

Returns: TRUE if added, FALSE otherwise

Method delPresentationForm(): Deletes presentation form

Usage:

```
ISOCitation$delPresentationForm(presentationForm)
```

Arguments:

presentationForm presentation form, object of class [ISOPresentationForm](#) or [character](#) among values returned by [ISOPresentationForm\\$values\(\)](#)

Returns: TRUE if deleted, FALSE otherwise

Method setSeries(): Set series

Usage:

```
ISOCitation$setSeries(series)
```

Arguments:

series object of class [ISOCitationSeries](#)

Method setOtherCitationDetails(): Set other citation details

Usage:

```
ISOCitation$setOtherCitationDetails(otherCitationDetails, locales = NULL)
```

Arguments:

otherCitationDetails other citation details

locales list of localized other citation details. Default is NULL

Method setCollectiveTitle(): Set collective title

Usage:

```
ISOCitation$setCollectiveTitle(collectiveTitle, locales = NULL)
```

Arguments:

collectiveTitle collective title
locales list of localized titles. Default is NULL

Method setISBN(): Set ISBN

Usage:

ISOCitation\$setISBN(isbn)

Arguments:

isbn isbn

Method setISSN(): Set ISSN

Usage:

ISOCitation\$setISSN(issn)

Arguments:

issn issn

Method addOnlineResource(): Adds online resource

Usage:

ISOCitation\$addOnlineResource(onlineResource)

Arguments:

onlineResource object of class [ISOOnlineResource](#)

Returns: TRUE if added, FALSE otherwise

Method delOnlineResource(): Deletes online resource

Usage:

ISOCitation\$delOnlineResource(onlineResource)

Arguments:

onlineResource object of class [ISOOnlineResource](#)

Returns: TRUE if added, FALSE otherwise

Method addGraphic(): Adds graphic

Usage:

ISOCitation\$addGraphic(graphic)

Arguments:

graphic object of class [ISOBrowseGraphic](#)

Returns: TRUE if added, FALSE otherwise

Method delGraphic(): Adds graphic

Usage:

ISOCitation\$delGraphic(graphic)

Arguments:

graphic object of class [ISOBrowseGraphic](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_Citation
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Citation

Examples

```
#create ISOCitation
md <- ISOCitation$new()
md$setTitle("sometitle")
md$setEdition("1.0")
md$setEditionDate(ISOdate(2015,1,1))
md$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
md$addPresentationForm("mapDigital")

#add a cited responsible party
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
md$addCitedResponsibleParty(rp)
xml <- md$encode()
```

ISOCitationSeries *ISOCitationSeries*

Description

ISOCitationSeries

ISOCitationSeries

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOCitationSeries

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOCitationSeries

Public fields

name name [0..1]

issueIdentification issueIdentification [0..1]

page page [0..1]

Methods**Public methods:**

- [ISOCitationSeries\\$new\(\)](#)
- [ISOCitationSeries\\$setName\(\)](#)
- [ISOCitationSeries\\$setIssueIdentification\(\)](#)
- [ISOCitationSeries\\$setPage\(\)](#)
- [ISOCitationSeries\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOCitationSeries\\$new](#)(xml = NULL)

Arguments:

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

Method [setName\(\)](#): Set name

Usage:

[ISOCitationSeries\\$setName](#)(name, locales = NULL)

Arguments:

name name

locales list of localized names. Default is NULL

Method setIssueIdentification(): Set issue ID*Usage:*

ISOCitationSeries\$setIssueIdentification(issueId, locales = NULL)

Arguments:

issueId issueId

locales list of localized ids Default is NULL

Method setPage(): Set page*Usage:*

ISOCitationSeries\$setPage(page, locales = NULL)

Arguments:

page page

locales list of localized pages. Default is NULL

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

ISOCitationSeries\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOClassification	<i>ISOClassification</i>
-------------------	--------------------------

Description

ISOClassification

ISOClassification

Format[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Classification

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue
-> ISOClassification
```

Methods**Public methods:**

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

Method new(): Initializes object

Usage:

```
ISOClassification$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_ClassificationCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mco/1.0/mco/#element_MD_ClassificationCode

Examples

```
#possible values
values <- ISOClassification$values(labels = TRUE)

#restricted classification
cl <- ISOClassification$new(value = "restricted")
```

ISOCodeDefinition	<i>ISOCodeDefinition</i>
-------------------	--------------------------

Description

ISOCodeDefinition

ISOCodeDefinition

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO Metadata code definition**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOCodeDefinition**Public fields**

identifier identifier

description description

Methods**Public methods:**

- [ISOCodeDefinition\\$new\(\)](#)
- [ISOCodeDefinition\\$toISOCTCodelistValue\(\)](#)
- [ISOCodeDefinition\\$clone\(\)](#)

Method [new\(\)](#): Initializes object*Usage:*[ISOCodeDefinition\\$new\(xml = NULL\)](#)*Arguments:*xml object of class [XMLInternalNode-class](#)**Method** [toISOCTCodelistValue\(\)](#): Converts to [ISOCTCodelistValue](#)*Usage:*[ISOCodeDefinition\\$toISOCTCodelistValue\(\)](#)*Returns:* object of class [ISOCTCodelistValue](#)**Method** [clone\(\)](#): The objects of this class are cloneable with this method.*Usage:*

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

Arguments:

deep Whether to make a deep clone.

Note

Abstract ISO codelist class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19139:2007 Geographic information – XML

ISOCodelist

ISOCodelist

Description

ISOCodelist

ISOCodelist

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO codelist

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOCodelist

Public fields

id id

refFile ref file

codeSpace code space

identifier identifier

description description

codeEntry code entries

Methods**Public methods:**

- [ISOCodelist\\$new\(\)](#)
- [ISOCodelist\\$getCodeEntries\(\)](#)
- [ISOCodelist\\$parse\(\)](#)
- [ISOCodelist\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOCodelist$new(xml = NULL, refFile = NULL, id = NULL)
```

Arguments:

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

`refFile` ref file

`id` id

Method `getCodeEntries()`: get code entries

Usage:

```
ISOCodelist$getCodeEntries(pretty = FALSE)
```

Arguments:

`pretty` prettify output as `data.frame`. Default is `FALSE`

Returns: an object of class [list](#) or [data.frame](#)

Method `parse()`: Parse codelist

Usage:

```
ISOCodelist$parse(refFile, id)
```

Arguments:

`refFile` ref file

`id` id

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Class used by geometa internal codelist XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

ISOCodelistCatalogue *ISOCodelistCatalogue*

Description

ISOCodelistCatalogue

ISOCodelistCatalogue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOCodelistCatalogue

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractCatalogue](#)
-> ISOCodelistCatalogue

Public fields

`codelistItem` codelist items

Methods**Public methods:**

- [ISOCodelistCatalogue\\$new\(\)](#)
- [ISOCodelistCatalogue\\$getCodelists\(\)](#)
- [ISOCodelistCatalogue\\$getCodelist\(\)](#)
- [ISOCodelistCatalogue\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOCodelistCatalogue$new(xml = NULL, refFile = NULL)`

Arguments:

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

`refFile` ref file

Method `getCodelists()`: Decodes and builds an ISOCodelistCatalogue from XML. This is done specifically for this class, without using the generic ISOAbstractObject decoder, to make it fully decodable on package load.

Get codelists. The method ensure an harmonized output made of objects of class [ISOCodelist](#). In the catalogue is built of objects of class [ISOCodeListDictionary](#), these will be mapped as [ISOCodelist](#), to facilitate the consumption of codelists by **geometa**

Usage:

```
ISOCodeListCatalogue$getCodelists()
```

Arguments:

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

Method `getCodelist()`: Get codelist by id.

Usage:

```
ISOCodeListCatalogue$getCodelist(id)
```

Arguments:

id id

Returns: object of class [ISOCodelist](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/cat/1.2.0/cat/#element_CT_CodelistCatalogue
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cat/1.0/cat/#element_CT_CodelistCatalogue

ISOCodeListDictionary *ISOCodeListDictionary*

Description

ISOCodeListDictionary

ISOCodeListDictionary

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Metadata codelist dictionary

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOCodeListDictionary

Public fields

identifier identifier
description description
codeEntry code entries

Methods**Public methods:**

- [ISOCodeListDictionary\\$new\(\)](#)
- [ISOCodeListDictionary\\$toISOCodelist\(\)](#)
- [ISOCodeListDictionary\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOCodeListDictionary\\$new\(xml = NULL\)](#)

Arguments:

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

Method [toISOCodelist\(\)](#): Converts to [ISOCodelist](#)

Usage:

[ISOCodeListDictionary\\$toISOCodelist\(\)](#)

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

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

Usage:

[ISOCodeListDictionary\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Note

Abstract ISO codelist class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19139:2007 Geographic information – XML

ISOCodeListValue	<i>ISOCodeListValue</i>
------------------	-------------------------

Description

ISOCodeListValue

ISOCodeListValue

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO Metadata codelist item**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOCodeListValue**Public fields**

codelistId codelist ID

attrs attrs

value value

valueDescription value description

Methods**Public methods:**

- [ISOCodeListValue\\$new\(\)](#)
- [ISOCodeListValue\\$getAcceptedValues\(\)](#)
- [ISOCodeListValue\\$clone\(\)](#)

Method new(): Method used to instantiate an [ISOCodeListValue](#). By default, addCodeListAttrs = TRUE, to add codelist attributes to root XML. The parameter addCodeSpaceAttr = TRUE by default, and ignored if the value of addCodeListAttrs is set to FALSE. The argument setValue sets the value as node text (default is TRUE). The argument setValueDescription allows to force having description set as value, default is FALSE in which case the name will be preferred, and in case no name is provided, code value will be used.

Usage:

```
ISOCodeListValue$new(
  xml = NULL,
  id,
  value = NULL,
  description = NULL,
```

```
    addCodeListAttrs = TRUE,  
    addCodeSpaceAttr = TRUE,  
    setValue = TRUE,  
    setValueDescription = FALSE  
  )
```

Arguments:

xml object of class [XMLInternalNode-class](#)
id id
value value
description description
addCodeListAttrs add codelist attributes?
addCodeSpaceAttr add codespace attribute?
setValue set value?
setValueDescription set value description?

Method `getAcceptedValues()`: Get accepted values

Usage:

```
ISOCodeListValue$getAcceptedValues()
```

Returns: a vector of class [character](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Abstract ISO codelist class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOCompletenessCommission
ISOCompletenessCommission

Description

ISOCompletenessCommission

ISOCompletenessCommission

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOCompletenessCommission

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement  
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractThematicAccuracy  
-> ISOCompletenessCommission
```

Methods

Public methods:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_CompletenessCommission
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_CompletenessCommission

Examples

```

#encoding
dq <- ISOCompletenessCommission$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()

```

ISOCompletenessOmission

ISOCompletenessOmission

Description

ISOCompletenessOmission

ISOCompletenessOmission

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOCompletenessOmission

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractThematicAccuracy
-> ISOCompletenessOmission

```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_CompletenessOmission
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_CompletenessOmission

Examples

```
#encoding
dq <- ISOCompletenessOmission$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()
```

ISOConceptualConsistency
ISOConceptualConsistency

Description

ISOConceptualConsistency

ISOConceptualConsistency

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOConceptualConsistency

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement  
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractLogicalConsistency  
-> ISOConceptualConsistency
```

Methods

Public methods:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_ConceptualConsistency
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_ConceptualConsistency

Examples

```

#encoding
dq <- ISOConceptualConsistency$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()

```

ISOConfidence

ISOConfidence

Description

ISOConfidence

ISOConfidence

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO confidence**Super classes**

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractMetaquality -> ISOConfidence

```

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_Confidence

ISOConformanceResult *ISOConformanceResult*

Description

ISOConformanceResult

ISOConformanceResult

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ConformanceResult

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractResult  
-> ISOConformanceResult
```

Public fields

resultScope resultScope [0..1]: ISOScope (=> 19115-3)
dateTime dateTime [0..1] (=> 19115-3)
specification specification
explanation explanation
pass pass

Methods**Public methods:**

- [ISOConformanceResult\\$new\(\)](#)
- [ISOConformanceResult\\$setResultScope\(\)](#)
- [ISOConformanceResult\\$setDateTime\(\)](#)
- [ISOConformanceResult\\$setSpecification\(\)](#)
- [ISOConformanceResult\\$setExplanation\(\)](#)
- [ISOConformanceResult\\$setPass\(\)](#)
- [ISOConformanceResult\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOConformanceResult$new(xml = NULL)`

Arguments:

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

Method [setResultScope\(\)](#): Set result scope

Usage:

`ISOConformanceResult$setResultScope(scope)`

Arguments:

scope object of class [ISOScope](#)

Method [setDateTime\(\)](#): Set date time

Usage:

`ISOConformanceResult$setDateTime(dateTime)`

Arguments:

dateTime date time, object of class [POSIXct](#)

Method [setSpecification\(\)](#): Set specification

Usage:

`ISOConformanceResult$setSpecification(specification)`

Arguments:

specification specification

Method `setExplanation()`: Set explanation about the conformance result

Usage:

```
ISOConformanceResult$setExplanation(explanation, locales = NULL)
```

Arguments:

`explanation` explanation

`locales` list of localized explanations. Default is NULL

Method `setPass()`: Set whether the conformance passed or not

Usage:

```
ISOConformanceResult$setPass(pass)
```

Arguments:

`pass` object of class `logical`

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_ConformanceResult
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_ConformanceResult

Examples

```
md <- ISOConformanceResult$new()
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
md$setSpecification(spec)
md$setExplanation("some explanation about the conformance")
md$setPass(TRUE)
xml <- md$encode()
```

 ISOConstraint

ISOConstraint

Description

ISOConstraint

ISOConstraint

Format

R6Class object.

Value

Object of R6Class for modelling an ISOConstraint

Super classes
[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOConstraint
Public fields

description description: character

Methods**Public methods:**

- [ISOConstraint\\$new\(\)](#)
- [ISOConstraint\\$setDescription\(\)](#)
- [ISOConstraint\\$clone\(\)](#)

Method new(): Initializes object*Usage:*

ISOConstraint\$new(xml = NULL, description = NULL)

*Arguments:*xml object of class [XMLInternalNode-class](#)

description description

Method setDescription(): Set description*Usage:*

ISOConstraint\$setDescription(description, locales = NULL)

Arguments:

description description

locales a list of localized descriptions. Default is NULL

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

Usage:

```
ISOConstraint$new(clone(deep = FALSE))
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

Examples

```
md <- ISOConstraint$new(description = "description")
xml <- md$encode()
```

ISOConstraints

ISOConstraints

Description

ISOConstraints

ISOConstraints

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract Constraints

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOConstraints

Public fields

`useLimitation` `useLimitation` [0..*]: character

`constraintApplicationScope` `constraintApplicationScope` [0..1]: ISOScope (=> ISO 19115-3)

`graphic` `graphic` [0..*]: ISOBrowseGraphic (=> ISO 19115-3)

`reference` `reference` [0..*]: ISOCitation (=> ISO 19115-3)

`releasability` `releasability` [0..1]: ISOReleasability (=> ISO 19115-3)

`responsibleParty` `responsibleParty` [0..*]: ISOAbstractResponsibility (=> ISO 19115-3)

Methods**Public methods:**

- [ISOConstraints\\$new\(\)](#)
- [ISOConstraints\\$addUseLimitation\(\)](#)
- [ISOConstraints\\$setUseLimitation\(\)](#)
- [ISOConstraints\\$delUseLimitation\(\)](#)
- [ISOConstraints\\$setScope\(\)](#)
- [ISOConstraints\\$addGraphic\(\)](#)
- [ISOConstraints\\$delGraphic\(\)](#)
- [ISOConstraints\\$addReference\(\)](#)
- [ISOConstraints\\$delReference\(\)](#)
- [ISOConstraints\\$setReleasability\(\)](#)
- [ISOConstraints\\$addResponsibleParty\(\)](#)
- [ISOConstraints\\$delResponsibleParty\(\)](#)
- [ISOConstraints\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOConstraints$new(xml = NULL, defaults = list())
```

Arguments:

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

`defaults` list of default values

Method `addUseLimitation()`: Adds a use limitation

Usage:

```
ISOConstraints$addUseLimitation(useLimitation, locales = NULL)
```

Arguments:

`useLimitation` use limitation

`locales` list of localized use limitations. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method `setUseLimitation()`: Adds a use limitation

Usage:

```
ISOConstraints$setUseLimitation(useLimitation, locales = NULL)
```

Arguments:

`useLimitation` use limitation

`locales` list of localized use limitations. Default is NULL

Method `delUseLimitation()`: Deletes a use limitation

Usage:

```
ISOConstraints$delUseLimitation(useLimitation, locales = NULL)
```

Arguments:

useLimitation use limitation
locales list of localized use limitations. Default is NULL
Returns: TRUE if deleted, FALSE otherwise

Method setScope(): Set scope

Usage:
ISOConstraints\$setScope(scope)
Arguments:
scope object of class [ISOScope](#)

Method addGraphic(): Adds a graphic

Usage:
ISOConstraints\$addGraphic(graphic)
Arguments:
graphic graphic
Returns: TRUE if added, FALSE otherwise

Method delGraphic(): Deletes a graphic

Usage:
ISOConstraints\$delGraphic(graphic)
Arguments:
graphic graphic
Returns: TRUE if deleted, FALSE otherwise

Method addReference(): Adds a reference

Usage:
ISOConstraints\$addReference(reference)
Arguments:
reference reference
Returns: TRUE if added, FALSE otherwise

Method delReference(): Deletes a reference

Usage:
ISOConstraints\$delReference(reference)
Arguments:
reference reference
Returns: TRUE if deleted, FALSE otherwise

Method setReleasability(): Set releasability

Usage:
ISOConstraints\$setReleasability(releasability)

Arguments:

releasability object of class [ISOReleasability](#)

Method addResponsibleParty(): Adds a responsible party

Usage:

ISOConstraints\$addResponsibleParty(party)

Arguments:

party party object of class inheriting [ISOAbstractResponsibility](#)

Returns: TRUE if added, FALSE otherwise

Method delResponsibleParty(): Deletes a responsible party

Usage:

ISOConstraints\$delResponsibleParty(party)

Arguments:

party party object of class inheriting [ISOAbstractResponsibility](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOConstraints\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Abstract ISO class

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Constraints

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mco/1.0/mco/#element_MD_Constraints

ISOContact

ISOContact

Description

ISOContact

ISOContact

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Contact

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOContact

Public fields

phone phone

address address

onlineResource online resource

hoursOfService hours of service

contactInstructions contact instructions

contactType contact type

Methods

Public methods:

- [ISOContact\\$new\(\)](#)
- [ISOContact\\$setPhone\(\)](#)
- [ISOContact\\$addPhone\(\)](#)
- [ISOContact\\$delPhone\(\)](#)
- [ISOContact\\$setAddress\(\)](#)
- [ISOContact\\$addAddress\(\)](#)
- [ISOContact\\$delAddress\(\)](#)
- [ISOContact\\$setOnlineResource\(\)](#)
- [ISOContact\\$addOnlineResource\(\)](#)
- [ISOContact\\$delOnlineResource\(\)](#)
- [ISOContact\\$addHoursOfService\(\)](#)
- [ISOContact\\$delHoursOfService\(\)](#)

- [ISOContact\\$setContactInstructions\(\)](#)
- [ISOContact\\$setContactType\(\)](#)
- [ISOContact\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOContact\$new(xml = NULL)

Arguments:

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

Method setPhone(): Set phone (with ISO 19139)

Usage:

ISOContact\$setPhone(phone)

Arguments:

phone object of class [ISOTelephone](#)

Method addPhone(): Adds phone (with ISO 19115-3)

Usage:

ISOContact\$addPhone(phone)

Arguments:

phone object of class [ISOTelephone](#)

Returns: TRUE if added, FALSE otherwise

Method delPhone(): Deletes phone (with ISO 19115-3)

Usage:

ISOContact\$delPhone(phone)

Arguments:

phone object of class [ISOTelephone](#)

Returns: TRUE if deleted, FALSE otherwise

Method setAddress(): Set address (with ISO 19139)

Usage:

ISOContact\$setAddress(address)

Arguments:

address object of class [ISOAddress](#)

Method addAddress(): Adds address (with ISO 19115-3)

Usage:

ISOContact\$addAddress(address)

Arguments:

address object of class [ISOAddress](#)

Returns: TRUE if added, FALSE otherwise

Method delAddress(): Deletes address (with ISO 19115-3)

Usage:

ISOContact\$delAddress(address)

Arguments:

address object of class [ISOAddress](#)

Returns: TRUE if deleted, FALSE otherwise

Method setOnlineResource(): Set online resource (with ISO 19139)

Usage:

ISOContact\$setOnlineResource(onlineResource)

Arguments:

onlineResource online resource, object of class [ISOOnlineResource](#)

Method addOnlineResource(): Adds online resource (with ISO 19115-3)

Usage:

ISOContact\$addOnlineResource(onlineResource)

Arguments:

onlineResource online resource, object of class [ISOOnlineResource](#)

Returns: TRUE if added, FALSE otherwise

Method delOnlineResource(): Deletes online resource (with ISO 19115-3)

Usage:

ISOContact\$delOnlineResource(onlineResource)

Arguments:

onlineResource online resource, object of class [ISOOnlineResource](#)

Returns: TRUE if deleted, FALSE otherwise

Method addHoursOfService(): Adds hours of service (with ISO 19115-3)

Usage:

ISOContact\$addHoursOfService(hoursOfService)

Arguments:

hoursOfService object of class [character](#)

Returns: TRUE if added, FALSE otherwise

Method delHoursOfService(): Deletes hours of service (with ISO 19115-3)

Usage:

ISOContact\$delHoursOfService(hoursOfService)

Arguments:

hoursOfService object of class [character](#)

Returns: TRUE if deleted, FALSE otherwise

Method setContactInstructions(): Set contact instructions

Usage:

```
ISOContact$setContactInstructions(contactInstructions, locales = NULL)
```

Arguments:

contactInstructions contact instructions
locales list of localized editions. Default is NULL

Method setContactType(): Set contact type

Usage:

```
ISOContact$setContactType(contactType, locales = NULL)
```

Arguments:

contactType contact type
locales list of localized editions. Default is NULL

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_Contact
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Contact

Examples

```
md <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
md$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
md$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somenam")
md$setOnlineResource(res)
xml <- md$encode()
```

ISOCountry

ISOCountry

Description

ISOCountry

ISOCountry

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Country

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOCountry

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISOCountry$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_Country
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/lan/1.0/lan/#element_CountryCode

Examples

```
#possible values
values <- ISOCountry$values(labels = TRUE)

#some charset
charset <- ISOCountry$new(value = "utf8")
```

ISOCoupledResource	<i>ISOCoupledResource</i>
--------------------	---------------------------

Description

ISOCoupledResource
ISOCoupledResource

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOCoupledResource

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOCoupledResource

Public fields

operationName operationName [1..1]: character
identifier identifier [1..1]: character

Methods**Public methods:**

- [ISOCoupledResource\\$new\(\)](#)
- [ISOCoupledResource\\$setOperationName\(\)](#)
- [ISOCoupledResource\\$setIdentifier\(\)](#)
- [ISOCoupledResource\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

Method `setOperationName()`: Set operation name

Usage:

```
ISOCoupledResource$setOperationName(operationName, locales = NULL)
```

Arguments:

operationName operation name

locales a list of localized names. Default is NULL

Method `setIdentifier()`: Set identifier

Usage:

```
ISOCoupledResource$setIdentifier(identifier, locales = NULL)
```

Arguments:

identifier identifier

locales a list of localized identifiers. Default is NULL

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19119/-/srv/1.0/srv/#element_SV_CoupledResource
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/srv/2.0/srv/#element_SV_CoupledResource

Examples

```
md <- ISOCoupledResource$new()
md$setOperationName("name")
md$setIdentifier("identifier")
xml <- md$encode()
```

ISOCouplingType	<i>ISOCouplingType</i>
-----------------	------------------------

Description

ISOCouplingType

ISOCouplingType

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISOCouplingType**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOCouplingType**Methods****Public methods:**

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

Method `new()`: Initializes object*Usage:*`ISOCouplingType$new(xml = NULL, value, description = NULL)`*Arguments:*xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.*Usage:*`ISOCouplingType$clone(deep = FALSE)`*Arguments:*

deep Whether to make a deep clone.

Author(s)Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19119/-/srv/1.0/srv/#element_SV_CouplingType
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/srv/2.0/srv/#element_SV_CouplingType

Examples

```
#possible values
values <- ISOCouplingType$values(labels = TRUE)

#couplingType
couplingType <- ISOCouplingType$new(value = "loose")
```

```
ISOCoverageContentType
      ISOCoverageContentType
```

Description

```
ISOCoverageContentType
ISOCoverageContentType
```

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO CoverageContentType

Methods

`new(xml, value, description)` This method is used to instantiate an [ISOCoverageContentType](#)

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodelistValue
-> ISOCoverageContentType
```

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
ISOCoverageContentType$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_CoverageContentTypeCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_CoverageContentTypeCode

Examples

```
#possible values
values <- ISOCoverageContentType$values(labels = TRUE)

#example of CoverageContentType
modelResultType <- ISOCoverageContentType$new(value = "modelResult")
```

ISOCoverageDescription

ISOCoverageDescription

Description

ISOCoverageDescription

ISOCoverageDescription

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOCoverageDescription

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractContentInformation
 -> ISOCoverageDescription

Public fields

attributeDescription attributeDescription: ISORecordType
 contentType contentType: ISOCoverageContentType
 dimension dimension: ISORangeDimension

Methods**Public methods:**

- ISOCoverageDescription\$new()
- ISOCoverageDescription\$setAttributeDescription()
- ISOCoverageDescription\$setContentType()
- ISOCoverageDescription\$addDimension()
- ISOCoverageDescription\$delDimension()
- ISOCoverageDescription\$clone()

Method new(): Initializes object

Usage:

ISOCoverageDescription\$new(xml = NULL)

Arguments:

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

Method setAttributeDescription(): Set attribute description

Usage:

ISOCoverageDescription\$setAttributeDescription(attributeDescription)

Arguments:

attributeDescription attribute description, object of class [ISORecordType](#) or [character](#)

Method setContentType(): Set content type

Usage:

ISOCoverageDescription\$setContentType(contentType)

Arguments:

contentType contentType, object of class [ISOCoverageContentType](#) or [character](#)

Method addDimension(): Adds dimension

Usage:

ISOCoverageDescription\$addDimension(dimension)

Arguments:

dimension object of class [ISORangeDimension](#)

Returns: TRUE if added, FALSE otherwise

Method delDimension(): Deletes dimension

Usage:

```
ISOCoverageDescription$delDimension(dimension)
```

Arguments:

dimension object of class [ISORangeDimension](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_CoverageDescription
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_CoverageDescription

Examples

```
#create coverage description
md <- ISOCoverageDescription$new()
md$setAttributeDescription("test")
md$setContent("modelResult")

#adding 3 arbitrary dimensions
for(i in 1:3){
  band <- ISOBand$new()
  mn <- ISOMemberName$new(aName = sprintf("name %s",i), attributeType = sprintf("type %s",i))
  band$setSequenceIdentifier(mn)
  band$setDescriptor("descriptor")
  band$setMaxValue(10)
  band$setMinValue(1)
  gml <- GMLBaseUnit$new(id = sprintf("ID%s",i))
  gml$setDescriptionReference("someref")
  gml$setIdentifier("identifier", "codespace")
  gml$addName("name1", "codespace")
  gml$addName("name2", "codespace")
  gml$setQuantityTypeReference("someref")
  gml$setCatalogSymbol("symbol")
  gml$setUnitsSystem("somelink")
  band$setUnits(gml)
  band$setPeakResponse(9)
```

```

    band$setBitsPerValue(5)
    band$setToneGradation(100)
    band$setScaleFactor(1)
    band$setOffset(4)
    md$addDimension(band)
  }
xml <- md$encode()

```

ISOCTCodelistValue *ISOCTCodelistValue*

Description

ISOCTCodelistValue
ISOCTCodelistValue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Metadata codelistvalue

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOCTCodelistValue

Public fields

identifier identifier
description description

Methods

Public methods:

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

Method [new\(\)](#): Initializes object

Usage:

[ISOCTCodelistValue\\$new](#)(xml = NULL)

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Abstract ISO codelist class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19139:2007 Geographic information – XML

ISODataFile

ISODataFile

Description

ISODataFile

ISODataFile

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DataFile

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODataFile

Public fields

fileName fileName [1..1]: ISOFileName

fileDescription fileDescription [1..1]: character|ISOLocalisedCharacterString

fileType fileType [1..1]: ISOMimeFileType

featureTypes featureTypes [0..*]: ISOLocalName|ISOScopedName

fileFormat fileFormat [1..1]: ISOFormat

Methods

Public methods:

- [ISODataFile\\$new\(\)](#)
- [ISODataFile\\$setFileName\(\)](#)
- [ISODataFile\\$setFileDescription\(\)](#)
- [ISODataFile\\$setFileType\(\)](#)
- [ISODataFile\\$addFeatureType\(\)](#)
- [ISODataFile\\$delFeatureType\(\)](#)
- [ISODataFile\\$setFileFormat\(\)](#)
- [ISODataFile\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setFileName()`: Set file name

Usage:

```
ISODataFile$setFileName(fileName)
```

Arguments:

`fileName` object of class [ISOFileName](#)

Method `setFileDescription()`: Set file description

Usage:

```
ISODataFile$setFileDescription(fileDescription, locales = NULL)
```

Arguments:

`fileDescription` object of class [character](#)

`locales` list of localized descriptions. Default is NULL

Method `setFileType()`: Set file type

Usage:

```
ISODataFile$setFileType(fileType)
```

Arguments:

`fileType` object of class [ISOMimeFileType](#)

Method `addFeatureType()`: Adds feature type

Usage:

```
ISODataFile$addFeatureType(featureType)
```

Arguments:

`featureType` object of class [ISOLocalName](#), [ISOScopedName](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method delFeatureType(): Deletes feature type

Usage:

```
ISODataFile$delFeatureType(featureType)
```

Arguments:

featureType object of class [ISOLocalName](#), [ISOScopedName](#) or character

Returns: TRUE if deleted, FALSE otherwise

Method setFileFormat(): Set file format

Usage:

```
ISODataFile$setFileFormat(fileFormat)
```

Arguments:

fileFormat file format, object of class [ISOFormat](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO/TS 19139:2007 Geographic information – XML

Examples

```
md <- ISODataFile$new()
md$setFileName(ISOFileName$new(file = "someuri", name = "filename"))
md$setFileDescription("description")
md$setFileType(ISOFileType$new(type = "somemimetype", name = "Mime type name"))
md$addFeatureType("feature_type")
f <- ISOFormat$new()
f$setName("name")
f$setVersion("1.0")
f$setAmendmentNumber("2")
f$setSpecification("specification")
md$setFileFormat(f)
xml <- md$encode()
```

ISODataIdentification *ISODataIdentification*

Description

ISODataIdentification
ISODataIdentification

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DataIdentification

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
-> ISODataIdentification

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISODataIdentification$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISODataIdentification$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_DataIdentification
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_DataIdentification

ISODataIdentification19115_3
ISODataIdentification

Description

ISODataIdentification
ISODataIdentification

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DataIdentification

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
-> [geometa::ISOIdentification19115_3](#) -> ISODataIdentification19115_3

Public fields

defaultLocale defaultLocale [0..1]: ISOLocale
otherLocale otherLocale [0..*]: ISOLocale
environmentDescription environment description [0..1]: character
supplementalInformation supplementalInformation [0..1]: character

Methods

Public methods:

- [ISODataIdentification19115_3\\$new\(\)](#)
- [ISODataIdentification19115_3\\$setDefaultLocale\(\)](#)
- [ISODataIdentification19115_3\\$addOtherLocale\(\)](#)
- [ISODataIdentification19115_3\\$delOtherLocale\(\)](#)
- [ISODataIdentification19115_3\\$setEnvironmentDescription\(\)](#)
- [ISODataIdentification19115_3\\$setSupplementalInformation\(\)](#)
- [ISODataIdentification19115_3\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
ISODataIdentification19115_3$new(xml = NULL)
```

Arguments:

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

Method `setDefaultLocale()`: Set default locale

Usage:

```
ISODataIdentification19115_3$setDefaultLocale(locale)
```

Arguments:

locale object of class [ISOLocale](#)

Method `addOtherLocale()`: Adds locale

Usage:

```
ISODataIdentification19115_3$addOtherLocale(locale)
```

Arguments:

locale object of class [ISOLocale](#)

Returns: TRUE if added, FALSE otherwise

Method `delOtherLocale()`: Deletes locale

Usage:

```
ISODataIdentification19115_3$delOtherLocale(locale)
```

Arguments:

locale object of class [ISOLocale](#)

Returns: TRUE if deleted, FALSE otherwise

Method `setEnvironmentDescription()`: Set environment description

Usage:

```
ISODataIdentification19115_3$setEnvironmentDescription(  
  environmentDescription,  
  locales = NULL  
)
```

Arguments:

environmentDescription environment description

locales a list of localized information. Default is NULL

Method `setSupplementalInformation()`: Set supplemental information

Usage:

```
ISODataIdentification19115_3$setSupplementalInformation(  
  supplementalInformation,  
  locales = NULL  
)
```

Arguments:

supplementalInformation supplemental information

locales a list of localized information. Default is NULL

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

Usage:

```
ISODataIdentification19115_3$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_DataIdentification

ISODataIdentification19139

ISODataIdentification19139

Description

ISODataIdentification19139

ISODataIdentification19139

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DataIdentification in ISO 19139

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
-> [geometa::ISOIdentification19139](#) -> ISODataIdentification19139

Public fields

spatialRepresentationType spatialRepresentationType [0..*]: ISOSpatialRepresentationType

spatialResolution spatialResolution [0..*]: ISOResolution

temporalResolution [0..*]: ISOPeriodDuration

language language [1..*]: character

characterSet characterSet [0..*]: ISOCharacterSet

topicCategory topicCategory [0..*]: ISOTopicCategory

environmentDescription environment description [0..1]: character

extent extent [0..*]: ISOExtent

supplementalInformation supplementalInformation

Methods**Public methods:**

- [ISODataIdentification19139\\$new\(\)](#)
- [ISODataIdentification19139\\$addSpatialRepresentationType\(\)](#)
- [ISODataIdentification19139\\$delSpatialRepresentationType\(\)](#)
- [ISODataIdentification19139\\$addSpatialResolution\(\)](#)
- [ISODataIdentification19139\\$delSpatialResolution\(\)](#)
- [ISODataIdentification19139\\$addLanguage\(\)](#)
- [ISODataIdentification19139\\$setLanguage\(\)](#)
- [ISODataIdentification19139\\$delLanguage\(\)](#)
- [ISODataIdentification19139\\$addCharacterSet\(\)](#)
- [ISODataIdentification19139\\$setCharacterSet\(\)](#)
- [ISODataIdentification19139\\$delCharacterSet\(\)](#)
- [ISODataIdentification19139\\$addTopicCategory\(\)](#)
- [ISODataIdentification19139\\$delTopicCategory\(\)](#)
- [ISODataIdentification19139\\$addExtent\(\)](#)
- [ISODataIdentification19139\\$delExtent\(\)](#)
- [ISODataIdentification19139\\$setSupplementalInformation\(\)](#)
- [ISODataIdentification19139\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISODataIdentification19139$new(xml = NULL)
```

Arguments:

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

Method `addSpatialRepresentationType()`: Adds spatial representation type

Usage:

```
ISODataIdentification19139$addSpatialRepresentationType(
  spatialRepresentationType
)
```

Arguments:

`spatialRepresentationType` object of class [ISOSpatialRepresentationType](#) or any `character` among values returned by `ISOSpatialRepresentationType$values()`

Returns: TRUE if added, FALSE otherwise

Method `delSpatialRepresentationType()`: Deletes spatial representation type

Usage:

```
ISODataIdentification19139$delSpatialRepresentationType(
  spatialRepresentationType
)
```

Arguments:

spatialRepresentationType object of class [ISOSpatialRepresentationType](#) or any [character](#) among values returned by `ISOSpatialRepresentationType$values()`

Returns: TRUE if deleted, FALSE otherwise

Method `addSpatialResolution()`: Adds spatial resolution

Usage:

```
ISODataIdentification19139$addSpatialResolution(resolution)
```

Arguments:

resolution object of class [ISOResolution](#)

Returns: TRUE if added, FALSE otherwise

Method `delSpatialResolution()`: Deletes spatial resolution

Usage:

```
ISODataIdentification19139$delSpatialResolution(resolution)
```

Arguments:

resolution object of class [ISOResolution](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addLanguage()`: Adds language

Usage:

```
ISODataIdentification19139$addLanguage(locale)
```

Arguments:

locale object of class [ISOLanguage](#) or any [character](#) value among those returned by `ISOLanguage$values()`

Returns: TRUE if added, FALSE otherwise

Method `setLanguage()`: Sets language

Usage:

```
ISODataIdentification19139$setLanguage(locale)
```

Arguments:

locale object of class [ISOLanguage](#) or any [character](#) value among those returned by `ISOLanguage$values()`

Returns: TRUE if added, FALSE otherwise

Method `delLanguage()`: Deletes language

Usage:

```
ISODataIdentification19139$delLanguage(locale)
```

Arguments:

locale object of class [ISOLanguage](#) or any [character](#) value among those returned by `ISOLanguage$values()`

Returns: TRUE if deleted, FALSE otherwise

Method `addCharacterSet()`: Adds character set

Usage:

```
ISODataIdentification19139$addCharacterSet(charset)
```

Arguments:

charset object of class [ISOCharacterSet](#) or any [character](#) value among those returned by [ISOCharacterSet\\$values\(\)](#)

Returns: TRUE if added, FALSE otherwise

Method [setCharacterSet\(\)](#): Sets character set

Usage:

```
ISODataIdentification19139$setCharacterSet(charset)
```

Arguments:

charset object of class [ISOCharacterSet](#) or any [character](#) value among those returned by [ISOCharacterSet\\$values\(\)](#)

Returns: TRUE if added, FALSE otherwise

Method [delCharacterSet\(\)](#): Deletes character set

Usage:

```
ISODataIdentification19139$delCharacterSet(charset)
```

Arguments:

charset object of class [ISOCharacterSet](#) or any [character](#) value among those returned by [ISOCharacterSet\\$values\(\)](#)

Returns: TRUE if deleted, FALSE otherwise

Method [addTopicCategory\(\)](#): Adds topic category

Usage:

```
ISODataIdentification19139$addTopicCategory(topicCategory)
```

Arguments:

topicCategory object of class [ISOTopicCategory](#) or any [character](#) value among those returned by [ISOTopicCategory\\$values\(\)](#)

Returns: TRUE if added, FALSE otherwise

Method [delTopicCategory\(\)](#): Deletes topic category

Usage:

```
ISODataIdentification19139$delTopicCategory(topicCategory)
```

Arguments:

topicCategory object of class [ISOTopicCategory](#) or any [character](#) value among those returned by [ISOTopicCategory\\$values\(\)](#)

Returns: TRUE if deleted, FALSE otherwise

Method [addExtent\(\)](#): Adds extent

Usage:

```
ISODataIdentification19139$addExtent(extent)
```

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method [delExtent\(\)](#): Deletes extent

Usage:

```
ISODataIdentification19139$delExtent(extent)
```

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method `setSupplementalInformation()`: Set supplemental information

Usage:

```
ISODataIdentification19139$setSupplementalInformation(
  supplementalInformation,
  locales = NULL
)
```

Arguments:

supplementalInformation supplemental information

locales a list of localized information. Default is NULL

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

Usage:

```
ISODataIdentification19139$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_DataIdentification

Examples

```
#create dataIdentification
md <- ISODataIdentification$new()
md$setAbstract("abstract")
md$setPurpose("purpose")
md$addLanguage("eng")
md$addCharacterSet("utf8")
md$addTopicCategory("biota")
md$addTopicCategory("oceans")

#adding a point of contact
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
```

```

contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
md$addPointOfContact(rp)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015, 1, 1, 1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp)
md$setCitation(ct)

#graphic overview
go <- ISOBrowseGraphic$new(
  fileName = "http://www.somefile.org/png",
  fileDescription = "Map Overview",
  fileType = "image/png"
)
md$addGraphicOverview(go)

#maintenance information
mi <- ISOMaintenanceInformation$new()
mi$setMaintenanceFrequency("daily")
md$addResourceMaintenance(mi)

#adding legal constraints
lc <- ISOLegalConstraints$new()
lc$addUseLimitation("limitation1")
lc$addUseLimitation("limitation2")
lc$addUseLimitation("limitation3")
lc$addAccessConstraint("copyright")
lc$addAccessConstraint("license")

```

```

lc$addUseConstraint("copyright")
lc$addUseConstraint("license")
md$addResourceConstraints(lc)

#adding extent
extent <- ISOExtent$new()
bbox <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
extent$addGeographicElement(bbox)
md$addExtent(extent)

#add keywords
kwds <- ISOKeywords$new()
kwds$addKeyword("keyword1")
kwds$addKeyword("keyword2")
kwds$setKeywordType("theme")
th <- ISOCitation$new()
th$setTitle("General")
th$addDate(d)
kwds$setThesaurusName(th)
md$addKeywords(kwds)

#supplementalInformation
md$setSupplementalInformation("some additional information")

xml <- md$encode()

```

ISODataInspection	<i>ISODataInspection</i>
-------------------	--------------------------

Description

ISODataInspection

ISODataInspection

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO data inspection

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOEvaluationMethod](#)
-> ISODataInspection

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_DataInspection

ISODataQuality

ISODataQuality

Description

ISODataQuality

ISODataQuality

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DataQuality

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODataQuality

Public fields

scope scope
standaloneQualityReport standalone quality report (=> 19115-3)
report list of reports (=> 19139)
lineage lineage

Methods**Public methods:**

- [ISODataQuality\\$new\(\)](#)
- [ISODataQuality\\$setScope\(\)](#)
- [ISODataQuality\\$setStandaloneQualityReport\(\)](#)
- [ISODataQuality\\$addReport\(\)](#)
- [ISODataQuality\\$setLineage\(\)](#)
- [ISODataQuality\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISODataQuality$new(xml = NULL)`

Arguments:

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

Method [setScope\(\)](#): Set scope

Usage:

`ISODataQuality$setScope(scope)`

Arguments:

scope scope

Method [setStandaloneQualityReport\(\)](#): Set standalone quality report

Usage:

`ISODataQuality$setStandaloneQualityReport(report)`

Arguments:

report object of class [ISOStandaloneQualityReportInformation](#)

Method [addReport\(\)](#): Adds report

Usage:

`ISODataQuality$addReport(report)`

Arguments:

report report, object of class [ISODataQualityAbstractElement](#)

Returns: TRUE if added, FALSE otherwise

Method [setLineage\(\)](#): Set lineage

Usage:

```
ISODataQuality$setLineage(lineage)
```

Arguments:

lineage lineage, object of class [ISOLineage](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
#create dataQuality object with a 'dataset' scope
dq <- ISODataQuality$new()
scope <- ISODataQualityScope$new()
scope$setLevel("dataset")
dq$setScope(scope)

#add data quality reports...

#add a report the data quality
dc <- ISODomainConsistency$new()
result <- ISOConformanceResult$new()
spec <- ISOCitation$new()
spec$setTitle("Data Quality check")
spec$addAlternateTitle("This is is some data quality check report")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dc$addResult(result)
dq$addReport(dc)

#add INSPIRE reports?
#INSPIRE - interoperability of spatial data sets and services
dc_inspire1 <- ISODomainConsistency$new()
cr_inspire1 <- ISOConformanceResult$new()
cr_inspire_spec1 <- ISOCitation$new()
```

```

cr_title <- paste(
  "Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC",
  "of the European Parliament and of the Council as regards interoperability of spatial data",
  "sets and services"
)
cr_inspire_spec1$title(cr_title)
cr_inspire1$setExplanation("See the referenced specification")
cr_inspire_date1 <- ISODate$new()
cr_inspire_date1$setDate(ISOdate(2010,12,8))
cr_inspire_date1$setDateType("publication")
cr_inspire_spec1$addDate(cr_inspire_date1)
cr_inspire1$setSpecification(cr_inspire_spec1)
cr_inspire1$setPass(TRUE)
dc_inspire1$addResult(cr_inspire1)
dq$addReport(dc_inspire1)
#INSPIRE - metadata
dc_inspire2 <- ISODomainConsistency$new()
cr_inspire2 <- ISOConformanceResult$new()
cr_inspire_spec2 <- ISOCitation$new()
cr_title2 <- paste(
  "COMMISSION REGULATION (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC",
  "of the European Parliament and of the Council as regards metadata"
)
cr_inspire_spec2$title(cr_title2)
cr_inspire2$setExplanation("See the referenced specification")
cr_inspire_date2 <- ISODate$new()
cr_inspire_date2$setDate(ISOdate(2008,12,4))
cr_inspire_date2$setDateType("publication")
cr_inspire_spec2$addDate(cr_inspire_date2)
cr_inspire2$setSpecification(cr_inspire_spec2)
cr_inspire2$setPass(TRUE)
dc_inspire2$addResult(cr_inspire2)
dq$addReport(dc_inspire2)

#add lineage (more example of lineages in ISOLineage documentation)
lineage <- ISOLineage$new()
lineage$setStatement("statement")
dq$setLineage(lineage)

#xml
xml <- dq$encode()

```

ISODataQualityAbstractElement

ISODataQualityAbstractElement

Description

ISODataQualityAbstractElement

ISODataQualityAbstractElement

Format

R6Class object.

Value

Object of R6Class for modelling an ISODataQualityAbstractElement

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> ISODataQualityAbstractElement

Public fields

standaloneQualityReportDetails standaloneQualityReportDetails [0..1]: character (=> 19115-3)
 nameOfMeasure nameOfMeasure [0..*]: character (=> 19139)
 measureIdentification measureIdentification [0..1]: ISOMetaIdentifier (=> 19139)
 measureDescription measureDescription [0..1]: character (=> 19139)
 measure measure [0..1]: ISOMeasureReference (=> 19115-3)
 evaluationMethodType evaluationMethodType [0..1]: ISOEvaluationMethodType (=> 19139)
 evaluationMethodDescription evaluationMethodDescription [0..1]: character (=> 19139)
 evaluationProcedure evaluationProcedure [0..1]: ISOCitation (=> 19139)
 evaluationMethod evaluationMethod [0..1]: ISOEvaluationMethod (=> 19115-3)
 dateTime dateTime [0..1]: ISODateTime (=> 19139)
 result result [1..2]: ISOAbstractResult
 derivedElement derivedElement [0..*]: ISODataQualityAbstractElement (=> 19115-3)

Methods**Public methods:**

- ISODataQualityAbstractElement\$new()
- ISODataQualityAbstractElement\$setStandaloneQualityReportDetails()
- ISODataQualityAbstractElement\$addNameOfMeasure()
- ISODataQualityAbstractElement\$delNameOfMeasure()
- ISODataQualityAbstractElement\$setMeasureIdentification()
- ISODataQualityAbstractElement\$setMeasure()
- ISODataQualityAbstractElement\$setMeasureDescription()
- ISODataQualityAbstractElement\$setEvaluationMethodType()
- ISODataQualityAbstractElement\$setEvaluationMethodDescription()
- ISODataQualityAbstractElement\$setEvaluationProcedure()
- ISODataQualityAbstractElement\$setEvaluationMethod()
- ISODataQualityAbstractElement\$setDateTime()

- [ISODataQualityAbstractElement\\$addResult\(\)](#)
- [ISODataQualityAbstractElement\\$delResult\(\)](#)
- [ISODataQualityAbstractElement\\$addDerivedElement\(\)](#)
- [ISODataQualityAbstractElement\\$delDerivedElement\(\)](#)
- [ISODataQualityAbstractElement\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setStandaloneQualityReportDetails()`: Set Standalone quality report details

Usage:

```
ISODataQualityAbstractElement$setStandaloneQualityReportDetails(details)
```

Arguments:

details object of class [character](#)

Method `addNameOfMeasure()`: Adds name of measure

Usage:

```
ISODataQualityAbstractElement$addNameOfMeasure(name, locales = NULL)
```

Arguments:

name name

locales list of localized names. Default is NULL

Returns: TRUE if added, FALSE

Method `delNameOfMeasure()`: Deletes name of measure

Usage:

```
ISODataQualityAbstractElement$delNameOfMeasure(name, locales = NULL)
```

Arguments:

name name

locales list of localized names. Default is NULL

Returns: TRUE if deleted, FALSE

Method `setMeasureIdentification()`: Set measure identification

Usage:

```
ISODataQualityAbstractElement$setMeasureIdentification(identification)
```

Arguments:

identification object of class [ISOMetalIdentifier](#)

Method `setMeasure()`: Set measure

Usage:

ISODataQualityAbstractElement\$setMeasure(measure)

Arguments:

measure object of class [ISOMeasureReference](#)

Method setMeasureDescription(): Set measure description

Usage:

```
ISODataQualityAbstractElement$setMeasureDescription(
    description,
    locales = NULL
)
```

Arguments:

description object of class [character](#)

locales list of localized descriptions. Default is NULL

Method setEvaluationMethodType(): Set evaluation method type

Usage:

```
ISODataQualityAbstractElement$setEvaluationMethodType(type)
```

Arguments:

type object of class [ISOEvaluationMethodType](#) or any [character](#) value from those returned by [ISOEvaluationMethodType\\$values\(\)](#)

Method setEvaluationMethodDescription(): Set evaluation method description

Usage:

```
ISODataQualityAbstractElement$setEvaluationMethodDescription(
    description,
    locales = NULL
)
```

Arguments:

description description

locales list of localized descriptions. Default is NULL

Method setEvaluationProcedure(): Set evaluation procedure

Usage:

```
ISODataQualityAbstractElement$setEvaluationProcedure(procedure)
```

Arguments:

procedure procedure, object of class [ISOCitation](#)

Method setEvaluationMethod(): Set evaluation method

Usage:

```
ISODataQualityAbstractElement$setEvaluationMethod(evaluationMethod)
```

Arguments:

evaluationMethod object of class [ISOEvaluationMethod](#)

Method setDateTime(): Set date time

Usage:

ISODataQualityAbstractElement\$setDateTime(dateTime)

Arguments:

dateTime date time, object of class [POSIXct](#)

Method addResult(): Adds result

Usage:

ISODataQualityAbstractElement\$addResult(result)

Arguments:

result object of class [ISOAbstractResult](#)

Returns: TRUE if added, FALSE otherwise

Method delResult(): Deletes result

Usage:

ISODataQualityAbstractElement\$delResult(result)

Arguments:

result object of class [ISOAbstractResult](#)

Returns: TRUE if deleted, FALSE otherwise

Method addDerivedElement(): Adds derived element

Usage:

ISODataQualityAbstractElement\$addDerivedElement(element)

Arguments:

element object of class [ISODataQualityAbstractElement](#)

Returns: TRUE if added, FALSE otherwise

Method delDerivedElement(): Deletes derived element

Usage:

ISODataQualityAbstractElement\$delDerivedElement(element)

Arguments:

element object of class [ISODataQualityAbstractElement](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISODataQualityAbstractElement\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractDQ_Element
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_AbstractDQ_Element

ISODataQualityScope *ISODataQualityScope*

Description

ISODataQualityScope
ISODataQualityScope

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Scope

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODataQualityScope

Public fields

level level

Methods**Public methods:**

- [ISODataQualityScope\\$new\(\)](#)
- [ISODataQualityScope\\$setLevel\(\)](#)
- [ISODataQualityScope\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISODataQualityScope\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setLevel\(\)](#): Set level

Usage:


```
ISODataQualityScope$setLevel(level)
```

Arguments:

level object of class [ISOScopeCode](#) or any [character](#) among values returned by [ISOScopeCode](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_Scope

Examples

```
md <- ISODataQualityScope$new()
md$setLevel("dataset")
xml <- md$encode()
```

ISODataset

ISODataset

Description

ISODataset

ISODataset

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISODataset

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODataset

Public fields

has has [1..*]
partOf partOf [0..*]

Methods**Public methods:**

- [ISODataset\\$new\(\)](#)
- [ISODataset\\$addHasMetadata\(\)](#)
- [ISODataset\\$delHasMetadata\(\)](#)
- [ISODataset\\$addPartOf\(\)](#)
- [ISODataset\\$delPartOf\(\)](#)
- [ISODataset\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISODataset$new(xml = NULL)`

Arguments:

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

Method `addHasMetadata()`: Adds metadata

Usage:

`ISODataset$addHasMetadata(metadata)`

Arguments:

`metadata` metadata, object of class [ISOMetadata](#)

Returns: TRUE if added, FALSE otherwise

Method `delHasMetadata()`: Deletes metadata

Usage:

`ISODataset$delHasMetadata(metadata)`

Arguments:

`metadata` metadata, object of class [ISOMetadata](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addPartOf()`: Adds aggregate dataset is part of

Usage:

`ISODataset$addPartOf(partOf)`

Arguments:

`partOf` object inheriting class [ISOAbstractAggregate](#)

Returns: TRUE if added, FALSE otherwise

Method `delPartOf()`: Deletes aggregate dataset is part of

Usage:

ISODataset\$delPartOf(partOf)

Arguments:

partOf object inheriting class [ISOAbstractAggregate](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISODataset\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISODatatype

ISODatatype

Description

ISODatatype

ISODatatype

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Datatype

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISODatatype

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
ISODatatype$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
#possible values
values <- ISODatatype$values(labels = TRUE)

#string Datatype
stringType <- ISODatatype$new(value = "characterString")
```

ISODate

ISODate

Description

ISODate

ISODate

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Date

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractTypedDate](#)
-> ISODate

Public fields

date date

dateType date type

Methods**Public methods:**

- [ISODate\\$new\(\)](#)
- [ISODate\\$setDate\(\)](#)
- [ISODate\\$setDateType\(\)](#)
- [ISODate\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISODate\\$new](#)(xml = NULL, date = NULL, dateType = NULL)

Arguments:

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

date object of class [Date](#) or [POSIXt](#)

dateType object of class [ISODateType](#) or any [character](#) value among values returned by [ISODateType\\$values\(\)](#)

Method [setDate\(\)](#): Set date

Usage:

[ISODate\\$setDate](#)(date)

Arguments:

date object of class [Date](#) or [POSIXct](#)

Method [setDateType\(\)](#): Set date type

Usage:

[ISODate\\$setDateType](#)(dateType)

Arguments:

dateType object of class [ISODateType](#) or any [character](#) values returned by [ISODateType\\$values\(\)](#)

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_Date
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Date

Examples

```
md <- ISODate$new()
md$setDate(ISOdate(2015, 1, 1, 1))
md$setDateType("publication")
xml <- md$encode()
```

ISODateType

ISODateType

Description

ISODateType

ISODateType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DateType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISODateType

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
ISODateType$new(xml = NULL, value = NULL, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_DateTypeCode

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_DateTypeCode

Examples

```
#possible values
values <- ISODateType$values(labels = TRUE)

#creation datatype
creation <- ISODateType$new(value = "creation")
```

ISODCPList

ISODCPList

Description

ISODCPList

ISODCPList

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DCPList

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISODCPList

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISODCPList$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19119/-/srv/1.0/srv/#element_DCPList
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/srv/2.0/srv/#element_DCPList

Examples

```
#possible values
values <- ISODCPList$values(labels = TRUE)

#example
javaDCP <- ISODCPList$new(value = "JAVA")
```

ISODefinitionReference

ISODefinitionReference

Description

ISODefinitionReference
ISODefinitionReference

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISODefinitionReference

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODefinitionReference

Public fields

sourceIdentifier sourceIdentifier [0..1]: character
definitionSource definitionSource: ISODefinitionSource

Methods

Public methods:

- [ISODefinitionReference\\$new\(\)](#)
- [ISODefinitionReference\\$setSourceIdentifier\(\)](#)
- [ISODefinitionReference\\$setDefinitionSource\(\)](#)
- [ISODefinitionReference\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISODefinitionReference\$new(xml = NULL)

Arguments:

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

Method setSourceIdentifier(): Set source identifier

Usage:

ISODefinitionReference\$setSourceIdentifier(identifier)

Arguments:

identifier identifier

Method setDefinitionSource(): Set definition source

Usage:

ISODefinitionReference\$setDefinitionSource(source)

Arguments:

source object of class [ISODefinitionSource](#) or [ISOCitation](#)

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

Usage:

ISODefinitionReference\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISODefinitionSource *ISODefinitionSource*

Description

ISODefinitionSource

ISODefinitionSource

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISODefinitionSource

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODefinitionSource

Public fields

source source [0..1]: ISOCitation

Methods**Public methods:**

- [ISODefinitionSource\\$new\(\)](#)
- [ISODefinitionSource\\$setSource\(\)](#)
- [ISODefinitionSource\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISODefinitionSource\\$new\(xml = NULL, source = NULL\)](#)

Arguments:

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

source source object of class [ISOCitation](#)

Method [setSource\(\)](#): Set source

Usage:

[ISODefinitionSource\\$setSource\(source\)](#)

Arguments:

source object of class [ISOCitation](#)

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

Usage:

[ISODefinitionSource\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISODescriptiveResult *ISODescriptiveResult*

Description

ISODescriptiveResult

ISODescriptiveResult

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISODescriptiveResult

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODescriptiveResult

Public fields

resultScope resultScope [0..1]: ISOScope

dateTime dateTime [0..1]: ISOBaseDateTime

statement statement [1]: character

Methods

Public methods:

- [ISODescriptiveResult\\$new\(\)](#)
- [ISODescriptiveResult\\$setResultScope\(\)](#)
- [ISODescriptiveResult\\$setDateTime\(\)](#)
- [ISODescriptiveResult\\$setStatement\(\)](#)
- [ISODescriptiveResult\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISODescriptiveResult\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setResultScope\(\)](#): Set result scope

Usage:

[ISODescriptiveResult\\$setResultScope\(scope\)](#)

Arguments:

scope object of class [ISOScope](#)

Method `setDateTime()`: Set date time*Usage:*

```
ISODescriptiveResult$setDateTime(dateTime)
```

Arguments:

dateTime dateTime object of class [ISOBaseDateTime](#)

Method `setStatement()`: Set statement*Usage:*

```
ISODescriptiveResult$setStatement(statement, locales = NULL)
```

Arguments:

statement statement

locales list of localized statement. Default is NULL

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

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_DescriptiveResult

ISODigitalTransferOptions

ISODigitalTransferOptions

Description

ISODigitalTransferOptions

ISODigitalTransferOptions

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DigitalTransferOptions

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODigitalTransferOptions

Public fields

unitsOfDistribution unitsOfDistribution [0..1]: character
 transferSize transferSize [0..1]: integer
 onLine onLine [0..*]: ISOOnlineResource
 offLine offLine [0..1]: MD_Medium
 distributionFormat distributionFormat [0..*]: ISOFormat (=> ISO 19115-3)

Methods**Public methods:**

- [ISODigitalTransferOptions\\$new\(\)](#)
- [ISODigitalTransferOptions\\$setUnitsOfDistribution\(\)](#)
- [ISODigitalTransferOptions\\$setTransferSize\(\)](#)
- [ISODigitalTransferOptions\\$addOnlineResource\(\)](#)
- [ISODigitalTransferOptions\\$setOnlineResource\(\)](#)
- [ISODigitalTransferOptions\\$delOnlineResource\(\)](#)
- [ISODigitalTransferOptions\\$addOfflineResource\(\)](#)
- [ISODigitalTransferOptions\\$setOfflineResource\(\)](#)
- [ISODigitalTransferOptions\\$delOfflineResource\(\)](#)
- [ISODigitalTransferOptions\\$addDistributionFormat\(\)](#)
- [ISODigitalTransferOptions\\$delDistributionFormat\(\)](#)
- [ISODigitalTransferOptions\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISODigitalTransferOptions\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setUnitsOfDistribution\(\)](#): Set units of distribution

Usage:

[ISODigitalTransferOptions\\$setUnitsOfDistribution\(unit\)](#)

Arguments:

unit unit

Method [setTransferSize\(\)](#): Set transfer size

Usage:`ISODigitalTransferOptions$setTransferSize(transferSize)`*Arguments:*`transferSize` transfer size**Method** `addOnlineResource()`: Adds online resource*Usage:*`ISODigitalTransferOptions$addOnlineResource(onlineResource)`*Arguments:*`onlineResource` object of class [ISOOnlineResource](#)*Returns:* TRUE if added, FALSE otherwise**Method** `setOnlineResource()`: Sets online resource*Usage:*`ISODigitalTransferOptions$setOnlineResource(onlineResource)`*Arguments:*`onlineResource` object of class [ISOOnlineResource](#)*Returns:* TRUE if added, FALSE otherwise**Method** `delOnlineResource()`: Deletes online resource*Usage:*`ISODigitalTransferOptions$delOnlineResource(onlineResource)`*Arguments:*`onlineResource` object of class [ISOOnlineResource](#)*Returns:* TRUE if deleted, FALSE otherwise**Method** `addOfflineResource()`: Adds offline resource*Usage:*`ISODigitalTransferOptions$addOfflineResource(offlineResource)`*Arguments:*`offlineResource` object of class [ISOMedium](#)*Returns:* TRUE if added, FALSE otherwise**Method** `setOfflineResource()`: Sets offline resource*Usage:*`ISODigitalTransferOptions$setOfflineResource(offlineResource)`*Arguments:*`offlineResource` object of class [ISOMedium](#)*Returns:* TRUE if added, FALSE otherwise**Method** `delOfflineResource()`: Deletes offline resource

Usage:

ISODigitalTransferOptions\$delOfflineResource(offlineResource)

Arguments:

offlineResource object of class [ISOMedium](#)

Returns: TRUE if deleted, FALSE otherwise

Method addDistributionFormat(): Adds distribution format

Usage:

ISODigitalTransferOptions\$addDistributionFormat(distributionFormat)

Arguments:

distributionFormat object of class [ISOFormat](#)

Returns: TRUE if added, FALSE otherwise

Method delDistributionFormat(): Deletes distribution format

Usage:

ISODigitalTransferOptions\$delDistributionFormat(distributionFormat)

Arguments:

distributionFormat object of class [ISOFormat](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISODigitalTransferOptions\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_DigitalTransferOptions
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrd/1.0/mrd/#element_MD_DigitalTransferOptions

Examples

```
md <- ISODigitalTransferOptions$new()

or <- ISOOnlineResource$new()
or$setLinkage("http://somelink")
or$setName("name")
or$setDescription("description")
or$setProtocol("WWW:LINK-1.0-http--link")
md$addOnlineResource(or)

xml <- md$encode()
```

ISODimension	<i>ISODimension</i>
--------------	---------------------

Description

ISODimension

ISODimension

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO Dimension**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODimension**Public fields**

dimensionName dimensionName [1..1]: ISODimensionNameType

dimensionSize dimensionSize [1..1]: integer

resolution resolution [0..1]: ISOMeasure or subclass

Methods**Public methods:**

- [ISODimension\\$new\(\)](#)
- [ISODimension\\$setName\(\)](#)
- [ISODimension\\$setSize\(\)](#)
- [ISODimension\\$setResolution\(\)](#)
- [ISODimension\\$clone\(\)](#)

Method [new\(\)](#): Initializes object*Usage:*[ISODimension\\$new](#)(xml = NULL)*Arguments:*xml object of class [XMLInternalNode-class](#)**Method** [setName\(\)](#): Set name*Usage:*[ISODimension\\$setName](#)(name)

Arguments:

name object of class [ISODimensionNameType](#) or any [character](#) among values returned by `ISODimensionNameType$valu`

Method `setSize()`: Set size

Usage:

```
ISODimension$setSize(size)
```

Arguments:

size object of class [integer](#)

Method `setResolution()`: Sets the resolution

Usage:

```
ISODimension$setResolution(resolution)
```

Arguments:

resolution object of class [ISOMeasure](#) or any subclass [ISOLength](#), [ISODistance](#), [ISOAngle](#), [ISOScale](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Dimension
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_Dimension

Examples

```
#create dimension
md <- ISODimension$new()
md$setName("row")
md$setSize(1)
md$setResolution(ISOLength$new(value=1,uom="m"))
xml <- md$encode()
```

ISODimensionNameType *ISODimensionNameType*

Description

ISODimensionNameType

ISODimensionNameType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DimensionNameType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISODimensionNameType

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISODimensionNameType$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_DimensionNameTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_DimensionNameTypeCode

Examples

```
#possible values
values <- ISODimensionNameType$values(labels = TRUE)

#row DimensionNameType
rowType <- ISODimensionNameType$new(value = "row")
```

ISODistance

*ISODistance***Description**

ISODistance

ISODistance

Format

R6Class object.

Value

Object of R6Class for modelling an ISO Distance measure

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOMeasure -> geometa::ISOLength
-> ISODistance
```

Methods**Public methods:**

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

Method new(): Initializes object*Usage:*

ISODistance\$new(xml = NULL, value, uom, useUomURI = FALSE)

*Arguments:*xml object of class [XMLInternalNode-class](#)

value value

uom uom symbol of unit of measure used
 useUomURI use uom URI. Default is FALSE

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

Usage:

ISODistance\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Distance
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Distance

ISODistribution

ISODistribution

Description

ISODistribution

ISODistribution

Format

R6Class object.

Value

Object of R6Class for modelling an ISO Distribution

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODistribution

Public fields

distributionFormat distributionFormat [0..*]: ISOFormat

distributor distributor [0..*]: ISODistributor

transferOptions transferOptions [0..*]: ISODigitalTransferOptions

Methods**Public methods:**

- [ISODistribution\\$new\(\)](#)
- [ISODistribution\\$addFormat\(\)](#)
- [ISODistribution\\$delFormat\(\)](#)
- [ISODistribution\\$addDistributor\(\)](#)
- [ISODistribution\\$delDistributor\(\)](#)
- [ISODistribution\\$addDigitalTransferOptions\(\)](#)
- [ISODistribution\\$setDigitalTransferOptions\(\)](#)
- [ISODistribution\\$delDigitalTransferOptions\(\)](#)
- [ISODistribution\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

Method [addFormat\(\)](#): Adds format

Usage:

```
ISODistribution$addFormat(format)
```

Arguments:

format format object of class [ISOFormat](#)

Returns: TRUE if added, FALSE otherwise

Method [delFormat\(\)](#): Deletes format

Usage:

```
ISODistribution$delFormat(format)
```

Arguments:

format format object of class [ISOFormat](#)

Returns: TRUE if deleted, FALSE otherwise

Method [addDistributor\(\)](#): Adds distributor

Usage:

```
ISODistribution$addDistributor(distributor)
```

Arguments:

distributor distributor object of class [ISODistributor](#)

Returns: TRUE if added, FALSE otherwise

Method [delDistributor\(\)](#): Deletes distributor

Usage:

```
ISODistribution$delDistributor(distributor)
```

Arguments:

distributor distributor object of class [ISODistributor](#)

Returns: TRUE if deleted, FALSE otherwise

Method addDigitalTransferOptions(): Adds digital transfer options

Usage:

ISODistribution\$addDigitalTransferOptions(options)

Arguments:

options options object of class [ISODigitalTransferOptions](#)

Returns: TRUE if added, FALSE otherwise

Method setDigitalTransferOptions(): Sets digital transfer options

Usage:

ISODistribution\$setDigitalTransferOptions(options)

Arguments:

options options object of class [ISODigitalTransferOptions](#)

Returns: TRUE if added, FALSE otherwise

Method delDigitalTransferOptions(): Deletes digital transfer options

Usage:

ISODistribution\$delDigitalTransferOptions(options)

Arguments:

options options object of class [ISODigitalTransferOptions](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISODistribution\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Distribution

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrd/1.0/mrd/#element_MD_Distribution

Examples

```
md <- ISODistribution$new()

dto <- ISODigitalTransferOptions$new()
for(i in 1:3){
  or <- ISOOnlineResource$new()
  or$setLinkage(paste0("http://somelink",i))
  or$setName(paste0("name",i))
  or$setDescription(paste0("description",i))
  or$setProtocol("WWW:LINK-1.0-http--link")
  dto$addOnlineResource(or)
}
md$setDigitalTransferOptions(dto)

xml <- md$encode()
```

ISODistributionUnits *ISODistributionUnits*

Description

ISODistributionUnits
ISODistributionUnits

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO DistributionUnits

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISODistributionUnits

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISODistributionUnits$new(xml = NULL, value, description = NULL)`

Arguments:

xml object of class [XMLInternalNode-class](#)
 value value
 description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
unit <- ISODistributionUnits$new(value = "unit")
```

 ISODistributor

ISODistributor

Description

ISODistributor

ISODistributor

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISODistributor

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISODistributor

Public fields

distributorContact distributorContact : ISOResponsibleParty
 distributionOrderProcess distributionOrderProcess : ISOStandardOrderProcess
 distributorFormat distributorFormat : ISOFormat
 distributorTransferOptions distributorTransferOptions : ISODigitalTransferOptions

Methods**Public methods:**

- [ISODistributor\\$new\(\)](#)
- [ISODistributor\\$setContact\(\)](#)
- [ISODistributor\\$addStandardOrderProcess\(\)](#)
- [ISODistributor\\$delStandardOrderProcess\(\)](#)
- [ISODistributor\\$addFormat\(\)](#)
- [ISODistributor\\$delFormat\(\)](#)
- [ISODistributor\\$addDigitalTransferOptions\(\)](#)
- [ISODistributor\\$delDigitalTransferOptions\(\)](#)
- [ISODistributor\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISODistributor$new(xml = NULL)`

Arguments:

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

Method [setContact\(\)](#): Set contact

Usage:

`ISODistributor$setContact(contact)`

Arguments:

contact object of class [ISOResponsibleParty](#)

Method [addStandardOrderProcess\(\)](#): Adds standard order process

Usage:

`ISODistributor$addStandardOrderProcess(standardOrderProcess)`

Arguments:

standardOrderProcess standardOrderProcess object of class [ISOStandardOrderProcess](#)

Returns: TRUE if added, FALSE otherwise

Method [delStandardOrderProcess\(\)](#): Deletes standard order process

Usage:

`ISODistributor$delStandardOrderProcess(standardOrderProcess)`

Arguments:

standardOrderProcess standardOrderProcess object of class [ISOStandardOrderProcess](#)

Returns: TRUE if deleted, FALSE otherwise

Method addFormat(): Adds format

Usage:

ISODistributor\$addFormat(format)

Arguments:

format format object of class [ISOFormat](#)

Returns: TRUE if added, FALSE otherwise

Method delFormat(): Deletes format

Usage:

ISODistributor\$delFormat(format)

Arguments:

format format object of class [ISOFormat](#)

Returns: TRUE if deleted, FALSE otherwise

Method addDigitalTransferOptions(): Adds digital transfer options

Usage:

ISODistributor\$addDigitalTransferOptions(digitalTransferOptions)

Arguments:

digitalTransferOptions object of class [ISODigitalTransferOptions](#)

Returns: TRUE if added, FALSE otherwise

Method delDigitalTransferOptions(): Deletes digital transfer options

Usage:

ISODistributor\$delDigitalTransferOptions(digitalTransferOptions)

Arguments:

digitalTransferOptions object of class [ISODigitalTransferOptions](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISODistributor\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Distributor
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrd/1.0/mrd/#element_MD_Distributor

Examples

```

md <- ISODistributor$new()
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("Data manager")

contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
rp$setRole("author")
md$setContact(rp)

format <- ISOFormat$new()
format$setName("name")
format$setVersion("1.0")
format$setAmendmentNumber("2")
format$setSpecification("specification")
md$addFormat(format)

xml <- md$encode()

```

ISODomainConsistency *ISODomainConsistency*

Description

ISODomainConsistency
ISODomainConsistency

Format

`R6Class` object.

Value

Object of `R6Class` for modelling an ISODomainConsistency

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractLogicalConsistency
-> ISODomainConsistency

```

Methods**Public methods:**

- `ISODomainConsistency$clone()`

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_DomainConsistency
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_DomainConsistency

Examples

```

#encoding
dq <- ISODomainConsistency$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))

```

```

d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()

```

ISOElementSequence *ISOElementSequence*

Description

ISOElementSequence

ISOElementSequence

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOElementSequence

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOElementSequence

Methods

Public methods:

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

Method [new\(\)](#): Initializes sequence object

Usage:

`ISOElementSequence$new(xml = NULL, ...)`

Arguments:

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

... other args

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

Usage:

`ISOElementSequence$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Note

This class is used internally by geometa to deal with simple type not handled by proper class element. e.g. name property of ISOParameter class from ISO 19119:2005

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19103:2005 Geographic information – Conceptual schema language

ISOEvaluationMethod *ISOEvaluationMethod*

Description

ISOEvaluationMethod

ISOEvaluationMethod

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract evaluation method

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOEvaluationMethod

Public fields

dateTime dateTime

evaluationMethodDescription evaluationMethodDescription

evaluationProcedure evaluationProcedure

referenceDoc referenceDoc

evaluationMethodType evaluationMethodType

Methods

Public methods:

- [ISOEvaluationMethod\\$new\(\)](#)
- [ISOEvaluationMethod\\$setDateTime\(\)](#)
- [ISOEvaluationMethod\\$setEvaluationMethodDescription\(\)](#)
- [ISOEvaluationMethod\\$setEvaluationProcedure\(\)](#)
- [ISOEvaluationMethod\\$addReferenceDoc\(\)](#)
- [ISOEvaluationMethod\\$delReferenceDoc\(\)](#)
- [ISOEvaluationMethod\\$setEvaluationMethodType\(\)](#)
- [ISOEvaluationMethod\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

Method [setDateTime\(\)](#): Set date time

Usage:

```
ISOEvaluationMethod$setDateTime(dateTime)
```

Arguments:

dateTime dateTime object of class [ISOBaseDateTime](#)

Method [setEvaluationMethodDescription\(\)](#): Set evaluation method description

Usage:

```
ISOEvaluationMethod$setEvaluationMethodDescription(description, locales = NULL)
```

Arguments:

description description

locales list of localized descriptions. Default is NULL

Method [setEvaluationProcedure\(\)](#): Set evaluation procedure

Usage:

```
ISOEvaluationMethod$setEvaluationProcedure(procedure)
```

Arguments:

procedure procedure, object of class [ISOCitation](#)

Method [addReferenceDoc\(\)](#): Adds reference doc

Usage:

```
ISOEvaluationMethod$addReferenceDoc(referenceDoc)
```

Arguments:

referenceDoc object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method delReferenceDoc(): Deletes reference doc

Usage:

ISOEvaluationMethod\$delReferenceDoc(referenceDoc)

Arguments:

referenceDoc object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method setEvaluationMethodType(): Set evaluation method type

Usage:

ISOEvaluationMethod\$setEvaluationMethodType(type)

Arguments:

type object of class [ISOEvaluationMethodType](#) or any [character](#) value from those returned by [ISOEvaluationMethodType\\$values\(\)](#)

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

Usage:

ISOEvaluationMethod\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_EvaluationMethod

ISOEvaluationMethodType

ISOEvaluationMethodType

Description

ISOEvaluationMethodType

ISOEvaluationMethodType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO EvaluationMethodType

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue
-> ISOEvaluationMethodType
```

Methods**Public methods:**

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

Method new(): Initializes object

Usage:

```
ISOEvaluationMethodType$new(xml = NULL, value, description = NULL)
```

Arguments:

```
xml  object of class XMLInternalNode-class
value value
description description
```

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

Usage:

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

Arguments:

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

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_EvaluationMethodTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_EvaluationMethodTypeCode

Examples

```
#possible values
values <- ISOEvaluationMethodType$values(labels = TRUE)

#example of EvaluationMethodType
indirect <- ISOEvaluationMethodType$new(value = "indirect")
```

ISOExtendedElementInformation
ISOExtendedElementInformation

Description

ISOExtendedElementInformation

ISOExtendedElementInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ExtendedElementInformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOExtendedElementInformation

Public fields

name name [1..1]: character

shortName shortName [0..1]: character

domainCode domainCode [0..1]: integer

definition definition [1..1]: character

obligation obligation [0..1]: ISOobligation

condition condition [0..1]: character

dataType dataType [1..1]: ISODatatype

maximumOccurrence maximumOccurrence [0..1]: character

domainValue domainValue [0..1]: character

parentEntity parentEntity [1..*]: character

rule rule [1..1]: character

rationale rationale [0..*]: character

source source [1..*]: ISOResponsibleParty

Methods**Public methods:**

- [ISOExtendedElementInformation\\$new\(\)](#)
- [ISOExtendedElementInformation\\$setName\(\)](#)
- [ISOExtendedElementInformation\\$setShortName\(\)](#)
- [ISOExtendedElementInformation\\$setDomainCode\(\)](#)
- [ISOExtendedElementInformation\\$setDefinition\(\)](#)
- [ISOExtendedElementInformation\\$setObligation\(\)](#)
- [ISOExtendedElementInformation\\$setCondition\(\)](#)
- [ISOExtendedElementInformation\\$setDatatype\(\)](#)
- [ISOExtendedElementInformation\\$setMaximumOccurrence\(\)](#)
- [ISOExtendedElementInformation\\$setDomainValue\(\)](#)
- [ISOExtendedElementInformation\\$addParentEntity\(\)](#)
- [ISOExtendedElementInformation\\$delParentEntity\(\)](#)
- [ISOExtendedElementInformation\\$setRule\(\)](#)
- [ISOExtendedElementInformation\\$addRationale\(\)](#)
- [ISOExtendedElementInformation\\$delRationale\(\)](#)
- [ISOExtendedElementInformation\\$addSource\(\)](#)
- [ISOExtendedElementInformation\\$delSource\(\)](#)
- [ISOExtendedElementInformation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setName()`: Set name

Usage:

```
ISOExtendedElementInformation$setName(name, locales = NULL)
```

Arguments:

`name` name

`locales` list of localized names. Default is NULL

Method `setShortName()`: Set short name

Usage:

```
ISOExtendedElementInformation$setShortName(shortName, locales = NULL)
```

Arguments:

`shortName` short name

`locales` list of localized short names. Default is NULL

Method `setDomainCode()`: Set domain code

Usage:

ISOExtendedElementInformation\$setDomainCode(domainCode)

Arguments:

domainCode domain code, object of class [integer](#)

Method setDefinition(): Set definition*Usage:*

ISOExtendedElementInformation\$setDefinition(definition, locales = NULL)

Arguments:

definition definition

locales list of localized definitions. Default is NULL

Method setObligation(): Set obligation*Usage:*

ISOExtendedElementInformation\$setObligation(obligation)

Arguments:

obligation obligation, object of class [ISOObligation](#) or any [character](#) value among those returned by ISOobligation\$values()

Method setCondition(): Set condition*Usage:*

ISOExtendedElementInformation\$setCondition(condition, locales = NULL)

Arguments:

condition condition

locales list of localized conditions. Default is NULL

Method setDatatype(): Set data type*Usage:*

ISOExtendedElementInformation\$setDatatype(dataType)

Arguments:

dataType data type, object of class [ISODatatype](#) or any [character](#) value among those returned by ISODatatype\$values()

Method setMaximumOccurrence(): Set maximum occurrence*Usage:*

ISOExtendedElementInformation\$setMaximumOccurrence(maximumOccurrence)

Arguments:

maximumOccurrence max occurrence

Method setDomainValue(): Set domain value*Usage:*

ISOExtendedElementInformation\$setDomainValue(domainValue)

Arguments:

domainValue domain value

Method addParentEntity(): Adds parent entity

Usage:

ISOExtendedElementInformation\$addParentEntity(entity)

Arguments:

entity parent entity

Returns: TRUE if added, FALSE otherwise

Method delParentEntity(): Deletes parent entity

Usage:

ISOExtendedElementInformation\$delParentEntity(entity)

Arguments:

entity parent entity

Returns: TRUE if deleted, FALSE otherwise

Method setRule(): Set rule

Usage:

ISOExtendedElementInformation\$setRule(rule, locales = NULL)

Arguments:

rule rule

locales list of localized rules. Default is NULL

Method addRationale(): Adds rationale

Usage:

ISOExtendedElementInformation\$addRationale(rationale, locales = NULL)

Arguments:

rationale rationale

locales list of localized rationales. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method delRationale(): Deletes rationale

Usage:

ISOExtendedElementInformation\$delRationale(rationale, locales = NULL)

Arguments:

rationale rationale

locales list of localized rationales. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method addSource(): Adds source

Usage:

ISOExtendedElementInformation\$addSource(source)

Arguments:

source source, object of class [ISOResponsibleParty](#)

Returns: TRUE if added, FALSE otherwise

Method delSource(): Deletes source

Usage:

ISOExtendedElementInformation\$delSource(source)

Arguments:

source source, object of class [ISOResponsibleParty](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOExtendedElementInformation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
md <- ISOExtendedElementInformation$new()
md$setName("name")
md$setShortName("shortName")
md$setDomainCode(1L)
md$setDefinition("some definition")
md$setObligation("mandatory")
md$setCondition("no condition")
md$setDatatype("characterString")
md$setMaximumOccurrence("string")
md$setDomainValue("value")
md$addParentEntity("none")
md$setRule("rule")
md$addRationale("rationale")

#adding a source
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
```

```

contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenummer")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)

md$addSource(rp)

xml <- md$encode()

```

ISOExtent

ISOExtent

Description

ISOExtent

ISOExtent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Extent

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOExtent

Public fields

geographicElement geographicElement [0..*]: ISOGeographicExtent

temporalElement temporalElement [0..*]: ISOTemporalExtent

verticalElement verticalElement [0..*]: ISOVerticalElement

Methods**Public methods:**

- [ISOExtent\\$new\(\)](#)
- [ISOExtent\\$addGeographicElement\(\)](#)
- [ISOExtent\\$setGeographicElement\(\)](#)
- [ISOExtent\\$delGeographicElement\(\)](#)
- [ISOExtent\\$addTemporalElement\(\)](#)
- [ISOExtent\\$delTemporalElement\(\)](#)
- [ISOExtent\\$addVerticalElement\(\)](#)
- [ISOExtent\\$delVerticalElement\(\)](#)
- [ISOExtent\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOExtent$new(xml = NULL)`

Arguments:

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

Method [addGeographicElement\(\)](#): Adds geographic element

Usage:

`ISOExtent$addGeographicElement(element)`

Arguments:

element object of class [ISOGeographicExtent](#)

Returns: TRUE if added, FALSE otherwise

Method [setGeographicElement\(\)](#): Sets geographic element

Usage:

`ISOExtent$setGeographicElement(element)`

Arguments:

element object of class [ISOGeographicExtent](#)

Returns: TRUE if added, FALSE otherwise

Method [delGeographicElement\(\)](#): Deletes geographic element

Usage:

`ISOExtent$delGeographicElement(element)`

Arguments:

element object of class [ISOGeographicExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method [addTemporalElement\(\)](#): Adds temporal element

Usage:

`ISOExtent$addTemporalElement(element)`

Arguments:

element object of class [ISOTemporalExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delTemporalElement(): Deletes temporal element

Usage:

ISOExtent\$delTemporalElement(element)

Arguments:

element object of class [ISOTemporalExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addVerticalElement(): Adds vertical element

Usage:

ISOExtent\$addVerticalElement(element)

Arguments:

element object of class [ISOVerticalExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delVerticalElement(): Deletes vertical element

Usage:

ISOExtent\$delVerticalElement(element)

Arguments:

element object of class [ISOVerticalExtent](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOExtent\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_EX_Extent
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gex/1.0/gex/#element_EX_Extent

ISOFeatureAssociation *ISOFeatureAssociation*

Description

ISOFeatureAssociation
ISOFeatureAssociation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOFeatureAssociation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOFeatureType](#) ->
ISOFeatureAssociation

Public fields

roleName roleName [2..*]: ISOAssociationRole

Methods

Public methods:

- [ISOFeatureAssociation\\$new\(\)](#)
- [ISOFeatureAssociation\\$addRoleName\(\)](#)
- [ISOFeatureAssociation\\$delRoleName\(\)](#)
- [ISOFeatureAssociation\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOFeatureAssociation\\$new\(xml = NULL\)](#)

Arguments:

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

Method [addRoleName\(\)](#): Adds role name

Usage:

[ISOFeatureAssociation\\$addRoleName\(associationRole\)](#)

Arguments:

associationRole object of class [ISOAssociationRole](#)

Returns: TRUE if added, FALSE otherwise

Method delRoleName(): Deletes role name

Usage:

ISOFeatureAssociation\$delRoleName(associationRole)

Arguments:

associationRole object of class [ISOAssociationRole](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOFeatureAssociation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOFeatureAssociation19115_3

ISOFeatureAssociation19115_3

Description

ISOFeatureAssociation19115_3

ISOFeatureAssociation19115_3

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOFeatureAssociation in ISO 19115-3

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOFeatureType](#) ->
[geometa::ISOFeatureType19115_3](#) -> ISOFeatureAssociation19115_3

Public fields

roleName roleName [2..*]: ISOAssociationRole

Methods**Public methods:**

- [ISOFeatureAssociation19115_3\\$new\(\)](#)
- [ISOFeatureAssociation19115_3\\$addRoleName\(\)](#)
- [ISOFeatureAssociation19115_3\\$delRoleName\(\)](#)
- [ISOFeatureAssociation19115_3\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOFeatureAssociation19115_3$new(xml = NULL)`

Arguments:

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

Method [addRoleName\(\)](#): Adds role name

Usage:

`ISOFeatureAssociation19115_3$addRoleName(associationRole)`

Arguments:

associationRole object of class [ISOAssociationRole](#)

Returns: TRUE if added, FALSE otherwise

Method [delRoleName\(\)](#): Deletes role name

Usage:

`ISOFeatureAssociation19115_3$delRoleName(associationRole)`

Arguments:

associationRole object of class [ISOAssociationRole](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

`ISOFeatureAssociation19115_3$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOFeatureAssociation19139

ISOFeatureAssociation19139

Description

ISOFeatureAssociation19139

ISOFeatureAssociation19139

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOFeatureAssociation in ISO 19139

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOFeatureType](#) ->
[geometa::ISOFeatureType19139](#) -> ISOFeatureAssociation19139

Public fields

roleName roleName [2..*]: ISOAssociationRole

Methods

Public methods:

- [ISOFeatureAssociation19139\\$new\(\)](#)
- [ISOFeatureAssociation19139\\$addRoleName\(\)](#)
- [ISOFeatureAssociation19139\\$delRoleName\(\)](#)
- [ISOFeatureAssociation19139\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOFeatureAssociation19139\\$new\(xml = NULL\)](#)

Arguments:

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

Method [addRoleName\(\)](#): Adds role name

Usage:

[ISOFeatureAssociation19139\\$addRoleName\(associationRole\)](#)

Arguments:

associationRole object of class [ISOAssociationRole](#)

Returns: TRUE if added, FALSE otherwise

Method delRoleName(): Deletes role name

Usage:

ISOFeatureAssociation19139\$delRoleName(associationRole)

Arguments:

associationRole object of class [ISOAssociationRole](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOFeatureAssociation19139\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOFeatureAttribute *ISOFeatureAttribute*

Description

ISOFeatureAttribute

ISOFeatureAttribute

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOFeatureAttribute

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractCarrierOfCharacteristics](#)
-> [geometa::ISOAbstractPropertyType](#) -> [geometa::ISOPropertyType](#) -> ISOFeatureAttribute

Public fields

code code [0..1]: character
 valueMeasurementUnit valueMeasurementUnit [0..1]: GMLUnitDefinition
 valueType valueType [0..1]: ISOTypeName
 listedValue listedValue [0..*]: ISOListedValue

Methods**Public methods:**

- [ISOFeatureAttribute\\$new\(\)](#)
- [ISOFeatureAttribute\\$setCode\(\)](#)
- [ISOFeatureAttribute\\$setValueMeasurementUnit\(\)](#)
- [ISOFeatureAttribute\\$setValueType\(\)](#)
- [ISOFeatureAttribute\\$addListedValue\(\)](#)
- [ISOFeatureAttribute\\$delListedValue\(\)](#)
- [ISOFeatureAttribute\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOFeatureAttribute\$new(xml = NULL)

Arguments:

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

Method setCode(): Set code

Usage:

ISOFeatureAttribute\$setCode(code, locales = NULL)

Arguments:

code code

locales list of localized codes. Default is NULL

Method setValueMeasurementUnit(): Set value measurement unit

Usage:

ISOFeatureAttribute\$setValueMeasurementUnit(uom)

Arguments:

uom uom, object of class [GMLUnitDefinition](#) (in ISO 19139) or [ISOUomIdentifier](#) / [character](#) (in ISO 19115-3)

Method setValueType(): Set type name

Usage:

ISOFeatureAttribute\$setValueType(typeName, locales = NULL)

Arguments:

typeName typeName

locales list of localized typeNames. Default is NULL

Method addListedValue(): Adds listed value

Usage:

```
ISOFeatureAttribute$addListedValue(value)
```

Arguments:

value value, object of class [ISOListedValue](#)

Returns: TRUE if added, FALSE otherwise

Method delListedValue(): Deletes listed value

Usage:

```
ISOFeatureAttribute$delListedValue(value)
```

Arguments:

value value, object of class [ISOListedValue](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

Examples

```
md <- ISOFeatureAttribute$new()
md$setMemberName("name")
md$setDefinition("definition")
md$setCardinality(lower=1,upper=1)
md$setCode("code")

gml <- GMLBaseUnit$new(id = "ID")
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name1", "codespace")
gml$addName("name2", "codespace")
gml$setQuantityTypeReference("someref")
gml$setCatalogSymbol("symbol")
gml$setUnitsSystem("somelink")
md$setValueMeasurementUnit(gml)
```

```

val1 <- ISOListedValue$new()
val1$setCode("code1")
val1$setLabel("label1")
val1$setDefinition("definition1")
md$addListedValue(val1)
val2 <- ISOListedValue$new()
val2$setCode("code2")
val2$setLabel("label2")
val2$setDefinition("definition2")
md$addListedValue(val2)
md$setValueType("typeName")

```

ISOFeatureCatalogue *ISOFeatureCatalogue*

Description

ISOFeatureCatalogue

ISOFeatureCatalogue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO FeatureCatalogue

Super classes

[geometa: :geometaLogger](#) -> [geometa: :ISOAbstractObject](#) -> [geometa: :ISOAbstractCatalogue](#)
-> ISOFeatureCatalogue

Public fields

attrs attrs

producer producer [1..1]: ISOResponsibleParty

functionalLanguage functionalLanguage [0..1]: character

featureType featureType [1..*]: ISOFeatureType

definitionSource definitionSource [0..*]: ISODefinitionSource

Methods**Public methods:**

- [ISOFeatureCatalogue\\$new\(\)](#)
- [ISOFeatureCatalogue\\$setProducer\(\)](#)
- [ISOFeatureCatalogue\\$setFunctionalLanguage\(\)](#)
- [ISOFeatureCatalogue\\$addFeatureType\(\)](#)
- [ISOFeatureCatalogue\\$delFeatureType\(\)](#)
- [ISOFeatureCatalogue\\$addDefinitionSource\(\)](#)
- [ISOFeatureCatalogue\\$delDefinitionSource\(\)](#)
- [ISOFeatureCatalogue\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOFeatureCatalogue$new(xml = NULL, uuid = NULL)`

Arguments:

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

`uuid` `uuid`

Method `setProducer()`: Set producer

Usage:

`ISOFeatureCatalogue$setProducer(producer)`

Arguments:

`producer` object of class [ISOResponsibleParty](#) (in ISO 19139) or [ISOResponsibility](#) (in ISO 19115-3)

Method `setFunctionalLanguage()`: Set functional language

Usage:

`ISOFeatureCatalogue$setFunctionalLanguage(functionalLanguage)`

Arguments:

`functionalLanguage` functional language

Method `addFeatureType()`: Adds feature type

Usage:

`ISOFeatureCatalogue$addFeatureType(featureType)`

Arguments:

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

Returns: TRUE if added, FALSE otherwise

Method `delFeatureType()`: Deletes feature type

Usage:

`ISOFeatureCatalogue$delFeatureType(featureType)`

Arguments:

featureType object of class [ISOFeatureType](#)

Returns: TRUE if deleted, FALSE otherwise

Method addDefinitionSource(): Adds definition source

Usage:

```
ISOFeatureCatalogue$addDefinitionSource(source)
```

Arguments:

source object of class [ISODefinitionSource](#) or [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method delDefinitionSource(): Deletes definition source

Usage:

```
ISOFeatureCatalogue$delDefinitionSource(source)
```

Arguments:

source object of class [ISODefinitionSource](#) or [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

Examples

```
fc <- ISOFeatureCatalogue$new(uuid = "my-fc-identifier")
fc$setName("name")
fc$addScope("scope1")
fc$addScope("scope2")
fc$addFieldOfApplication("field1")
fc$addFieldOfApplication("field2")
fc$setVersionNumber("1.0")
fc$setVersionDate(ISOdate(2015, 1, 1, 1))

producer <- ISOResponsibleParty$new()
producer$setIndividualName("someone")
fc$setProducer(producer)
fc$setFunctionalLanguage("eng")
```

```

cit <- ISOCitation$new()
cit$setTitle("some citation title")
fc$addDefinitionSource(cit)
#' #add featureType
ft <- ISOFeatureType$new()
ft$setType("typeName")
ft$setDefinition("definition")
ft$setCode("code")
ft$setIsAbstract(FALSE)
ft$addAlias("alias1")
ft$addAlias("alias2")

#add feature attributes
for(i in 1:3){
  #create attribute
  fat <- ISOFeatureAttribute$new()
  fat$setMemberName(sprintf("name %s",i))
  fat$setDefinition(sprintf("definition %s",i))
  fat$setCardinality(lower=1,upper=1)
  fat$setCode(sprintf("code %s",i))

  gml <- GMLBaseUnit$new(id = sprintf("ID%s",i))
  gml$setDescriptionReference("someref")
  gml$setIdentifier("identifrier", "codespace")
  gml$addName("name1", "codespace")
  gml$addName("name2", "codespace")
  gml$setQuantityTypeReference("someref")
  gml$setCatalogSymbol("symbol")
  gml$setUnitsSystem("somelink")
  fat$setValueMeasurementUnit(gml)

  #add listed values
  val1 <- ISOListedValue$new()
  val1$setCode("code1")
  val1$setLabel("label1")
  val1$setDefinition("definition1")
  fat$addListedValue(val1)
  val2 <- ISOListedValue$new()
  val2$setCode("code2")
  val2$setLabel("label2")
  val2$setDefinition("definition2")
  fat$addListedValue(val2)
  fat$setValueType("typeName")

  #add feature attribute as carrierOfCharacteristic
  ft$addCharacteristic(fat)
}
#add featureType to catalogue
fc$addFeatureType(ft)

xml <- fc$encode()

```

ISOFeatureCatalogueDescription
ISOFeatureCatalogueDescription

Description

ISOFeatureCatalogueDescription
 ISOFeatureCatalogueDescription

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOFeatureCatalogue

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractContentInformation](#)
 -> ISOFeatureCatalogueDescription

Public fields

complianceCode complianceCode: logical
 language language [0..*]: character
 locale locale [0..*]: ISOLocale
 includedWithDataset includedWithDataset: logical
 featureTypes featureTypes [0..*]: GenericName #TODO?
 featureCatalogueCitation featureCatalogueCitation [1..*]: ISOCitation

Methods

Public methods:

- [ISOFeatureCatalogueDescription\\$new\(\)](#)
- [ISOFeatureCatalogueDescription\\$setComplianceCode\(\)](#)
- [ISOFeatureCatalogueDescription\\$addLanguage\(\)](#)
- [ISOFeatureCatalogueDescription\\$delLanguage\(\)](#)
- [ISOFeatureCatalogueDescription\\$addLocale\(\)](#)
- [ISOFeatureCatalogueDescription\\$delLocale\(\)](#)
- [ISOFeatureCatalogueDescription\\$setIncludedWithDataset\(\)](#)
- [ISOFeatureCatalogueDescription\\$addFeatureCatalogueCitation\(\)](#)
- [ISOFeatureCatalogueDescription\\$delFeatureCatalogueCitation\(\)](#)
- [ISOFeatureCatalogueDescription\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOFeatureCatalogueDescription\$new(xml = NULL)

Arguments:

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

Method setComplianceCode(): Set compliance code

Usage:

ISOFeatureCatalogueDescription\$setComplianceCode(compliance)

Arguments:

compliance compliance, object of class [logical](#)

Method addLanguage(): Adds language

Usage:

ISOFeatureCatalogueDescription\$addLanguage(lang)

Arguments:

lang lang

Returns: TRUE if added, FALSE otherwise

Method delLanguage(): Deletes language

Usage:

ISOFeatureCatalogueDescription\$delLanguage(lang)

Arguments:

lang lang

Returns: TRUE if deleted, FALSE otherwise

Method addLocale(): Adds locale

Usage:

ISOFeatureCatalogueDescription\$addLocale(locale)

Arguments:

locale object of class [ISOLocale](#)

Returns: TRUE if added, FALSE otherwise

Method delLocale(): Deletes locale

Usage:

ISOFeatureCatalogueDescription\$delLocale(locale)

Arguments:

locale object of class [ISOLocale](#)

Returns: TRUE if deleted, FALSE otherwise

Method setIncludedWithDataset(): Set included with dataset

Usage:

```
ISOFeatureCatalogueDescription$setIncludedWithDataset(include)
```

Arguments:

include include, object of class [logical](#)

Method addFeatureCatalogueCitation(): Adds feature catalogue citation

Usage:

```
ISOFeatureCatalogueDescription$addFeatureCatalogueCitation(
  citation,
  uuid = NULL
)
```

Arguments:

citation, object of class [ISOCitation](#)
 uuid uuid

Returns: TRUE if added, FALSE otherwise

Method delFeatureCatalogueCitation(): Deletes feature catalogue citation

Usage:

```
ISOFeatureCatalogueDescription$delFeatureCatalogueCitation(
  citation,
  uuid = NULL
)
```

Arguments:

citation, object of class [ISOCitation](#)
 uuid uuid

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_FeatureCatalogueDescription
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_FeatureCatalogueDescription

Examples

```
md <- ISOFeatureCatalogueDescription$new()
md$setComplianceCode(FALSE)
md$addLanguage("eng")
md$setIncludedWithDataset(FALSE)

cit = ISOCitation$new()
contact = ISOContact$new()
fcLink <- ISOOnlineResource$new()
fcLink$setLinkage("http://somelink/featurecatalogue")
contact$setOnlineResource(fcLink)
rp = ISOResponsibleParty$new()
rp$setContactInfo(contact)
cit$addCitedResponsibleParty(rp)
md$addFeatureCatalogueCitation(cit)
```

ISOFeatureOperation *ISOFeatureOperation*

Description

ISOFeatureOperation

ISOFeatureOperation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOFeatureOperation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractCarrierOfCharacteristics](#)
-> [geometa::ISOAbstractPropertyType](#) -> [geometa::ISOPropertyType](#) -> ISOFeatureOperation

Public fields

signature signature: character

formalDefinition formalDefinition [0..1]: character

Methods**Public methods:**

- [ISOFeatureOperation\\$new\(\)](#)
- [ISOFeatureOperation\\$setSignature\(\)](#)
- [ISOFeatureOperation\\$setFormalDefinition\(\)](#)
- [ISOFeatureOperation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setSignature()`: Set signature

Usage:

```
ISOFeatureOperation$setSignature(signature, locales = NULL)
```

Arguments:

`signature` signature

`locales` list of localized signatures. Default is NULL

Method `setFormalDefinition()`: Set formal definition

Usage:

```
ISOFeatureOperation$setFormalDefinition(formalDefinition, locales = NULL)
```

Arguments:

`formalDefinition` formal definition

`locales` list of localized definitions. Default is NULL

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

Examples

```
md <- ISOFeatureOperation$new()
md$setMemberName("name")
md$setDefinition("definition")
md$setCardinality(lower=1, upper=1)
md$setSignature("signature")
md$setFormalDefinition("def")
```

ISOFeatureType

*ISOFeatureType***Description**

ISOFeatureType

ISOFeatureType

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO FeatureType**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOFeatureType**Methods****Public methods:**

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

Method `new()`: Initializes object*Usage:*`ISOFeatureType$new(xml = NULL)`*Arguments:*xml object of class [XMLInternalNode-class](#)**Method** `clone()`: The objects of this class are cloneable with this method.*Usage:*`ISOFeatureType$clone(deep = FALSE)`*Arguments:*

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19110 - GFC 1.0 https://schemas.isotc211.org/19110/-/gfc/1.0/gfc/#element_FC_FeatureType
(in ISO 19139)
- ISO 19110 - GFC 1.1 https://schemas.isotc211.org/19110/gfc/1.1/gfc/#element_FC_FeatureType
(in ISO 19115-3)

Examples

```
#featuretype
md <- ISOFeatureType$new()
md$setType("typeName")
md$setDefinition("definition")
md$setCode("code")
md$setIsAbstract(FALSE)
md$addAlias("alias1")
md$addAlias("alias2")

#add feature attributes
for(i in 1:3){
  #create attribute
  fat <- ISOFeatureAttribute$new()
  fat$setMemberName(sprintf("name %s",i))
  fat$setDefinition(sprintf("definition %s",i))
  fat$setCardinality(lower=1,upper=1)
  fat$setCode(sprintf("code %s",i))

  #add measurement unit
  gml <- GMLBaseUnit$new(id = "ID")
  gml$setDescriptionReference("someref")
  gml$setIdentifier("identifier", "codespace")
  gml$addName("name1", "codespace")
  gml$addName("name2", "codespace")
  gml$setQuantityTypeReference("someref")
  gml$setCatalogSymbol("symbol")
  gml$setUnitsSystem("somelink")
  fat$setValueMeasurementUnit(gml)

  #add listed values
  val1 <- ISOListedValue$new()
  val1$setCode("code1")
  val1$setLabel("label1")
  val1$setDefinition("definition1")
  fat$addListedValue(val1)
  val2 <- ISOListedValue$new()
  val2$setCode("code2")
  val2$setLabel("label2")
  val2$setDefinition("definition2")
}
```

```

fat$addListedValue(val2)
fat$setValueType("typeName")

#add feature attribute as carrierOfCharacteristic
md$addCharacteristic(fat)
}
xml <- md$encode()

```

ISOFeatureType19115_3 *ISOFeatureType19115_3*

Description

ISOFeatureType19115_3
ISOFeatureType19115_3

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO FeatureType in ISO 19115-3

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOFeatureType](#) ->
ISOFeatureType19115_3

Public fields

typeName typeName [1..1]: character
definition definition [0..1]: character
code code [0..1]: character
isAbstract isAbstract [1..1]: logical
aliases aliases [0..*]: character
designation designation [0..1]: character
carrierOfCharacteristics carrierOfCharacteristics [0..*]: ISOCarrierOfCharacteristics
inheritsFrom inheritsFrom [0..*]: ISOInheritanceRelation
inheritsTo inheritsTo [0..*]: ISOInheritanceRelation
constrainedBy constrainedBy [0..*]: ISOConstraint
definitionReference definitionReference [0..*]: ISODefinitionReference
featureCatalogue featureCatalogue: ISOFeatureCatalogue

Methods

Public methods:

- [ISOFeatureType19115_3\\$new\(\)](#)
- [ISOFeatureType19115_3\\$setTypeNames\(\)](#)
- [ISOFeatureType19115_3\\$setDefinition\(\)](#)
- [ISOFeatureType19115_3\\$setCode\(\)](#)
- [ISOFeatureType19115_3\\$setIsAbstract\(\)](#)
- [ISOFeatureType19115_3\\$addAlias\(\)](#)
- [ISOFeatureType19115_3\\$delAlias\(\)](#)
- [ISOFeatureType19115_3\\$setDesignation\(\)](#)
- [ISOFeatureType19115_3\\$addCharacteristic\(\)](#)
- [ISOFeatureType19115_3\\$delCharacteristic\(\)](#)
- [ISOFeatureType19115_3\\$addInheritsFrom\(\)](#)
- [ISOFeatureType19115_3\\$delInheritsFrom\(\)](#)
- [ISOFeatureType19115_3\\$addInheritsTo\(\)](#)
- [ISOFeatureType19115_3\\$delInheritsTo\(\)](#)
- [ISOFeatureType19115_3\\$addConstraint\(\)](#)
- [ISOFeatureType19115_3\\$delConstraint\(\)](#)
- [ISOFeatureType19115_3\\$setDefinitionReference\(\)](#)
- [ISOFeatureType19115_3\\$setFeatureCatalogue\(\)](#)
- [ISOFeatureType19115_3\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOFeatureType19115_3$new(xml = NULL)
```

Arguments:

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

Method `setTypeNames()`: Set type name

Usage:

```
ISOFeatureType19115_3$setTypeNames(typeName)
```

Arguments:

`typeName` type name, object of class [character](#)

Method `setDefinition()`: Set definition

Usage:

```
ISOFeatureType19115_3$setDefinition(definition, locales = NULL)
```

Arguments:

`definition` definition

`locales` list of localized definitions. Default is NULL

Method `setCode()`: Set code

Usage:

```
ISOFeatureType19115_3$setCode(code, locales = NULL)
```

Arguments:

code definition

locales list of localized codes. Default is NULL

Method `setIsAbstract()`: Set whether feature type is abstract

Usage:

```
ISOFeatureType19115_3$setIsAbstract(isAbstract)
```

Arguments:

isAbstract object of class [logical](#)

Method `addAlias()`: Adds alias

Usage:

```
ISOFeatureType19115_3$addAlias(alias)
```

Arguments:

alias object of class [ISOLocalName](#) (in ISO 19139 only) or [character](#) (in ISO 19139 or ISO 19115-3)

Returns: TRUE if added, FALSE otherwise

Method `delAlias()`:

Usage:

```
ISOFeatureType19115_3$delAlias(alias)
```

Arguments:

alias object of class [ISOLocalName](#) (in ISO 19139 only) or [character](#) (in ISO 19139 or ISO 19115-3)

Returns: TRUE if deleted, FALSE otherwise

Method `setDesignation()`: Set designation

Usage:

```
ISOFeatureType19115_3$setDesignation(designation, locales = NULL)
```

Arguments:

designation designation

locales list of localized designations. Default is NULL

Method `addCharacteristic()`: Adds characteristic

Usage:

```
ISOFeatureType19115_3$addCharacteristic(characteristic)
```

Arguments:

characteristic characteristic, object inheriting class [ISOAbstractCarrierOfCharacteristics](#)

Returns: TRUE if added, FALSE otherwise

Method delCharacteristic(): Deletes characteristic

Usage:

ISOFeatureType19115_3\$delCharacteristic(characteristic)

Arguments:

characteristic characteristic, object inheriting class [ISOAbstractCarrierOfCharacteristics](#)

Returns: TRUE if deleted, FALSE otherwise

Method addInheritsFrom(): Adds 'inheritsFrom' relation

Usage:

ISOFeatureType19115_3\$addInheritsFrom(rel)

Arguments:

rel rel, object of class [ISOInheritanceRelation](#)

Returns: TRUE if added, FALSE otherwise

Method delInheritsFrom(): Deletes 'inheritsFrom' relation

Usage:

ISOFeatureType19115_3\$delInheritsFrom(rel)

Arguments:

rel rel, object of class [ISOInheritanceRelation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addInheritsTo(): Adds 'inheritsTo' relation

Usage:

ISOFeatureType19115_3\$addInheritsTo(rel)

Arguments:

rel rel, object of class [ISOInheritanceRelation](#)

Returns: TRUE if added, FALSE otherwise

Method delInheritsTo(): Deletes 'inheritsTo' relation

Usage:

ISOFeatureType19115_3\$delInheritsTo(rel)

Arguments:

rel rel, object of class [ISOInheritanceRelation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addConstraint(): Adds constraint

Usage:

ISOFeatureType19115_3\$addConstraint(constraint)

Arguments:

constraint constraint, object of class [ISOConstraint](#)

Returns: TRUE if added, FALSE otherwise

Method delConstraint(): Deletes constraint

Usage:

ISOFeatureType19115_3\$delConstraint(constraint)

Arguments:

constraint constraint, object of class [ISOConstraint](#)

Returns: TRUE if deleted, FALSE otherwise

Method setDefinitionReference(): Set definition reference

Usage:

ISOFeatureType19115_3\$setDefinitionReference(definitionReference)

Arguments:

definitionReference object of class [ISODefinitionReference](#)

Method setFeatureCatalogue(): Set feature catalogue

Usage:

ISOFeatureType19115_3\$setFeatureCatalogue(fc)

Arguments:

fc object of class [ISOFeatureCatalogue](#)

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

Usage:

ISOFeatureType19115_3\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19110 - GFC 1.1 https://schemas.isotc211.org/19110/gfc/1.1/gfc/#element_FC_FeatureType

Examples

```
## Not run:
setMetadataStandard("19115-3") #required
#featuretype
md <- ISOFeatureType$new()
md$setType("typeName")
md$setDefinition("definition")
md$setDesignation("designation")
md$setCode("code")
md$setIsAbstract(FALSE)
md$addAlias("alias1")
md$addAlias("alias2")
```

```

#add feature attributes
for(i in 1:3){
  #create attribute
  fat <- ISOFeatureAttribute$new()
  fat$setMemberName(sprintf("name %s",i))
  fat$setDefinition(sprintf("definition %s",i))
  fat$setCardinality(lower=1,upper=1)
  fat$setCode(sprintf("code %s",i))

  #add measurement unit
  gml <- GMLBaseUnit$new(id = "ID%")
  gml$setDescriptionReference("someref")
  gml$setIdentifier("identifier", "codespace")
  gml$addName("name1", "codespace")
  gml$addName("name2", "codespace")
  gml$setQuantityTypeReference("someref")
  gml$setCatalogSymbol("symbol")
  gml$setUnitsSystem("somelink")
  fat$setValueMeasurementUnit(gml)

  #add listed values
  val1 <- ISOListedValue$new()
  val1$setCode("code1")
  val1$setLabel("label1")
  val1$setDefinition("definition1")
  fat$addListedValue(val1)
  val2 <- ISOListedValue$new()
  val2$setCode("code2")
  val2$setLabel("label2")
  val2$setDefinition("definition2")
  fat$addListedValue(val2)
  fat$setValueType("typeName")

  #add feature attribute as carrierOfCharacteristic
  md$addCharacteristic(fat)
}
xml <- md$encode()
setMetadataStandard("19139")

## End(Not run)

```

ISOFeatureType19139 *ISOFeatureType19139*

Description

ISOFeatureType19139

ISOFeatureType19139

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO FeatureType in ISO 19139

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOFeatureType](#) -> [ISOFeatureType19139](#)

Public fields

typeName typeName [1..1]: ISOLocalName or character
 definition definition [0..1]: character
 code code [0..1]: character
 isAbstract isAbstract [1..1]: logical
 aliases aliases [0..*]: ISOLocalName or character
 inheritsFrom inheritsFrom [0..*]: ISOInheritanceRelation
 inheritsTo inheritsTo [0..*]: ISOInheritanceRelation
 featureCatalogue featureCatalogue: ISOFeatureCatalogue
 constrainedBy constrainedBy [0..*]: ISOConstraint
 definitionReference definitionReference [0..*]: ISODefinitionReference
 carrierOfCharacteristics carrierOfCharacteristics [0..*]: ISOCarrierOfCharacteristics

Methods**Public methods:**

- [ISOFeatureType19139\\$new\(\)](#)
- [ISOFeatureType19139\\$setTypeName\(\)](#)
- [ISOFeatureType19139\\$setDefinition\(\)](#)
- [ISOFeatureType19139\\$setCode\(\)](#)
- [ISOFeatureType19139\\$setIsAbstract\(\)](#)
- [ISOFeatureType19139\\$addAlias\(\)](#)
- [ISOFeatureType19139\\$delAlias\(\)](#)
- [ISOFeatureType19139\\$addInheritsFrom\(\)](#)
- [ISOFeatureType19139\\$delInheritsFrom\(\)](#)
- [ISOFeatureType19139\\$addInheritsTo\(\)](#)
- [ISOFeatureType19139\\$delInheritsTo\(\)](#)
- [ISOFeatureType19139\\$setFeatureCatalogue\(\)](#)
- [ISOFeatureType19139\\$addConstraint\(\)](#)
- [ISOFeatureType19139\\$delConstraint\(\)](#)

- [ISOFeatureType19139\\$setDefinitionReference\(\)](#)
- [ISOFeatureType19139\\$addCharacteristic\(\)](#)
- [ISOFeatureType19139\\$delCharacteristic\(\)](#)
- [ISOFeatureType19139\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOFeatureType19139\$new(xml = NULL)

Arguments:

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

Method setTypeNames(): Set type name

Usage:

ISOFeatureType19139\$setTypeNames(typeNames)

Arguments:

typeNames type name, object of class [ISOLocalName](#) or [character](#)

Method setDefinition(): Set definition

Usage:

ISOFeatureType19139\$setDefinition(definition, locales = NULL)

Arguments:

definition definition

locales list of localized definitions. Default is NULL

Method setCode(): Set code

Usage:

ISOFeatureType19139\$setCode(code, locales = NULL)

Arguments:

code definition

locales list of localized codes. Default is NULL

Method setIsAbstract(): Set whether feature type is abstract

Usage:

ISOFeatureType19139\$setIsAbstract(isAbstract)

Arguments:

isAbstract object of class [logical](#)

Method addAlias(): Adds alias

Usage:

ISOFeatureType19139\$addAlias(alias)

Arguments:

alias object of class [ISOLocalName](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method delAlias():

Usage:

ISOFeatureType19139\$delAlias(alias)

Arguments:

alias object of class [ISOLocalName](#) or character

Returns: TRUE if deleted, FALSE otherwise

Method addInheritsFrom(): Adds 'inheritsFrom' relation

Usage:

ISOFeatureType19139\$addInheritsFrom(rel)

Arguments:

rel rel, object of class [ISOInheritanceRelation](#)

Returns: TRUE if added, FALSE otherwise

Method delInheritsFrom(): Deletes 'inheritsFrom' relation

Usage:

ISOFeatureType19139\$delInheritsFrom(rel)

Arguments:

rel rel, object of class [ISOInheritanceRelation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addInheritsTo(): Adds 'inheritsTo' relation

Usage:

ISOFeatureType19139\$addInheritsTo(rel)

Arguments:

rel rel, object of class [ISOInheritanceRelation](#)

Returns: TRUE if added, FALSE otherwise

Method delInheritsTo(): Deletes 'inheritsTo' relation

Usage:

ISOFeatureType19139\$delInheritsTo(rel)

Arguments:

rel rel, object of class [ISOInheritanceRelation](#)

Returns: TRUE if deleted, FALSE otherwise

Method setFeatureCatalogue(): Set feature catalogue

Usage:

ISOFeatureType19139\$setFeatureCatalogue(fc)

Arguments:

fc object of class [ISOFeatureCatalogue](#)

Method addConstraint(): Adds constraint

Usage:

ISOFeatureType19139\$addConstraint(constraint)

Arguments:

constraint constraint, object of class [ISOConstraint](#)

Returns: TRUE if added, FALSE otherwise

Method delConstraint(): Deletes constraint

Usage:

ISOFeatureType19139\$delConstraint(constraint)

Arguments:

constraint constraint, object of class [ISOConstraint](#)

Returns: TRUE if deleted, FALSE otherwise

Method setDefinitionReference(): Set definition reference

Usage:

ISOFeatureType19139\$setDefinitionReference(definitionReference)

Arguments:

definitionReference object of class [ISODefinitionReference](#)

Method addCharacteristic(): Adds characteristic

Usage:

ISOFeatureType19139\$addCharacteristic(characteristic)

Arguments:

characteristic characteristic, object inheriting class [ISOAbstractCarrierOfCharacteristics](#)

Returns: TRUE if added, FALSE otherwise

Method delCharacteristic(): Deletes characteristic

Usage:

ISOFeatureType19139\$delCharacteristic(characteristic)

Arguments:

characteristic characteristic, object inheriting class [ISOAbstractCarrierOfCharacteristics](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOFeatureType19139\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19110 - GFC 1.0 https://schemas.isotc211.org/19110/-/gfc/1.0/gfc/#element_FC_FeatureType

Examples

```
#featuretype
md <- ISOFeatureType$new()
md$setType("typeName")
md$setDefinition("definition")
md$setCode("code")
md$setIsAbstract(FALSE)
md$addAlias("alias1")
md$addAlias("alias2")

#add feature attributes
for(i in 1:3){
  #create attribute
  fat <- ISOFeatureAttribute$new()
  fat$setMemberName(sprintf("name %s",i))
  fat$setDefinition(sprintf("definition %s",i))
  fat$setCardinality(lower=1,upper=1)
  fat$setCode(sprintf("code %s",i))

  #add measurement unit
  gml <- GMLBaseUnit$new(id = "ID%")
  gml$setDescriptionReference("someref")
  gml$setIdentifier("identif", "codespace")
  gml$addName("name1", "codespace")
  gml$addName("name2", "codespace")
  gml$setQuantityTypeReference("someref")
  gml$setCatalogSymbol("symbol")
  gml$setUnitsSystem("somelink")
  fat$setValueMeasurementUnit(gml)

  #add listed values
  val1 <- ISOListedValue$new()
  val1$setCode("code1")
  val1$setLabel("label1")
  val1$setDefinition("definition1")
  fat$addListedValue(val1)
  val2 <- ISOListedValue$new()
  val2$setCode("code2")
  val2$setLabel("label2")
  val2$setDefinition("definition2")
  fat$addListedValue(val2)
  fat$setValueType("typeName")

  #add feature attribute as carrierOfCharacteristic
```

```

    md$addCharacteristic(fat)
  }
xml <- md$encode()

```

ISOFeatureTypeInfo *ISOFeatureTypeInfo*

Description

ISOFeatureTypeInfo

ISOFeatureTypeInfo

Format

[R6Class](#) object.

Value

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

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOFeatureTypeInfo

Public fields

featureTypeName featureTypeName [1..1]: ISOFeatureTypeInfo

featureInstanceCount featureInstanceCount [0..1]: Integer

Methods

Public methods:

- [ISOFeatureTypeInfo\\$new\(\)](#)
- [ISOFeatureTypeInfo\\$setFeatureTypeName\(\)](#)
- [ISOFeatureTypeInfo\\$setFeatureInstanceCount\(\)](#)
- [ISOFeatureTypeInfo\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOFeatureTypeInfo\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setFeatureTypeName\(\)](#): Set feature type Name

Usage:

ISOFeatureTypeInfo\$setFeatureTypeName(name)

Arguments:

name object of class [ISOAbstractGenericName](#) or [character](#)

Method setFeatureInstanceCount(): Set feature instance count

Usage:

ISOFeatureTypeInfo\$setFeatureInstanceCount(count)

Arguments:

count object of class [integer](#)

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

Usage:

ISOFeatureTypeInfo\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_FeatureTypeInfo

ISOFileName

ISOFileName

Description

ISOFileName

ISOFileName

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO FileName

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOFileName

Public fields

attrs attrs

Methods**Public methods:**

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

Method new(): Initializes object

Usage:

```
ISOFileName$new(xml = NULL, file = NULL, name = NULL)
```

Arguments:

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

file file

name name

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmx/1.0/gmx/#element_FileName
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gcx/1.0/gcx/#element_FileName

Examples

```
md <- ISOFileName$new(file = "someuri", name = "filename")
xml <- md$encode()
```

ISOFormat

ISOFormat

Description

ISOFormat

ISOFormat

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOFormat

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOFormat

Public fields

name name : [CharacterString](#) (ISO 19139)

formatSpecificationCitation format specification citation [1]: [ISOCitation](#)

version version : [CharacterString](#) (ISO 19139)

amendmentNumber amendmentNumber [0..1] : [CharacterString](#)

specification specification [0..1] : [CharacterString](#) (ISO 19139)

fileDecompressionTechnique fileDecompressionTechnique [0..1] : [CharacterString](#)

medium medium [0..*] : [ISOMedium](#) [0..*] (ISO 19115-3)

formatDistributor formatDistributor [0..*] : [ISODistributor](#)

Methods

Public methods:

- [ISOFormat\\$new\(\)](#)
- [ISOFormat\\$setName\(\)](#)
- [ISOFormat\\$setFormatSpecificationCitation\(\)](#)
- [ISOFormat\\$setVersion\(\)](#)
- [ISOFormat\\$setAmendmentNumber\(\)](#)
- [ISOFormat\\$setSpecification\(\)](#)
- [ISOFormat\\$setFileDecompressionTechnique\(\)](#)
- [ISOFormat\\$addDistributor\(\)](#)
- [ISOFormat\\$addMedium\(\)](#)
- [ISOFormat\\$delMedium\(\)](#)

- [ISOFormat\\$delDistributor\(\)](#)
- [ISOFormat\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOFormat\$new(xml = NULL)

Arguments:

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

Method setName(): Set name

Usage:

ISOFormat\$setName(name, locales = NULL)

Arguments:

name name

locales list of localized names. Default is NULL

Method setFormatSpecificationCitation(): Set format specification citation

Usage:

ISOFormat\$setFormatSpecificationCitation(citation)

Arguments:

citation citation

Method setVersion(): Set version

Usage:

ISOFormat\$setVersion(version)

Arguments:

version version

Method setAmendmentNumber(): Set amendment number

Usage:

ISOFormat\$setAmendmentNumber(amendmentNumber)

Arguments:

amendmentNumber amendment number

Method setSpecification(): Set specification

Usage:

ISOFormat\$setSpecification(specification, locales = NULL)

Arguments:

specification specification

locales list of localized specifications. Default is NULL

Method setFileDecompressionTechnique(): Set file decompression technique

Usage:

ISOFormat\$setFileDecompressionTechnique(technique)

Arguments:

technique technique

Method addDistributor(): Adds distributor

Usage:

ISOFormat\$addDistributor(distributor)

Arguments:

distributor object of class [ISODistributor](#)

Returns: TRUE if added, FALSE otherwise

Method addMedium(): Adds medium

Usage:

ISOFormat\$addMedium(medium)

Arguments:

medium object of class [ISOMedium](#)

Returns: TRUE if added, FALSE otherwise

Method delMedium(): Deletes medium

Usage:

ISOFormat\$delMedium(medium)

Arguments:

medium object of class [ISOMedium](#)

Returns: TRUE if deleted, FALSE otherwise

Method delDistributor(): Deletes distributor

Usage:

ISOFormat\$delDistributor(distributor)

Arguments:

distributor object of class [ISODistributor](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOFormat\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Format
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrd/1.0/mrd/#element_MD_Format

Examples

```
md <- ISOFormat$new()
md$setName("name")
md$setVersion("1.0")
md$setAmendmentNumber("2")
md$setSpecification("specification")
```

ISOFormatConsistency *ISOFormatConsistency*

Description

ISOFormatConsistency
 ISOFormatConsistency

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOFormatConsistency

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractLogicalConsistency
-> ISOFormatConsistency
```

Methods**Public methods:**

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_FormatConsistency
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_FormatConsistency

Examples

```
#encoding
dq <- ISOFormatConsistency$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()
```

ISOFreeText

ISOFreeText

Description

ISOFreeText

ISOFreeText

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO FreeText

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOFreeText

Public fields

textGroup textGroup [1..*]: [ISOLocalisedCharacterString](#)

Methods**Public methods:**

- [ISOFreeText\\$new\(\)](#)
- [ISOFreeText\\$addTextGroup\(\)](#)
- [ISOFreeText\\$delTextGroup\(\)](#)
- [ISOFreeText\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOFreeText\\$new](#)(xml = NULL)

Arguments:

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

Method [addTextGroup\(\)](#): Adds text group

Usage:

[ISOFreeText\\$addTextGroup](#)(textGroup)

Arguments:

textGroup text group, object of class [ISOLocalisedCharacterString](#)

Returns: TRUE if added, FALSE otherwise

Method [delTextGroup\(\)](#): Deletes text group

Usage:

[ISOFreeText\\$delTextGroup](#)(textGroup)

Arguments:

textGroup text group, object of class [ISOLocalisedCharacterString](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

[ISOFreeText\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_PT_FreeText
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/lan/1.0/lan/#element_PT_FreeText

Examples

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

ISOFullInspection	<i>ISOFullInspection</i>
-------------------	--------------------------

Description

ISOFullInspection

ISOFullInspection

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO full inspection

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOEvaluationMethod](#)
-> ISOFullInspection

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOFullInspection$new(xml = NULL)`

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_FullInspection

ISOGeographicBoundingBox

ISOGeographicBoundingBox

Description

ISOGeographicBoundingBox

ISOGeographicBoundingBox

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO GeographicBoundingBox

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOGeographicExtent  
-> ISOGeographicBoundingBox
```

Public fields

westBoundLongitude westBoundLongitude

eastBoundLongitude eastBoundLongitude

southBoundLatitude southBoundLatitude

northBoundLatitude northBoundLatitude

Methods**Public methods:**

- [ISOGeographicBoundingBox\\$new\(\)](#)
- [ISOGeographicBoundingBox\\$setWestBoundLongitude\(\)](#)
- [ISOGeographicBoundingBox\\$setEastBoundLongitude\(\)](#)
- [ISOGeographicBoundingBox\\$setSouthBoundLatitude\(\)](#)
- [ISOGeographicBoundingBox\\$setNorthBoundLatitude\(\)](#)
- [ISOGeographicBoundingBox\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOGeographicBoundingBox$new(  
  xml = NULL,  
  minx = NULL,  
  miny = NULL,  
  maxx = NULL,  
  maxy = NULL,  
  bbox = NULL  
)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)
`minx` `minx` object of class [numeric](#)
`miny` `miny` object of class [numeric](#)
`maxx` `maxx` object of class [numeric](#)
`maxy` `maxy` object of class [numeric](#)
`bbox` `bbox` object of class [matrix](#)

Method `setWestBoundLongitude()`: Set west bound longitude

Usage:

```
ISOGeographicBoundingBox$setWestBoundLongitude(minx)
```

Arguments:

`minx` `minx` object of class [numeric](#)

Method `setEastBoundLongitude()`: Set east bound longitude

Usage:

```
ISOGeographicBoundingBox$setEastBoundLongitude(maxx)
```

Arguments:

`maxx` `maxx` object of class [numeric](#)

Method `setSouthBoundLatitude()`: Set south bound latitude

Usage:

```
ISOGeographicBoundingBox$setSouthBoundLatitude(miny)
```

Arguments:

miny miny object of class [numeric](#)

Method `setNorthBoundLatitude()`: Set north bound latitude

Usage:

```
ISOGeographicBoundingBox$setNorthBoundLatitude(maxy)
```

Arguments:

maxy maxy object of class [numeric](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_EX_GeographicBoundingBox
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gex/1.0/gex/#element_EX_GeographicBoundingBox

Examples

```
md <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
xml <- md$encode()
```

ISOGeographicDescription

ISOGeographicDescription

Description

ISOGeographicDescription

ISOGeographicDescription

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO GeographicDescription

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOGeographicExtent
 -> ISOGeographicDescription

Public fields

geographicIdentifier geographicIdentifier [1..1]: character

Methods**Public methods:**

- ISOGeographicDescription\$new()
- ISOGeographicDescription\$setGeographicIdentifier()
- ISOGeographicDescription\$clone()

Method new(): Initializes object

Usage:

ISOGeographicDescription\$new(xml = NULL)

Arguments:

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

Method setGeographicIdentifier(): Set geographic identifier

Usage:

ISOGeographicDescription\$setGeographicIdentifier(geographicIdentifier)

Arguments:

geographicIdentifier geographic identifier, object of class [ISOMetaIdentifier](#)

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

Usage:

ISOGeographicDescription\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_EX_GeographicDescription
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gex/1.0/gex/#element_EX_GeographicDescription

Examples

```
md <- ISOGeographicDescription$new()
md$setGeographicIdentifier(ISOMetaIdentifier$new(code = "identifier"))
xml <- md$encode()
```

ISOGeographicExtent *ISOGeographicExtent*

Description

ISOGeographicExtent

ISOGeographicExtent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO abstract geographicExtent

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOGeographicExtent

Public fields

extentTypeCode extentTypeCode [0..1]: ISOBaseBoolean default "true"

Methods

Public methods:

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

Method [new\(\)](#): Initializes object

Usage:

[ISOGeographicExtent\\$new](#)(xml = NULL, defaults = list())

Arguments:

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

defaults defaults list

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

Usage:

[ISOGeographicExtent\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

abstract class

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractEX_GeographicExtent
- ISO 19115-3 https://schemas.isotc211.org/19115-3/gex/1.0/gex/#element_AbstractEX_GeographicExtent

ISOGeometricObjects *ISOGeometricObjects*

Description

ISOGeometricObjects

ISOGeometricObjects

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO GeometricObjects

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOGeometricObjects

Public fields

geometricObjectType geometricObjectType
geometricObjectCount geometricObjectCount

Methods**Public methods:**

- [ISOGeometricObjects\\$new\(\)](#)
- [ISOGeometricObjects\\$setGeometricObjectType\(\)](#)
- [ISOGeometricObjects\\$setGeometricObjectCount\(\)](#)
- [ISOGeometricObjects\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

Method setGeometricObjectType(): Set geometric object type

Usage:

```
ISOGeometricObjects$setGeometricObjectType(geometricObjectType)
```

Arguments:

geometricObjectType object of class [ISOGeometricObjectType](#) or any [character](#) among values returned by [ISOGeometricObjectType\\$values\(\)](#)

Method setGeometricObjectCount(): Set geometric object count

Usage:

```
ISOGeometricObjects$setGeometricObjectCount(geometricObjectCount)
```

Arguments:

geometricObjectCount object of class [integer](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_GeometricObjects
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_GeometricObjects

Examples

```
md <- ISOGeometricObjects$new()
md$setGeometricObjectType("surface")
md$setGeometricObjectCount(5L)
xml <- md$encode()
```

ISOGeometricObjectType
ISOGeometricObjectType

Description

ISOGeometricObjectType
ISOGeometricObjectType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO GeometricObjectType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOGeometricObjectType

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

[ISOGeometricObjectType\\$new](#)(xml = NULL, value, description = NULL)

Arguments:

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

value value

description description

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

Usage:

[ISOGeometricObjectType\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_GeometricObjectTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_GeometricObjectTypeCode

Examples

```
#possible values
values <- ISOGeometricObjectType$values(labels = TRUE)

#point type
pt <- ISOGeometricObjectType$new(value = "point")
```

ISOGeorectified	<i>ISOGeorectified</i>
-----------------	------------------------

Description

ISOGeorectified
ISOGeorectified

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Georectified

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractSpatialRepresentation
-> geometa::ISOSpatialRepresentation -> geometa::ISOGridSpatialRepresentation -> ISOGeorectified
```

Public fields

```
checkPointAvailability checkPointAvailability [1..1]
checkPointDescription checkPointDescription [0..1]
cornerPoints cornerPoints [0..*]
centerPoint centerPoint [0..1]
pointInPixel pointInPixel [1..1]
transformationDimensionDescription transformationDimensionDescription [0..1]
transformationDimensionMapping transformationDimensionMapping [0..2]
```

Methods

Public methods:

- [ISOGeorectified\\$new\(\)](#)
- [ISOGeorectified\\$setCheckPointAvailability\(\)](#)
- [ISOGeorectified\\$setCheckPointDescription\(\)](#)
- [ISOGeorectified\\$addCornerPoint\(\)](#)
- [ISOGeorectified\\$delCornerPoint\(\)](#)
- [ISOGeorectified\\$setCenterPoint\(\)](#)
- [ISOGeorectified\\$setPixelOrientation\(\)](#)
- [ISOGeorectified\\$setTransformationDimensionDescription\(\)](#)
- [ISOGeorectified\\$addTransformationDimensionMapping\(\)](#)
- [ISOGeorectified\\$delTransformationDimensionMapping\(\)](#)
- [ISOGeorectified\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

Method [setCheckPointAvailability\(\)](#): Set check point availability

Usage:

```
ISOGeorectified$setCheckPointAvailability(availability)
```

Arguments:

availability object of class [logical](#)

Method [setCheckPointDescription\(\)](#): Set check point description

Usage:

```
ISOGeorectified$setCheckPointDescription(description, locales = NULL)
```

Arguments:

description object of class [character](#)

locales list of localized descriptions. Default is NULL

Method [addCornerPoint\(\)](#): Adds corner point

Usage:

```
ISOGeorectified$addCornerPoint(sfg = NULL, m = NULL)
```

Arguments:

sfg simple feature object from [sf](#)

m simple feature object of class [matrix](#)

Returns: TRUE if added, FALSE otherwise

Method [delCornerPoint\(\)](#): Deletes corner point

Usage:

ISOGeorectified\$delCornerPoint(sfg = NULL, m = NULL)

Arguments:

sfg simple feature object from **sf**

m simple feature object of class **matrix**

Returns: TRUE if deleted, FALSE otherwise

Method setCenterPoint(): Sets center point

Usage:

ISOGeorectified\$setCenterPoint(sfg = NULL, m = NULL)

Arguments:

sfg simple feature object from **sf**

m simple feature object of class **matrix**

Method setPixelOrientation(): Set pixel orientation

Usage:

ISOGeorectified\$setPixelOrientation(pixelOrientation)

Arguments:

pixelOrientation object of class **ISOPixelOrientation** or **character** among values among those returned by **ISOPixelOrientation\$values()**

Method setTransformationDimensionDescription(): Set transformation dimension description

Usage:

```
ISOGeorectified$setTransformationDimensionDescription(
  description,
  locales = NULL
)
```

Arguments:

description description

locales list of localized descriptions. Default is NULL

Method addTransformationDimensionMapping(): Adds transformation dimension mapping

Usage:

ISOGeorectified\$addTransformationDimensionMapping(mapping)

Arguments:

mapping mapping

Returns: TRUE if added, FALSE otherwise

Method delTransformationDimensionMapping(): Deletes transformation dimension mapping

Usage:

ISOGeorectified\$delTransformationDimensionMapping(mapping)

Arguments:

mapping mapping

Returns: TRUE if deleted, FALSE otherwise**Method** clone(): The objects of this class are cloneable with this method.*Usage:*

ISOGeorectified\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Georectified- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_Georectified

 ISOGeoreferenceable *ISOGeoreferenceable*

Description

ISOGeoreferenceable

ISOGeoreferenceable

Format

R6Class object.

Value

Object of R6Class for modelling an ISO Georeferenceable

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractSpatialRepresentation
-> geometa::ISOSpatialRepresentation -> geometa::ISOGridSpatialRepresentation -> ISOGeoreferenceable

```

Public fields

controlPointAvailability controlPointAvailability: logical

orientationParameterAvailability orientationParameterAvailability: logical

orientationParameterDescription orientationParameterDescription [0..1]: character

georeferencedParameters georeferencedParameters: ISORRecord

parameterCitation parameterCitation [0..*]: ISOCitation

Methods**Public methods:**

- [ISOGeoreferenceable\\$new\(\)](#)
- [ISOGeoreferenceable\\$setControlPointAvailability\(\)](#)
- [ISOGeoreferenceable\\$setOrientationParameterAvailability\(\)](#)
- [ISOGeoreferenceable\\$setOrientationParameterDescription\(\)](#)
- [ISOGeoreferenceable\\$setGeoreferencedParameters\(\)](#)
- [ISOGeoreferenceable\\$addParameterCitation\(\)](#)
- [ISOGeoreferenceable\\$delParameterCitation\(\)](#)
- [ISOGeoreferenceable\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setControlPointAvailability()`: Set control point availability

Usage:

```
ISOGeoreferenceable$setControlPointAvailability(availability)
```

Arguments:

`availability` object of class [logical](#)

Method `setOrientationParameterAvailability()`: Set orientation parameter availability

Usage:

```
ISOGeoreferenceable$setOrientationParameterAvailability(availability)
```

Arguments:

`availability` object of class [logical](#)

Method `setOrientationParameterDescription()`: Set orientation parameter description

Usage:

```
ISOGeoreferenceable$setOrientationParameterDescription(
  description,
  locales = NULL
)
```

Arguments:

`description` description

`locales` list of localized descriptions. Default is NULL

Method `setGeoreferencedParameters()`: Set georeferenced parameters

Usage:

```
ISOGeoreferenceable$setGeoreferencedParameters(record)
```

Arguments:

record object of class [ISORecord](#)

Method addParameterCitation(): Adds parameter citation

Usage:

```
ISOGeoreferenceable$addParameterCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method delParameterCitation(): Deletes parameter citation

Usage:

```
ISOGeoreferenceable$delParameterCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Georeferenceable
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_Georeferenceable

Examples

```
md <- ISOGeoreferenceable$new()

#inherited methods from ISOGridSpatialRepresentation
md$setNumberOfDimensions(1)
dim1 <- ISODimension$new()
dim1$setName("row")
dim1$setSize(100)
dim1$setResolution(ISOMeasure$new(value=1,uom="m"))
md$addDimension(dim1)
md$setCellGeometry("area")

#parameters
```

```

md$setControlPointAvailability(TRUE)
md$setOrientationParameterAvailability(TRUE)
md$setOrientationParameterDescription("description")
md$setGeoreferencedParameters("record")
ct <- ISOCitation$new()
ct$setTitle("citation")
md$addParameterCitation(ct)

xml <- md$encode()

```

ISOGriddedDataPositionalAccuracy

ISOGriddedDataPositionalAccuracy

Description

ISOGriddedDataPositionalAccuracy

ISOGriddedDataPositionalAccuracy

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOGriddedDataPositionalAccuracy

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractPositionalAccuracy
-> ISOGriddedDataPositionalAccuracy

```

Methods

Public methods:

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

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_GriddedDataPositionalAccuracy
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_GriddedDataPositionalAccuracy

Examples

```
#encoding
dq <- ISOGriddedDataPositionalAccuracy$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()
```

ISOGridSpatialRepresentation

ISOGridSpatialRepresentation

Description

ISOGridSpatialRepresentation

ISOGridSpatialRepresentation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO GridSpatialRepresentation

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractSpatialRepresentation
 -> geometa::ISOSpatialRepresentation -> ISOGridSpatialRepresentation

Public fields

numberOfDimensions numberOfDimensions [1..1]: integer
 axisDimensionProperties axisDimensionProperties [1..*]: ISODimension
 cellGeometry cellGeometry [1..1]: ISOCellGeometry
 transformationParameterAvailability transformationParameterAvailability: logical

Methods**Public methods:**

- [ISOGridSpatialRepresentation\\$new\(\)](#)
- [ISOGridSpatialRepresentation\\$setNumberOfDimensions\(\)](#)
- [ISOGridSpatialRepresentation\\$addDimension\(\)](#)
- [ISOGridSpatialRepresentation\\$delDimension\(\)](#)
- [ISOGridSpatialRepresentation\\$setCellGeometry\(\)](#)
- [ISOGridSpatialRepresentation\\$setTransformationParameterAvailability\(\)](#)
- [ISOGridSpatialRepresentation\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOGridSpatialRepresentation$new(xml = NULL)`

Arguments:

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

Method [setNumberOfDimensions\(\)](#): Set number of dimensions

Usage:

`ISOGridSpatialRepresentation$setNumberOfDimensions(numberOfDimensions)`

Arguments:

numberOfDimensions object of class [integer](#)

Method [addDimension\(\)](#): Adds dimension

Usage:

`ISOGridSpatialRepresentation$addDimension(dimension)`

Arguments:

dimension object of class [ISODimension](#)

Returns: TRUE if added, FALSE otherwise

Method [delDimension\(\)](#): Deletes dimension

Usage:

```
ISOGridSpatialRepresentation$delDimension(dimension)
```

Arguments:

dimension object of class [ISODimension](#)

Returns: TRUE if deleted, FALSE otherwise

Method setCellGeometry(): Set cell geometry

Usage:

```
ISOGridSpatialRepresentation$setCellGeometry(cellGeometry)
```

Arguments:

cellGeometry object of class [ISOCellGeometry](#) or any [character](#) among values returned by [ISOCellGeometry\\$values\(\)](#)

Method setTransformationParameterAvailability(): Set transformation parameter availability

Usage:

```
ISOGridSpatialRepresentation$setTransformationParameterAvailability(
  availability
)
```

Arguments:

availability object of class [logical](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_GridSpatialRepresentation
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_GridSpatialRepresentation

Examples

```
md <- ISOGridSpatialRepresentation$new()
md$setNumberOfDimensions(1)
dim1 <- ISODimension$new()
dim1$setName("row")
dim1$setSize(100)
dim1$setResolution(ISOMeasure$new(value=1,uom="m"))
md$addDimension(dim1)
md$setCellGeometry("area")
xml <- md$encode()
```

ISOHomogeneity	<i>ISOHomogeneity</i>
----------------	-----------------------

Description

ISOHomogeneity

ISOHomogeneity

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO homogeneity

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractQualityElement](#)
-> [geometa::ISODataQualityAbstractElement](#) -> [geometa::ISOAbstractMetaquality](#) -> ISOHomogeneity

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOHomogeneity$new(xml = NULL)`

Arguments:

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

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

Usage:

`ISOHomogeneity$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_Homogeneity

ISOIdentification *ISOIdentification*

Description

ISOIdentification

ISOIdentification

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Identification

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOIdentification

Methods**Public methods:**

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

Method [new\(\)](#): Initializes object

Usage:

```
ISOIdentification$new(xml = NULL, defaults = list())
```

Arguments:

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

defaults defaults list

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractMD_Identification
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_AbstractMD_Identification

ISOIdentification19115_3

ISOIdentification19115_3

Description

ISOIdentification19115_3

ISOIdentification19115_3

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Identification in ISO 19115-3

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
-> [ISOIdentification19115_3](#)

Public fields

citation citation: [ISOCitation](#)
 abstract abstract: character
 purpose purpose [0..1]: character
 credit credit [0..*]: character
 status status [0..*]: [ISOProgress](#)
 pointOfContact pointOfContact [0..*]: [ISOResponsibility](#)
 spatialRepresentationType spatialRepresentationType [0..*]: [ISOSpatialRepresentationType](#)
 spatialResolution spatialResolution [0..*]: [ISOResolution](#)
 temporalResolution [0..*]: [ISOPeriodDuration](#)
 topicCategory topicCategory [0..*]: [ISOTopicCategory](#)
 extent extent [0..*]: [ISOExtent \(ISO 19139\)](#)
 additionalDocumentation additional documentation [0..*]: [ISOCitation](#)
 processingLevel processing level [0..1]: [ISOMetaIdentifier](#)

resourceMaintenance resourceMaintenance [0..*]: ISOMaintenanceInformation
 graphicOverview graphicOverview [0..*]: ISOBrowseGraphic
 resourceFormat resourceFormat [0..*]: ISOFormat
 descriptiveKeywords descriptiveKeywords [0..*]: ISOKeywords (ISO 19139)
 resourceSpecificUsage resourceSpecificUsage [0..*]: ISOUsage (ISO 19139)
 resourceConstraints resourceConstraints [0..*]: ISOLegalConstraints
 aggregationInfo aggregationInfo [0..*]: ISOAggregateInformation

Methods

Public methods:

- ISOIdentification19115_3\$new()
- ISOIdentification19115_3\$setCitation()
- ISOIdentification19115_3\$setAbstract()
- ISOIdentification19115_3\$setPurpose()
- ISOIdentification19115_3\$addCredit()
- ISOIdentification19115_3\$delCredit()
- ISOIdentification19115_3\$addStatus()
- ISOIdentification19115_3\$delStatus()
- ISOIdentification19115_3\$addPointOfContact()
- ISOIdentification19115_3\$delPointOfContact()
- ISOIdentification19115_3\$addSpatialRepresentationType()
- ISOIdentification19115_3\$delSpatialRepresentationType()
- ISOIdentification19115_3\$addSpatialResolution()
- ISOIdentification19115_3\$delSpatialResolution()
- ISOIdentification19115_3\$addTemporalResolution()
- ISOIdentification19115_3\$delTemporalResolution()
- ISOIdentification19115_3\$addTopicCategory()
- ISOIdentification19115_3\$delTopicCategory()
- ISOIdentification19115_3\$addExtent()
- ISOIdentification19115_3\$delExtent()
- ISOIdentification19115_3\$addAdditionalDocumentation()
- ISOIdentification19115_3\$delAdditionalDocumentation()
- ISOIdentification19115_3\$setProcessingLevel()
- ISOIdentification19115_3\$addResourceMaintenance()
- ISOIdentification19115_3\$delResourceMaintenance()
- ISOIdentification19115_3\$addGraphicOverview()
- ISOIdentification19115_3\$delGraphicOverview()
- ISOIdentification19115_3\$addFormat()
- ISOIdentification19115_3\$delFormat()
- ISOIdentification19115_3\$addKeywords()
- ISOIdentification19115_3\$delKeywords()

- [ISOIdentification19115_3\\$addResourceSpecificUsage\(\)](#)
- [ISOIdentification19115_3\\$delResourceSpecificUsage\(\)](#)
- [ISOIdentification19115_3\\$addResourceConstraints\(\)](#)
- [ISOIdentification19115_3\\$delResourceConstraints\(\)](#)
- [ISOIdentification19115_3\\$addAssociatedResource\(\)](#)
- [ISOIdentification19115_3\\$delAssociatedResource\(\)](#)
- [ISOIdentification19115_3\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOIdentification19115_3$new(xml = NULL, defaults = list())
```

Arguments:

xml object of class [XMLInternalNode-class](#)
defaults defaults list

Method setCitation(): Set citation

Usage:

```
ISOIdentification19115_3$setCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Method setAbstract(): Set abstract

Usage:

```
ISOIdentification19115_3$setAbstract(abstract, locales = NULL)
```

Arguments:

abstract abstract
locales list of localized abstracts. Default is NULL

Method setPurpose(): Set purpose

Usage:

```
ISOIdentification19115_3$setPurpose(purpose, locales = NULL)
```

Arguments:

purpose purpose
locales list of localized texts. Default is NULL

Method addCredit(): Adds credit

Usage:

```
ISOIdentification19115_3$addCredit(credit, locales = NULL)
```

Arguments:

credit credit
locales list of localized texts. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method delCredit(): Deletes credit

Usage:

```
ISOIdentification19115_3$delCredit(credit, locales = NULL)
```

Arguments:

credit credit

locales list of localized texts. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method addStatus(): Adds status

Usage:

```
ISOIdentification19115_3$addStatus(status)
```

Arguments:

status object of class [ISOProgress](#) or any [character](#) among values returned by [ISOProgress\\$values\(\)](#)

Returns: TRUE if added, FALSE otherwise

Method delStatus(): Deletes status

Usage:

```
ISOIdentification19115_3$delStatus(status)
```

Arguments:

status object of class [ISOProgress](#) or any [character](#) among values returned by [ISOProgress\\$values\(\)](#)

Returns: TRUE if deleted, FALSE otherwise

Method addPointOfContact(): Adds point of contact

Usage:

```
ISOIdentification19115_3$addPointOfContact(pointOfContact)
```

Arguments:

pointOfContact object of class [ISOResponsibility](#)

Returns: TRUE if added, FALSE otherwise

Method delPointOfContact(): Deletes point of contact

Usage:

```
ISOIdentification19115_3$delPointOfContact(pointOfContact)
```

Arguments:

pointOfContact object of class [ISOResponsibility](#)

Returns: TRUE if deleted, FALSE otherwise

Method addSpatialRepresentationType(): Adds spatial representation type

Usage:

```
ISOIdentification19115_3$addSpatialRepresentationType(  
  spatialRepresentationType  
)
```

Arguments:

spatialRepresentationType object of class [ISOSpatialRepresentationType](#) or any [character](#) among values returned by `ISOSpatialRepresentationType$values()`

Returns: TRUE if added, FALSE otherwise

Method `delSpatialRepresentationType()`: Deletes spatial representation type

Usage:

```
ISOIdentification19115_3$delSpatialRepresentationType(  
  spatialRepresentationType  
)
```

Arguments:

spatialRepresentationType object of class [ISOSpatialRepresentationType](#) or any [character](#) among values returned by `ISOSpatialRepresentationType$values()`

Returns: TRUE if deleted, FALSE otherwise

Method `addSpatialResolution()`: Adds spatial resolution

Usage:

```
ISOIdentification19115_3$addSpatialResolution(resolution)
```

Arguments:

resolution object of class [ISOResolution](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method `delSpatialResolution()`: Deletes spatial resolution

Usage:

```
ISOIdentification19115_3$delSpatialResolution(resolution)
```

Arguments:

resolution object of class [ISOResolution](#) or [character](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addTemporalResolution()`: Adds temporal resolution

Usage:

```
ISOIdentification19115_3$addTemporalResolution(resolution)
```

Arguments:

resolution object of class [ISOPeriodDuration](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method `delTemporalResolution()`: Deletes temporal resolution

Usage:

```
ISOIdentification19115_3$delTemporalResolution(resolution)
```

Arguments:

resolution object of class [ISOPeriodDuration](#) or [character](#)

Returns: TRUE if deleted, FALSE otherwise

Method addTopicCategory(): Adds topic category

Usage:

ISOIdentification19115_3\$addTopicCategory(topicCategory)

Arguments:

topicCategory object of class [ISOTopicCategory](#) or any [character](#) value among those returned by ISOTopicCategory\$values()

Returns: TRUE if added, FALSE otherwise

Method delTopicCategory(): Deletes topic category

Usage:

ISOIdentification19115_3\$delTopicCategory(topicCategory)

Arguments:

topicCategory object of class [ISOTopicCategory](#) or any [character](#) value among those returned by ISOTopicCategory\$values()

Returns: TRUE if deleted, FALSE otherwise

Method addExtent(): Adds extent

Usage:

ISOIdentification19115_3\$addExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delExtent(): Deletes extent

Usage:

ISOIdentification19115_3\$delExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addAdditionalDocumentation(): Adds additional documentation

Usage:

ISOIdentification19115_3\$addAdditionalDocumentation(additionalDocumentation)

Arguments:

additionalDocumentation object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method delAdditionalDocumentation(): Deletes additional documentation

Usage:

ISOIdentification19115_3\$delAdditionalDocumentation(additionalDocumentation)

Arguments:

additionalDocumentation object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method setProcessingLevel(): Set processing level

Usage:

ISOIdentification19115_3\$setProcessingLevel(processingLevel)

Arguments:

processingLevel object of class [ISOMetaIdentifier](#) or [character](#)

Method addResourceMaintenance(): Adds resource maintenance

Usage:

ISOIdentification19115_3\$addResourceMaintenance(resourceMaintenance)

Arguments:

resourceMaintenance object of class [ISOMaintenanceInformation](#)

Returns: TRUE if added, FALSE otherwise

Method delResourceMaintenance(): Deletes resource maintenance

Usage:

ISOIdentification19115_3\$delResourceMaintenance(resourceMaintenance)

Arguments:

resourceMaintenance object of class [ISOMaintenanceInformation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addGraphicOverview(): Adds graphic overview

Usage:

ISOIdentification19115_3\$addGraphicOverview(graphicOverview)

Arguments:

graphicOverview object of class [ISOBrowseGraphic](#)

Returns: TRUE if added, FALSE otherwise

Method delGraphicOverview(): Deletes graphic overview

Usage:

ISOIdentification19115_3\$delGraphicOverview(graphicOverview)

Arguments:

graphicOverview object of class [ISOBrowseGraphic](#)

Returns: TRUE if deleted, FALSE otherwise

Method addFormat(): Adds format

Usage:

ISOIdentification19115_3\$addFormat(format)

Arguments:

format object of class [ISOFormat](#)

Returns: TRUE if added, FALSE otherwise

Method delFormat(): Deletes format

Usage:

ISOIdentification19115_3\$delFormat(format)

Arguments:

format object of class [ISOFormat](#)

Returns: TRUE if deleted, FALSE otherwise

Method addKeywords(): Adds keywords

Usage:

ISOIdentification19115_3\$addKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if added, FALSE otherwise

Method delKeywords(): Deletes keywords

Usage:

ISOIdentification19115_3\$delKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if deleted, FALSE otherwise

Method addResourceSpecificUsage(): Adds resource specific usage

Usage:

ISOIdentification19115_3\$addResourceSpecificUsage(usage)

Arguments:

usage object of class [ISOUsage](#)

Returns: TRUE if added, FALSE otherwise

Method delResourceSpecificUsage(): Deletes resource specific usage

Usage:

ISOIdentification19115_3\$delResourceSpecificUsage(usage)

Arguments:

usage object of class [ISOUsage](#)

Returns: TRUE if deleted, FALSE otherwise

Method addResourceConstraints(): Adds resource constraints

Usage:

ISOIdentification19115_3\$addResourceConstraints(resourceConstraints)

Arguments:

resourceConstraints object of class [ISOConstraints](#)

Returns: TRUE if added, FALSE otherwise

Method delResourceConstraints(): Deletes resource constraints

Usage:

ISOIdentification19115_3\$delResourceConstraints(resourceConstraints)

Arguments:

resourceConstraints object of class [ISOConstraints](#)

Returns: TRUE if deleted, FALSE otherwise

Method addAssociatedResource(): Adds associated resource

Usage:

ISOIdentification19115_3\$addAssociatedResource(associatedResource)

Arguments:

associatedResource object of class [ISOAssociatedResource](#)

Returns: TRUE if added, FALSE otherwise

Method delAssociatedResource(): Deletes associated resource

Usage:

ISOIdentification19115_3\$delAssociatedResource(associatedResource)

Arguments:

associatedResource object of class [ISOAssociatedResource](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOIdentification19115_3\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_AbstractMD_Identification

ISOIdentification19139

ISOIdentification19139

Description

ISOIdentification19139

ISOIdentification19139

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Identification in ISO 19139

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
-> ISOIdentification19139

Public fields

citation citation: ISOCitation

abstract abstract: character

purpose purpose [0..1]: character

credit credit [0..*]: character

status status [0..*]: ISOProgress

pointOfContact pointOfContact [0..*]: ISOResponsibleParty

resourceMaintenance resourceMaintenance [0..*]: ISOMaintenanceInformation

graphicOverview graphicOverview [0..*]: ISOBrowseGraphic

resourceFormat resourceFormat [0..*]: ISOFormat

descriptiveKeywords descriptiveKeywords [0..*]: ISOKeywords

resourceSpecificUsage resourceSpecificUsage [0..*]: ISOUsage

resourceConstraints resourceConstraints [0..*]: ISOLegalConstraints

aggregationInfo aggregationInfo [0..*]: ISOAggregateInformation

Methods**Public methods:**

- `ISOIdentification19139$new()`
- `ISOIdentification19139$setCitation()`
- `ISOIdentification19139$setAbstract()`
- `ISOIdentification19139$setPurpose()`
- `ISOIdentification19139$addCredit()`
- `ISOIdentification19139$delCredit()`
- `ISOIdentification19139$addStatus()`
- `ISOIdentification19139$delStatus()`
- `ISOIdentification19139$addPointOfContact()`
- `ISOIdentification19139$delPointOfContact()`
- `ISOIdentification19139$addResourceMaintenance()`
- `ISOIdentification19139$setResourceMaintenance()`
- `ISOIdentification19139$delResourceMaintenance()`
- `ISOIdentification19139$addGraphicOverview()`
- `ISOIdentification19139$setGraphicOverview()`
- `ISOIdentification19139$delGraphicOverview()`
- `ISOIdentification19139$addFormat()`
- `ISOIdentification19139$delFormat()`
- `ISOIdentification19139$addKeywords()`
- `ISOIdentification19139$setKeywords()`
- `ISOIdentification19139$delKeywords()`
- `ISOIdentification19139$addResourceConstraints()`
- `ISOIdentification19139$delResourceConstraints()`
- `ISOIdentification19139$addResourceSpecificUsage()`
- `ISOIdentification19139$delResourceSpecificUsage()`
- `ISOIdentification19139$addAggregateInformation()`
- `ISOIdentification19139$delAggregateInformation()`
- `ISOIdentification19139$clone()`

Method `new()`: Initializes object

Usage:

```
ISOIdentification19139$new(xml = NULL, defaults = list())
```

Arguments:

`xml` object of class `XMLInternalNode-class`

`defaults` defaults list

Method `setCitation()`: Set citation

Usage:

```
ISOIdentification19139$setCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Method setAbstract(): Set abstract

Usage:

```
ISOIdentification19139$setAbstract(abstract, locales = NULL)
```

Arguments:

abstract abstract

locales list of localized abstracts. Default is NULL

Method setPurpose(): Set purpose

Usage:

```
ISOIdentification19139$setPurpose(purpose, locales = NULL)
```

Arguments:

purpose purpose

locales list of localized texts. Default is NULL

Method addCredit(): Adds credit

Usage:

```
ISOIdentification19139$addCredit(credit, locales = NULL)
```

Arguments:

credit credit

locales list of localized texts. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method delCredit(): Deletes credit

Usage:

```
ISOIdentification19139$delCredit(credit, locales = NULL)
```

Arguments:

credit credit

locales list of localized texts. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method addStatus(): Adds status

Usage:

```
ISOIdentification19139$addStatus(status)
```

Arguments:

status object of class [ISOProgress](#) or any [character](#) among values returned by [ISOProgress\\$values\(\)](#)

Returns: TRUE if added, FALSE otherwise

Method delStatus(): Deletes status

Usage:

```
ISOIdentification19139$delStatus(status)
```

Arguments:

status object of class [ISOProgress](#) or any [character](#) among values returned by `ISOProgress$values()`

Returns: TRUE if deleted, FALSE otherwise

Method `addPointOfContact()`: Adds point of contact

Usage:

`ISOIdentification19139$addPointOfContact(pointOfContact)`

Arguments:

pointOfContact object of class [ISOResponsibleParty](#)

Returns: TRUE if added, FALSE otherwise

Method `delPointOfContact()`: Deletes point of contact

Usage:

`ISOIdentification19139$delPointOfContact(pointOfContact)`

Arguments:

pointOfContact object of class [ISOResponsibleParty](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addResourceMaintenance()`: Adds resource maintenance

Usage:

`ISOIdentification19139$addResourceMaintenance(resourceMaintenance)`

Arguments:

resourceMaintenance object of class [ISOMaintenanceInformation](#)

Returns: TRUE if added, FALSE otherwise

Method `setResourceMaintenance()`: Set resource maintenance

Usage:

`ISOIdentification19139$setResourceMaintenance(resourceMaintenance)`

Arguments:

resourceMaintenance object of class [ISOMaintenanceInformation](#)

Returns: TRUE if set, FALSE otherwise

Method `delResourceMaintenance()`: Deletes resource maintenance

Usage:

`ISOIdentification19139$delResourceMaintenance(resourceMaintenance)`

Arguments:

resourceMaintenance object of class [ISOMaintenanceInformation](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addGraphicOverview()`: Adds graphic overview

Usage:

ISOIdentification19139\$addGraphicOverview(graphicOverview)

Arguments:

graphicOverview object of class [ISOBrowseGraphic](#)

Returns: TRUE if added, FALSE otherwise

Method setGraphicOverview(): Sets graphic overview

Usage:

ISOIdentification19139\$setGraphicOverview(graphicOverview)

Arguments:

graphicOverview object of class [ISOBrowseGraphic](#)

Returns: TRUE if set, FALSE otherwise

Method delGraphicOverview(): Deletes graphic overview

Usage:

ISOIdentification19139\$delGraphicOverview(graphicOverview)

Arguments:

graphicOverview object of class [ISOBrowseGraphic](#)

Returns: TRUE if deleted, FALSE otherwise

Method addFormat(): Adds format

Usage:

ISOIdentification19139\$addFormat(format)

Arguments:

format object of class [ISOFormat](#)

Returns: TRUE if added, FALSE otherwise

Method delFormat(): Deletes format

Usage:

ISOIdentification19139\$delFormat(format)

Arguments:

format object of class [ISOFormat](#)

Returns: TRUE if deleted, FALSE otherwise

Method addKeywords(): Adds keywords

Usage:

ISOIdentification19139\$addKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if added, FALSE otherwise

Method setKeywords(): Set keywords

Usage:

ISOIdentification19139\$setKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if set, FALSE otherwise

Method delKeywords(): Deletes keywords

Usage:

ISOIdentification19139\$delKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if deleted, FALSE otherwise

Method addResourceConstraints(): Adds resource constraints

Usage:

ISOIdentification19139\$addResourceConstraints(resourceConstraints)

Arguments:

resourceConstraints object of class [ISOConstraints](#)

Returns: TRUE if added, FALSE otherwise

Method delResourceConstraints(): Deletes resource constraints

Usage:

ISOIdentification19139\$delResourceConstraints(resourceConstraints)

Arguments:

resourceConstraints object of class [ISOConstraints](#)

Returns: TRUE if deleted, FALSE otherwise

Method addResourceSpecificUsage(): Adds resource specific usage

Usage:

ISOIdentification19139\$addResourceSpecificUsage(usage)

Arguments:

usage object of class [ISOUsage](#)

Returns: TRUE if added, FALSE otherwise

Method delResourceSpecificUsage(): Deletes resource specific usage

Usage:

ISOIdentification19139\$delResourceSpecificUsage(usage)

Arguments:

usage object of class [ISOUsage](#)

Returns: TRUE if deleted, FALSE otherwise

Method addAggregateInformation(): Adds aggregate information

Usage:

ISOIdentification19139\$addAggregateInformation(aggregateInfo)

Arguments:

aggregateInfo object of class [ISOAggregateInformation](#)

Returns: TRUE if added, FALSE otherwise

Method delAggregateInformation(): Deletes aggregate information

Usage:

ISOIdentification19139\$delAggregateInformation(aggregateInfo)

Arguments:

aggregateInfo object of class [ISOAggregateInformation](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOIdentification19139\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractMD_Identification

ISOImageDescription *ISOImageDescription*

Description

ISOImageDescription

ISOImageDescription

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOImageDescription

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractContentInformation](#)
 -> [geometa::ISOCoverageDescription](#) -> ISOImageDescription

Public fields

illuminationElevationAngle illuminationElevationAngle [0..1]
 illuminationAzimuthAngle illuminationAzimuthAngle [0..1]
 imagingCondition imagingCondition [0..1]
 imageQualityCode imageQualityCode [0..1]
 cloudCoverPercentage cloudCoverPercentage [0..1]
 processingLevelCode processingLevelCode [0..1]
 compressionGenerationQuantity compressionGenerationQuantity [0..1]
 triangulationIndicator triangulationIndicator [0..1]
 radiometricCalibrationDataAvailability radiometricCalibrationDataAvailability [0..1]
 cameraCalibrationInformationAvailability cameraCalibrationInformationAvailability [0..1]
 filmDistortionInformationAvailability filmDistortionInformationAvailability [0..1]
 lensDistortionInformationAvailability lensDistortionInformationAvailability [0..1]

Methods**Public methods:**

- [ISOImageDescription\\$new\(\)](#)
- [ISOImageDescription\\$setIlluminationElevationAngle\(\)](#)
- [ISOImageDescription\\$setIlluminationAzimuthAngle\(\)](#)
- [ISOImageDescription\\$setImagingCondition\(\)](#)
- [ISOImageDescription\\$setImageQualityCode\(\)](#)
- [ISOImageDescription\\$setCloudCoverPercentage\(\)](#)
- [ISOImageDescription\\$setProcessingLevelCode\(\)](#)
- [ISOImageDescription\\$setCompressionGenerationQuantity\(\)](#)
- [ISOImageDescription\\$setTriangulationIndicator\(\)](#)
- [ISOImageDescription\\$setRadiometricCalibrationDataAvailability\(\)](#)
- [ISOImageDescription\\$setCameraCalibrationInformationAvailability\(\)](#)
- [ISOImageDescription\\$setFilmDistortionInformationAvailability\(\)](#)
- [ISOImageDescription\\$setLensDistortionInformationAvailability\(\)](#)
- [ISOImageDescription\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOImageDescription$new(xml = NULL)`

Arguments:

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

Method setIlluminationElevationAngle(): Set illumination elevation angle

Usage:

ISOImageDescription\$setIlluminationElevationAngle(illuminationElevationAngle)

Arguments:

illuminationElevationAngle object of class [numeric](#)

Method setIlluminationAzimuthAngle(): Set illumination azimuth angle

Usage:

ISOImageDescription\$setIlluminationAzimuthAngle(illuminationAzimuthAngle)

Arguments:

illuminationAzimuthAngle object of class [numeric](#)

Method setImagingCondition(): Set imaging condition

Usage:

ISOImageDescription\$setImagingCondition(imagingCondition)

Arguments:

imagingCondition object of class [ISOImagingCondition](#) or [character](#) among values returned by ISOImagingCondition\$values()

Method setImageQualityCode(): Set image quality code

Usage:

ISOImageDescription\$setImageQualityCode(code)

Arguments:

code object of class [ISOMetaIdentifier](#)

Method setCloudCoverPercentage(): Set cloud cover percentage

Usage:

ISOImageDescription\$setCloudCoverPercentage(cloudCoverPercentage)

Arguments:

cloudCoverPercentage object of class [numeric](#)

Method setProcessingLevelCode(): Set processing level code

Usage:

ISOImageDescription\$setProcessingLevelCode(code)

Arguments:

code object of class [ISOMetaIdentifier](#)

Method setCompressionGenerationQuantity(): Set compression generation quantity

Usage:

ISOImageDescription\$setCompressionGenerationQuantity(quantity)

Arguments:

quantity object of class [integer](#)

Method setTriangulationIndicator(): Set triangulation indicator

Usage:

```
ISOImageDescription$setTriangulationIndicator(triangulationIndicator)
```

Arguments:

triangulationIndicator object of class [logical](#)

Method setRadiometricCalibrationDataAvailability(): Set radiometric calibration data availability

Usage:

```
ISOImageDescription$setRadiometricCalibrationDataAvailability(  
  radiometricCalibrationDataAvailability  
)
```

Arguments:

radiometricCalibrationDataAvailability object of class [logical](#)

Method setCameraCalibrationInformationAvailability(): Set camera calibration information availability

Usage:

```
ISOImageDescription$setCameraCalibrationInformationAvailability(  
  cameraCalibrationInformationAvailability  
)
```

Arguments:

cameraCalibrationInformationAvailability object of class [logical](#)

Method setFilmDistortionInformationAvailability(): Set film distortion information availability

Usage:

```
ISOImageDescription$setFilmDistortionInformationAvailability(  
  filmDistortionInformationAvailability  
)
```

Arguments:

filmDistortionInformationAvailability object of class [logical](#)

Method setLensDistortionInformationAvailability(): Set lens distortion information availability

Usage:

```
ISOImageDescription$setLensDistortionInformationAvailability(  
  lensDistortionInformationAvailability  
)
```

Arguments:

lensDistortionInformationAvailability object of class [logical](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_ImageDescription
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_ImageDescription

Examples

```
#create image description
md <- ISOImageDescription$new()
md$setAttributeDescription("test")
md$setContenttype("modelResult")

#adding 3 arbitrary dimensions
for(i in 1:3){
  band <- ISOBand$new()
  mn <- ISOMemberName$new(aName = sprintf("name %s",i), attributeType = sprintf("type %s",i))
  band$setSequenceIdentifier(mn)
  band$setDescriptor("descriptor")
  band$setMaxValue(10)
  band$setMinValue(1)
  gml <- GMLBaseUnit$new(id = sprintf("ID%s",i))
  gml$setDescriptionReference("someref")
  gml$setIdentifier("identifier", "codespace")
  gml$addName("name1", "codespace")
  gml$addName("name2", "codespace")
  gml$setQuantityTypeReference("someref")
  gml$setCatalogSymbol("symbol")
  gml$setUnitsSystem("somelink")
  band$setUnits(gml)
  band$setPeakResponse(9)
  band$setBitsPerValue(5)
  band$setToneGradation(100)
  band$setScaleFactor(1)
  band$setOffset(4)
  md$addDimension(band)
}

md$setIlluminationElevationAngle(15)
md$setIlluminationAzimuthAngle(10)
md$setImagingCondition("rain")
md$setImageQualityCode("bad")
md$setCloudCoverPercentage(90)
md$setProcessingLevelCode("high")
md$setCompressionGenerationQuantity(1L)
md$setTriangulationIndicator(FALSE)
md$setRadiometricCalibrationDataAvailability(FALSE)
md$setCameraCalibrationInformationAvailability(FALSE)
md$setFilmDistortionInformationAvailability(FALSE)
md$setLensDistortionInformationAvailability(FALSE)
```

```
xml <- md$encode()
```

ISOImageryAbstractGeolocationInformation
ISOImageryAbstractGeolocationInformation

Description

ISOImageryAbstractGeolocationInformation
 ISOImageryAbstractGeolocationInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOimagery geolocation information

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryAbstractGeolocationInformation

Methods

Public methods:

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

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

abstract class

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_AbstractMI_GeolocationInformation

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_AbstractMI_GeolocationInformation

ISOImageryAcquisitionInformation

ISOImageryAcquisitionInformation

Description

ISOImageryAcquisitionInformation

ISOImageryAcquisitionInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Imagery AcquisitionInformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractAcquisitionInformation](#)
-> ISOImageryAcquisitionInformation

Public fields

scope scope [0..1]: ISOScope

instrument instrument [0..*]: ISOImageryInstrument

operation operation [0..*]: ISOImageryOperation

platform platform [0..*]: ISOImageryPlatform

acquisitionPlan acquisitionPlan [0..*]: ISOImageryPlan

objective objective [0..*]: ISOImageryObjective

acquisitionRequirement acquisitionRequirement [0..*]: ISOImageryRequirement

environmentalConditions environmentalConditions [0..1]: ISOImageryEnvironmentalRecord

Methods

Public methods:

- `ISOImageryAcquisitionInformation$new()`
- `ISOImageryAcquisitionInformation$setScope()`
- `ISOImageryAcquisitionInformation$addInstrument()`
- `ISOImageryAcquisitionInformation$delInstrument()`
- `ISOImageryAcquisitionInformation$addOperation()`
- `ISOImageryAcquisitionInformation$delOperation()`
- `ISOImageryAcquisitionInformation$addPlatform()`
- `ISOImageryAcquisitionInformation$delPlatform()`
- `ISOImageryAcquisitionInformation$addPlan()`
- `ISOImageryAcquisitionInformation$delPlan()`
- `ISOImageryAcquisitionInformation$addObjective()`
- `ISOImageryAcquisitionInformation$delObjective()`
- `ISOImageryAcquisitionInformation$addRequirement()`
- `ISOImageryAcquisitionInformation$delRequirement()`
- `ISOImageryAcquisitionInformation$setEnvironmentConditions()`
- `ISOImageryAcquisitionInformation$clone()`

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setScope()`: Set scope

Usage:

```
ISOImageryAcquisitionInformation$setScope(scope)
```

Arguments:

scope object of class [ISOScope](#)

Method `addInstrument()`: Adds instrument

Usage:

```
ISOImageryAcquisitionInformation$addInstrument(instrument)
```

Arguments:

instrument object of class [ISOImageryInstrument](#)

Returns: TRUE if added, FALSE otherwise

Method `delInstrument()`: Deletes instrument

Usage:

```
ISOImageryAcquisitionInformation$delInstrument(instrument)
```

Arguments:

instrument object of class [ISOImageryInstrument](#)

Returns: TRUE if deleted, FALSE otherwise

Method addOperation(): Adds operation

Usage:

ISOImageryAcquisitionInformation\$addOperation(operation)

Arguments:

operation object of class [ISOImageryOperation](#)

Returns: TRUE if added, FALSE otherwise

Method delOperation(): Deletes operation

Usage:

ISOImageryAcquisitionInformation\$delOperation(operation)

Arguments:

operation object of class [ISOImageryOperation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addPlatform(): Adds platform

Usage:

ISOImageryAcquisitionInformation\$addPlatform(platform)

Arguments:

platform object of class [ISOImageryPlatform](#)

Returns: TRUE if added, FALSE otherwise

Method delPlatform(): Deletes platform

Usage:

ISOImageryAcquisitionInformation\$delPlatform(platform)

Arguments:

platform object of class [ISOImageryPlatform](#)

Returns: TRUE if deleted, FALSE otherwise

Method addPlan(): Adds plan

Usage:

ISOImageryAcquisitionInformation\$addPlan(plan)

Arguments:

plan object of class [ISOImageryPlan](#)

Returns: TRUE if added, FALSE otherwise

Method delPlan(): Deletes plan

Usage:

ISOImageryAcquisitionInformation\$delPlan(plan)

Arguments:

plan object of class [ISOImageryPlan](#)

Returns: TRUE if deleted, FALSE otherwise

Method addObjective(): Adds objective

Usage:

ISOImageryAcquisitionInformation\$addObjective(objective)

Arguments:

objective object of class [ISOImageryObjective](#)

Returns: TRUE if added, FALSE otherwise

Method delObjective(): Deletes objective

Usage:

ISOImageryAcquisitionInformation\$delObjective(objective)

Arguments:

objective object of class [ISOImageryObjective](#)

Returns: TRUE if deleted, FALSE otherwise

Method addRequirement(): Adds requirement

Usage:

ISOImageryAcquisitionInformation\$addRequirement(requirement)

Arguments:

requirement object of class [ISOImageryRequirement](#)

Returns: TRUE if added, FALSE otherwise

Method delRequirement(): Deletes requirement

Usage:

ISOImageryAcquisitionInformation\$delRequirement(requirement)

Arguments:

requirement object of class [ISOImageryRequirement](#)

Returns: TRUE if deleted, FALSE otherwise

Method setEnvironmentConditions(): Set environment conditions

Usage:

ISOImageryAcquisitionInformation\$setEnvironmentConditions(conditions)

Arguments:

conditions object of class [ISOImageryEnvironmentalRecord](#)

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

Usage:

ISOImageryAcquisitionInformation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_AcquisitionInformation
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_AcquisitionInformation

Examples

```
md = ISOImageryAcquisitionInformation$new()
xml <- md$encode()
```

ISOImageryAlgorithm *ISOImageryAlgorithm*

Description

ISOImageryAlgorithm
ISOImageryAlgorithm

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery algorithm

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryAlgorithm

Public fields

citation citation [1..1]: ISOCitation
description description [1..1]: character|ISOLocalisedCharacterString

Methods**Public methods:**

- [ISOImageryAlgorithm\\$new\(\)](#)
- [ISOImageryAlgorithm\\$setCitation\(\)](#)
- [ISOImageryAlgorithm\\$setDescription\(\)](#)
- [ISOImageryAlgorithm\\$clone\(\)](#)

Method `new()`: Initialized object

Usage:

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

Arguments:

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

Method `setCitation()`: Set citation

Usage:

```
ISOImageryAlgorithm$setCitation(citation)
```

Arguments:

`citation` object of class [ISOCitation](#)

Method `setDescription()`: Set description

Usage:

```
ISOImageryAlgorithm$setDescription(description, locales = NULL)
```

Arguments:

`description` description

`locales` list of localized texts. Default is NULL

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_LE_Algorithm
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LE_Algorithm

Examples

```

md <- ISOImageryAlgorithm$new()

#add citation
rp1 <- ISOResponsibleParty$new()
rp1$setIndividualName("someone1")
rp1$setOrganisationName("somewhere1")
rp1$setPositionName("someposition1")
rp1$setRole("pointOfContact")
contact1 <- ISOContact$new()
phone1 <- ISOTelephone$new()
phone1$setVoice("myphonenumber1")
phone1$setFacsimile("myfacsimile1")
contact1$setPhone(phone1)
address1 <- ISOAddress$new()
address1$setDeliveryPoint("theaddress1")
address1$setCity("thecity1")
address1$setPostalCode("111")
address1$setCountry("France")
address1$setEmail("someone1@theorg.org")
contact1$setAddress(address1)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact1$setOnlineResource(res)
rp1$setContactInfo(contact1)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp1)
md$setCitation(ct)
md$setDescription("some description")

xml <- md$encode()

```

Description

ISOImageryBand
ISOImageryBand

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery band

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISORangeDimension](#)
-> [geometa::ISOBand](#) -> ISOImageryBand

Public fields

bandBoundaryDefinition bandBoundaryDefinition [0..1]: ISOImageryBandDefinition
nominalSpatialResolution nominalSpatialResolution [0..1] ISOBaseReal
transferFunctionType transferFunctionType [0..1]: ISOImageryTransferFunctionType
transmittedPolarisation transmittedPolarisation [0..1]: ISOImageryPolarisationOrientation
detectedPolarisation detectedPolarisation [0..1]: ISOImageryPolarisationOrientation

Methods**Public methods:**

- [ISOImageryBand\\$new\(\)](#)
- [ISOImageryBand\\$setBandBoundaryDefinition\(\)](#)
- [ISOImageryBand\\$setNominalSpatialResolution\(\)](#)
- [ISOImageryBand\\$setTransferFunctionType\(\)](#)
- [ISOImageryBand\\$setTransmittedPolarisation\(\)](#)
- [ISOImageryBand\\$setDetectedPolarisation\(\)](#)
- [ISOImageryBand\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOImageryBand\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setBandBoundaryDefinition\(\)](#): Set band boundary definition

Usage:

[ISOImageryBand\\$setBandBoundaryDefinition\(definition\)](#)

Arguments:

definition object of class [ISOImageryBandDefinition](#) or [character](#) among values returned by `ISOImageryBandDefinition$values()`

Method `setNominalSpatialResolution()`: Set nominal spatial resolution

Usage:

`ISOImageryBand$setNominalSpatialResolution(resolution)`

Arguments:

resolution object of class [numeric](#)

Method `setTransferFunctionType()`: Set transfer function type

Usage:

`ISOImageryBand$setTransferFunctionType(functionType)`

Arguments:

functionType object of class [ISOImageryTransferFunctionType](#) or any [character](#) from values returned by `ISOImageryTransferFunctionType$values()`

Method `setTransmittedPolarisation()`: Set transmitted polarisation

Usage:

`ISOImageryBand$setTransmittedPolarisation(polarisation)`

Arguments:

polarisation object of class [ISOImageryPolarisationOrientation](#) or any [character](#) from values returned by `ISOImageryPolarisationOrientation$values()`

Method `setDetectedPolarisation()`: Set detected polarisation

Usage:

`ISOImageryBand$setDetectedPolarisation(polarisation)`

Arguments:

polarisation object of class [ISOImageryPolarisationOrientation](#) or any [character](#) from values returned by `ISOImageryPolarisationOrientation$values()`

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

Usage:

`ISOImageryBand$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Band
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MI_Band

Examples

```

#create band range dimension
md <- ISOImageryBand$new()
md$setSequenceIdentifier(ISOMemberName$new(aName = "name", attributeType = "type"))
md$setDescriptor("descriptor")
md$setMaxValue(10)
md$setMinValue(1)
gml <- GMLBaseUnit$new(id = "ID")
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name1", "codespace")
gml$addName("name2", "codespace")
gml$setQuantityTypeReference("someref")
gml$setCatalogSymbol("symbol")
gml$setUnitsSystem("somelink")
md$setUnits(gml)
md$setPeakResponse(9)
md$setBitsPerValue(5)
md$setToneGradation(100)
md$setScaleFactor(1)
md$setOffset(4)

md$setBandBoundaryDefinition("fiftyPercent")
md$setNominalSpatialResolution(14.5)
md$setTransferFunctionType("linear")
md$setTransmittedPolarisation("horizontal")
md$setDetectedPolarisation("horizontal")

xml <- md$encode()

```

ISOImageryBandDefinition

ISOImageryBandDefinition

Description

ISOImageryBandDefinition

ISOImageryBandDefinition

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO Imagery Band definition

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue  
-> ISOImageryBandDefinition
```

Methods**Public methods:**

- `ISOImageryBandDefinition$new()`
- `ISOImageryBandDefinition$clone()`

Method `new()`: Initializes object

Usage:

```
ISOImageryBandDefinition$new(xml = NULL, value, description = NULL)
```

Arguments:

```
xml  object of class XMLInternalNode-class  
value value  
description description
```

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

Usage:

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

Arguments:

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

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_BandDefinition
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MI_BandDefinition

Examples

```
#possible values  
values <- ISOImageryBandDefinition$values(labels = TRUE)  
  
#some def  
fifty <- ISOImageryBandDefinition$new(value = "fiftyPercent")
```

ISOImageryContext *ISOImageryContext*

Description

ISOImageryContext

ISOImageryContext

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Imagery Context

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOImageryContext

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISOImageryContext$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_ContextCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_ContextCode

Examples

```
#possible values
values <- ISOImageryContext$values(labels = TRUE)

#some def
acquisition <- ISOImageryContext$new(value = "acquisition")
```

ISOImageryCoverageDescription
ISOImageryCoverageDescription

Description

ISOImageryCoverageDescription
 ISOImageryCoverageDescription

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery image description

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractContentInformation
-> geometa::ISOCoverageDescription -> ISOImageryCoverageDescription
```

Public fields

```
rangeElementDescription rangeElementDescription [0..*]: ISOImageryRangeElementDescription
```

Methods**Public methods:**

- [ISOImageryCoverageDescription\\$new\(\)](#)
- [ISOImageryCoverageDescription\\$addRangeElementDescription\(\)](#)
- [ISOImageryCoverageDescription\\$delRangeElementDescription\(\)](#)

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

Method new(): Initializes object

Usage:

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

Arguments:

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

Method addRangeElementDescription(): Adds range element description

Usage:

```
ISOImageryCoverageDescription$addRangeElementDescription(description)
```

Arguments:

description object of class [ISOImageryRangeElementDescription](#)

Returns: TRUE if added, FALSE otherwise

Method delRangeElementDescription(): Deletes range element description

Usage:

```
ISOImageryCoverageDescription$delRangeElementDescription(description)
```

Arguments:

description object of class [ISOImageryRangeElementDescription](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_CoverageDescription
- 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MI_CoverageDescription

Examples

```
#create coverage description
md <- ISOImageryCoverageDescription$new()
md$setAttributeDescription("test")
md$setContentType("modelResult")

#adding 3 arbitrary dimensions
```



```

for(i in 1:3){
  band <- ISOBand$new()
  mn <- ISOMemberName$new(aName = sprintf("name %s",i), attributeType = sprintf("type %s",i))
  band$setSequenceIdentifier(mn)
  band$setDescriptor("descriptor")
  band$setMaxValue(10)
  band$setMinValue(1)
  gml <- GMLBaseUnit$new(id = sprintf("ID%s",i))
  gml$setDescriptionReference("someref")
  gml$setIdentifier("identifier", "codespace")
  gml$addName("name1", "codespace")
  gml$addName("name2", "codespace")
  gml$setQuantityTypeReference("someref")
  gml$setCatalogSymbol("symbol")
  gml$setUnitsSystem("somelink")
  band$setUnits(gml)
  band$setPeakResponse(9)
  band$setBitsPerValue(5)
  band$setToneGradation(100)
  band$setScaleFactor(1)
  band$setOffset(4)
  md$addDimension(band)
}

des <- ISOImageryRangeElementDescription$new()
des$setName("name")
des$setDefinition("description")
des$addRangeElement("record1")
des$addRangeElement("record2")
md$addRangeElementDescription(des)
xml <- md$encode()

```

ISOImageryCoverageResult

ISOImageryCoverageResult

Description

ISOImageryCoverageResult

ISOImageryCoverageResult

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery coverage result

Super classes

`geometa::geometaLogger` -> `geometa::ISOAbstractObject` -> `geometa::ISOAbstractResult`
 -> `ISOImageryCoverageResult`

Public fields

`resultScope` `resultScope` [0..1]: `ISOScope`
`dateTime` `dateTime` [0..1]: `POSIX/date`
`spatialRepresentationType` `spatialRepresentationType` [1..1]: `ISOSpatialRepresentationType`
`resultFile` `resultFile` [1..1]: `ISODataFile`
`resultSpatialRepresentation` `resultSpatialRepresentation` [1..1]: `ISOSpatialRepresentation`
`resultContentDescription` `resultContentDescription` [1..1]: `ISOCoverageDescription`
`resultFormat` `resultFormat` [1..1]: `ISOFormat`

Methods**Public methods:**

- `ISOImageryCoverageResult$new()`
- `ISOImageryCoverageResult$setResultScope()`
- `ISOImageryCoverageResult$setDateTime()`
- `ISOImageryCoverageResult$setSpatialRepresentationType()`
- `ISOImageryCoverageResult$setResultFile()`
- `ISOImageryCoverageResult$setResultSpatialRepresentation()`
- `ISOImageryCoverageResult$setResultCoverageDescription()`
- `ISOImageryCoverageResult$setResultFormat()`
- `ISOImageryCoverageResult$clone()`

Method `new()`: Initializes object

Usage:

`ISOImageryCoverageResult$new(xml = NULL)`

Arguments:

`xml` object of class `XMLInternalNode-class`

Method `setResultScope()`: Set result scope

Usage:

`ISOImageryCoverageResult$setResultScope(scope)`

Arguments:

`scope` object of class `ISOScope`

Method `setDateTime()`: Set date time

Usage:

`ISOImageryCoverageResult$setDateTime(dateTime)`

Arguments:

dateTime date time, object of class [POSIXct](#)

Method setSpatialRepresentation(): Set spatial representation type

Usage:

```
ISOImageryCoverageResult$setSpatialRepresentation(  
  spatialRepresentation  
)
```

Arguments:

spatialRepresentation object of class [ISOSpatialRepresentationType](#) or [character](#) among values returned by [ISOSpatialRepresentationType\\$values\(\)](#)

Method setResultFile(): Set result file

Usage:

```
ISOImageryCoverageResult$setResultFile(resultFile)
```

Arguments:

resultFile object of class [ISODataFile](#) (in ISO 19139) or [ISOQualityResultFile](#) (in ISO 19115-3)

Method setResultSpatialRepresentation(): Set result spatial representation

Usage:

```
ISOImageryCoverageResult$setResultSpatialRepresentation(spatialRepresentation)
```

Arguments:

spatialRepresentation object of class [ISOSpatialRepresentation](#)

Method setResultCoverageDescription(): Set result coverage description

Usage:

```
ISOImageryCoverageResult$setResultCoverageDescription(coverageDescription)
```

Arguments:

coverageDescription object of class [ISOCoverageDescription](#)

Method setResultFormat(): Set format

Usage:

```
ISOImageryCoverageResult$setResultFormat(format)
```

Arguments:

format object of class [ISOFormat](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_QE_CoverageResult
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_QE_CoverageResult

ISOImageryEnvironmentalRecord

ISOImageryEnvironmentalRecord

Description

ISOImageryEnvironmentalRecord

ISOImageryEnvironmentalRecord

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery environmental record

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryEnvironmentalRecord

Public fields

averageAirTemperature averageAirTemperature

maxRelativeHumidity maxRelativeHumidity

maxAltitude maxAltitude

meterologicalConditions meterologicalConditions

solarAzimuth solarAzimuth

solarElevation solarElevation

Methods**Public methods:**

- [ISOImageryEnvironmentalRecord\\$new\(\)](#)
- [ISOImageryEnvironmentalRecord\\$setAverageAirTemperature\(\)](#)
- [ISOImageryEnvironmentalRecord\\$setMaxRelativeHumidity\(\)](#)
- [ISOImageryEnvironmentalRecord\\$setMaxAltitude\(\)](#)
- [ISOImageryEnvironmentalRecord\\$setMeterologicalConditions\(\)](#)
- [ISOImageryEnvironmentalRecord\\$setSolarAzimuth\(\)](#)
- [ISOImageryEnvironmentalRecord\\$setSolarElevation\(\)](#)

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

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setAverageAirTemperature()`: Set average air temperature

Usage:

```
ISOImageryEnvironmentalRecord$setAverageAirTemperature(temperature)
```

Arguments:

temperature object of class [numeric](#)

Method `setMaxRelativeHumidity()`: Set max relative humidity

Usage:

```
ISOImageryEnvironmentalRecord$setMaxRelativeHumidity(humidity)
```

Arguments:

humidity object of class [numeric](#)

Method `setMaxAltitude()`: Set max altitude

Usage:

```
ISOImageryEnvironmentalRecord$setMaxAltitude(altitude)
```

Arguments:

altitude object of class [numeric](#)

Method `setMeterologicalConditions()`: Set meterological conditions

Usage:

```
ISOImageryEnvironmentalRecord$setMeterologicalConditions(  
  conditions,  
  locales = NULL  
)
```

Arguments:

conditions conditions

locales list of localized texts. Default is NULL

Method `setSolarAzimuth()`: Set solar azimuth

Usage:

```
ISOImageryEnvironmentalRecord$setSolarAzimuth(solarAzimuth)
```

Arguments:

solarAzimuth object of class [numeric](#)

Method `setSolarElevation()`: Set solar elevation

Usage:

```
ISOImageryEnvironmentalRecord$setSolarElevation(solarElevation)
```

Arguments:

solarElevation object of class [numeric](#)

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_EnvironmentalRecord
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_EnvironmentalRecord

Examples

```
md <- ISOImageryEnvironmentalRecord$new()
md$setAverageAirTemperature(3)
md$setMaxRelativeHumidity(67)
md$setMaxAltitude(400)
md$setMeterologicalConditions("some conditions")
xml <- md$encode()
```

ISOImageryEvent

ISOImageryEvent

Description

ISOImageryEvent

ISOImageryEvent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery event

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryEvent

Public fields

identifier identifier [1..1]: ISOMetaIdentifier
 trigger trigger [1..1]: ISOImageryTrigger
 context context [1..1]: ISOImageryContext
 sequence sequence [1..1]: ISOImagerySequence
 time time [1..1]: POSIXt
 relatedPass relatedPass [0..1]: ISOImageryPlatformPass
 relatedSensor relatedSensor [0..*]: ISOImageryInstrument
 expectedObjective expectedObjective [0..*]: ISOImageryObjective

Methods**Public methods:**

- [ISOImageryEvent\\$new\(\)](#)
- [ISOImageryEvent\\$setIdentifier\(\)](#)
- [ISOImageryEvent\\$setTrigger\(\)](#)
- [ISOImageryEvent\\$setContext\(\)](#)
- [ISOImageryEvent\\$setSequence\(\)](#)
- [ISOImageryEvent\\$setTime\(\)](#)
- [ISOImageryEvent\\$setPlatformPass\(\)](#)
- [ISOImageryEvent\\$addSensor\(\)](#)
- [ISOImageryEvent\\$delSensor\(\)](#)
- [ISOImageryEvent\\$addObjective\(\)](#)
- [ISOImageryEvent\\$delObjective\(\)](#)
- [ISOImageryEvent\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOImageryEvent\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setIdentifier\(\)](#): Set identifier

Usage:

[ISOImageryEvent\\$setIdentifier\(identifier\)](#)

Arguments:

identifier object of class [ISOMetaIdentifier](#) or [character](#)

Method [setTrigger\(\)](#): Set trigger

Usage:

ISOImageryEvent\$setTrigger(trigger)

Arguments:

trigger object of class [ISOImageryTrigger](#) or any [character](#) among values returned by ISOImageryTrigger\$values()

Method setContext(): Set context*Usage:*

ISOImageryEvent\$setContext(context)

Arguments:

context object of class [ISOImageryContext](#) or any [character](#) among values returned by ISOImageryContext\$values()

Method setSequence(): Set sequence*Usage:*

ISOImageryEvent\$setSequence(sequence)

Arguments:

sequence object of class [ISOImagerySequence](#) or any [character](#) among values returned by ISOImagerySequence\$values()

Method setTime(): Set time*Usage:*

ISOImageryEvent\$setTime(time)

Arguments:

time object of class [POSIXct](#)

Method setPlatformPass(): Set platform pass*Usage:*

ISOImageryEvent\$setPlatformPass(platformPass)

Arguments:

platformPass object of class [ISOImageryPlatformPass](#)

Method addSensor(): Adds sensor*Usage:*

ISOImageryEvent\$addSensor(sensor)

Arguments:

sensor object of class [ISOImageryInstrument](#)

Returns: TRUE if added, FALSE otherwise

Method delSensor(): Deletes sensor*Usage:*

ISOImageryEvent\$delSensor(sensor)

Arguments:

sensor object of class [ISOImageryInstrument](#)

Returns: TRUE if deleted, FALSE otherwise

Method addObjective(): Adds objective

Usage:

```
ISOImageryEvent$addObjective(objective)
```

Arguments:

objective object of class [ISOImageryObjective](#)

Returns: TRUE if added, FALSE otherwise

Method delObjective(): Deletes objective

Usage:

```
ISOImageryEvent$delObjective(objective)
```

Arguments:

objective object of class [ISOImageryObjective](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Event
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Event

Examples

```
md <- ISOImageryEvent$new()
md$setIdentifier("event_1")
md$setTrigger("manual")
md$setContext("pass")
md$setSequence("instantaneous")
md$setTime(Sys.time())

xml <- md$encode()
```

ISOImageryGCP

*ISOImageryGCPCollection***Description**

ISOImageryGCPCollection

ISOImageryGCPCollection

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO imagery gcp collection**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLAbstractObject](#)
-> ISOImageryGCP**Public fields**

geographicCoordinates geographicCoordinates

Methods**Public methods:**

- [ISOImageryGCP\\$new\(\)](#)
- [ISOImageryGCP\\$setGeographicCoordinates\(\)](#)
- [ISOImageryGCP\\$clone\(\)](#)

Method [new\(\)](#): Initializes object*Usage:*[ISOImageryGCP\\$new](#)(xml = NULL)*Arguments:*xml object of class [XMLInternalNode-class](#)**Method** [setGeographicCoordinates\(\)](#): Set geographic coordinates*Usage:*[ISOImageryGCP\\$setGeographicCoordinates](#)(sfg = NULL, m = NULL)*Arguments:*sfg simple feature object from **sf**m object of class [matrix](#)

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_GCP
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MI_GCP

Examples

```
md <- ISOImageryGCP$new()
require(sf)
pt <- sf::st_point(c(1,1))
md$setGeographicCoordinates(sfg = pt)
xml <- md$encode()
```

ISOImageryGCPCollection

ISOImageryGCPCollection

Description

ISOImageryGCPCollection

ISOImageryGCPCollection

Format

`R6Class` object.

Value

Object of `R6Class` for modelling an ISO imagery gcp collection

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOImageryAbstractGeolocationInformat
-> ISOImageryGCPCollection
```

Public fields

collectionIdentification collectionIdentification [1..1]: integer
 collectionName collectionName [1..1]: character!ISOLocalisedCharacterString
 coordinateReferenceSystem coordinateReferenceSystem [1..1]: ISOAbstractReferenceSystem
 gcp gcp [0..*]: list of ISOImageryGCP

Methods**Public methods:**

- [ISOImageryGCPCollection\\$new\(\)](#)
- [ISOImageryGCPCollection\\$setCollectionIdentification\(\)](#)
- [ISOImageryGCPCollection\\$setCollectionName\(\)](#)
- [ISOImageryGCPCollection\\$setCoordinateReferenceSystem\(\)](#)
- [ISOImageryGCPCollection\\$addGCP\(\)](#)
- [ISOImageryGCPCollection\\$delGCP\(\)](#)
- [ISOImageryGCPCollection\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOImageryGCPCollection$new(xml = NULL)`

Arguments:

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

Method [setCollectionIdentification\(\)](#): Set collection identification id

Usage:

`ISOImageryGCPCollection$setCollectionIdentification(id)`

Arguments:

id object of class [integer](#)

Method [setCollectionName\(\)](#): Set collection name

Usage:

`ISOImageryGCPCollection$setCollectionName(name, locales = NULL)`

Arguments:

name object of class [character](#)

locales list of localized names. Default is NULL

Method [setCoordinateReferenceSystem\(\)](#): Set coordinate reference system

Usage:

`ISOImageryGCPCollection$setCoordinateReferenceSystem(crs)`

Arguments:

crs object of class inheriting [ISOAbstractReferenceSystem](#)

Method [addGCP\(\)](#): Adds GCP

Usage:

```
ISOImageryGCPCollection$addGCP(gcp)
```

Arguments:

gcp object of class [ISOImageryGCP](#)

Returns: TRUE if added, FALSE otherwise

Method delGCP(): Deletes GCP

Usage:

```
ISOImageryGCPCollection$delGCP(gcp)
```

Arguments:

gcp object of class [ISOImageryGCP](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_GCPCollection
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MI_GCPCollection

Examples

```
md <- ISOImageryGCPCollection$new()
md$setCollectionIdentification(1L)
md$setCollectionName("name")
rs <- ISOReferenceSystem$new()
rsId <- ISOReferenceIdentifier$new(code = "4326", codeSpace = "EPSG")
rs$setReferenceSystemIdentifier(rsId)
md$setCoordinateReferenceSystem(rs)
xml <- md$encode()
```

ISOImageryGeometryType

ISOImageryGeometryType

Description

ISOImageryGeometryType

ISOImageryGeometryType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Imagery geometry type

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOImageryGeometryType

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISOImageryGeometryType$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_GeometryTypeCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_GeometryTypeCode

Examples

```
#possible values
values <- ISOImageryGeometryType$values(labels = TRUE)

#some def
point <- ISOImageryGeometryType$new(value = "point")
```

ISOImageryGeorectified

ISOImageryGeorectified

Description

ISOImageryGeorectified
 ISOImageryGeorectified

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO image Georectified

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractSpatialRepresentation
-> geometa::ISOSpatialRepresentation -> geometa::ISOGridSpatialRepresentation -> geometa::ISOGeorectified
-> ISOImageryGeorectified
```

Public fields

checkPoint checkPoint [0..*]: ISOImageryGCP

Methods**Public methods:**

- [ISOImageryGeorectified\\$new\(\)](#)
- [ISOImageryGeorectified\\$addCheckPoint\(\)](#)
- [ISOImageryGeorectified\\$delCheckPoint\(\)](#)

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

Method new(): Initializes object

Usage:

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

Arguments:

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

Method addCheckPoint(): Adds check point

Usage:

```
ISOImageryGeorectified$addCheckPoint(sfg = NULL, m = NULL)
```

Arguments:

sfg simple feature object from **sf**

m object of class [matrix](#)

Returns: TRUE if added, FALSE otherwise

Method delCheckPoint(): Deletes check point

Usage:

```
ISOImageryGeorectified$delCheckPoint(sfg = NULL, m = NULL)
```

Arguments:

sfg simple feature object from **sf**

m object of class [matrix](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Georectified

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MI_Georectified

ISOImageryGeoreferenceable
ISOImageryGeoreferenceable

Description

ISOImageryGeoreferenceable
ISOImageryGeoreferenceable

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery Georeferenceable

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractSpatialRepresentation](#)
-> [geometa::ISOSpatialRepresentation](#) -> [geometa::ISOGridSpatialRepresentation](#) -> [geometa::ISOGeoreferen](#)
-> ISOImageryGeoreferenceable

Public fields

geolocationInformation geolocationInformation [0..*]: ISOImageryGeolocationInformation

Methods**Public methods:**

- [ISOImageryGeoreferenceable\\$new\(\)](#)
- [ISOImageryGeoreferenceable\\$addGeolocationInformation\(\)](#)
- [ISOImageryGeoreferenceable\\$delGeolocationInformation\(\)](#)
- [ISOImageryGeoreferenceable\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOImageryGeoreferenceable\\$new\(xml = NULL\)](#)

Arguments:

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

Method [addGeolocationInformation\(\)](#): Adds geolocation information

Usage:

[ISOImageryGeoreferenceable\\$addGeolocationInformation\(geolocationInfo\)](#)

Arguments:

geolocationInfo object of class inheriting [ISOImageryAbstractGeolocationInformation](#)

Returns: TRUE if added, FALSE otherwise

Method delGeolocationInformation(): Deletes geolocation information

Usage:

ISOImageryGeoreferenceable\$delGeolocationInformation(geolocationInfo)

Arguments:

geolocationInfo object of class inheriting [ISOImageryAbstractGeolocationInformation](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOImageryGeoreferenceable\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Georeferenceable
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MI_Georeferenceable

ISOImageryImageDescription

ISOImageryImageDescription

Description

ISOImageryImageDescription

ISOImageryImageDescription

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery image description

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractContentInformation](#)
-> [geometa::ISOCoverageDescription](#) -> [geometa::ISOImageDescription](#) -> ISOImageryImageDescription

Public fields

rangeElementDescription rangeElementDescription [0..*]: ISOImageryRangeElementDescription

Methods**Public methods:**

- [ISOImageryImageDescription\\$new\(\)](#)
- [ISOImageryImageDescription\\$addRangeElementDescription\(\)](#)
- [ISOImageryImageDescription\\$delRangeElementDescription\(\)](#)
- [ISOImageryImageDescription\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOImageryImageDescription$new(xml = NULL)`

Arguments:

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

Method `addRangeElementDescription()`: Adds range element description

Usage:

`ISOImageryImageDescription$addRangeElementDescription(description)`

Arguments:

`description` object of class [ISOImageryRangeElementDescription](#)

Returns: TRUE if added, FALSE otherwise

Method `delRangeElementDescription()`: Deletes range element description

Usage:

`ISOImageryImageDescription$delRangeElementDescription(description)`

Arguments:

`description` object of class [ISOImageryRangeElementDescription](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

`ISOImageryImageDescription$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_ImageDescription
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MI_ImageDescription

Examples

```

#create image description
md <- ISOImageryImageDescription$new()
md$setAttributeDescription("test")
md$setContent("modelResult")

#adding 3 arbitrary dimensions
for(i in 1:3){
  band <- ISOBand$new()
  mn <- ISOMemberName$new(aName = sprintf("name %s",i), attributeType = sprintf("type %s",i))
  band$setSequenceIdentifier(mn)
  band$setDescriptor("descriptor")
  band$setMaxValue(10)
  band$setMinValue(1)
  gml <- GMLBaseUnit$new(id = sprintf("ID%s",i))
  gml$setDescriptionReference("someref")
  gml$setIdentifier("identifier", "codespace")
  gml$addName("name1", "codespace")
  gml$addName("name2", "codespace")
  gml$setQuantityTypeReference("someref")
  gml$setCatalogSymbol("symbol")
  gml$setUnitsSystem("somelink")
  band$setUnits(gml)
  band$setPeakResponse(9)
  band$setBitsPerValue(5)
  band$setToneGradation(100)
  band$setScaleFactor(1)
  band$setOffset(4)
  md$addDimension(band)
}

md$setIlluminationElevationAngle(15)
md$setIlluminationAzimuthAngle(10)
md$setImagingCondition("rain")
md$setImageQualityCode("bad")
md$setCloudCoverPercentage(90)
md$setProcessingLevelCode("high")
md$setCompressionGenerationQuantity(1L)
md$setTriangulationIndicator(FALSE)
md$setRadiometricCalibrationDataAvailability(FALSE)
md$setCameraCalibrationInformationAvailability(FALSE)
md$setFilmDistortionInformationAvailability(FALSE)
md$setLensDistortionInformationAvailability(FALSE)

des <- ISOImageryRangeElementDescription$new()
des$setName("name")
des$setDefinition("description")

```

```

des$addRangeElement("record1")
des$addRangeElement("record2")
md$addRangeElementDescription(des)
xml <- md$encode()

```

ISOImageryInstrument *ISOImageryPlatform*

Description

ISOImageryPlatform

ISOImageryPlatform

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery platform

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryInstrument

Public fields

citation citation [0..*]: ISOCitation

identifier identifier [1..1]: ISOMetaIdentifier

type type [1..1]: character|ISOLocalisedCharacterString

description description [0..1]: character|ISOLocalisedCharacterString

mountedOn mountedOn [0..*]: ISOImageryPlatform

otherPropertyType otherPropertyType [0..1] : ISORecordType (=> ISO 19115-3)

otherProperty otherProperty [0..1] : ISORecord (=> ISO 19115-3)

sensor sensor [0..*]: ISOImagerySensor (=> ISO 19115-3)

history history [0..*]: ISOInstrumentationEventList (=> ISO 19115-3)

Methods**Public methods:**

- [ISOImageryInstrument\\$new\(\)](#)
- [ISOImageryInstrument\\$addCitation\(\)](#)
- [ISOImageryInstrument\\$delCitation\(\)](#)
- [ISOImageryInstrument\\$setIdentifier\(\)](#)
- [ISOImageryInstrument\\$setType\(\)](#)
- [ISOImageryInstrument\\$setDescription\(\)](#)
- [ISOImageryInstrument\\$addPlatform\(\)](#)
- [ISOImageryInstrument\\$delPlatform\(\)](#)
- [ISOImageryInstrument\\$setOtherPropertyType\(\)](#)
- [ISOImageryInstrument\\$setOtherProperty\(\)](#)
- [ISOImageryInstrument\\$addSensor\(\)](#)
- [ISOImageryInstrument\\$delSensor\(\)](#)
- [ISOImageryInstrument\\$addInstrumentationEventList\(\)](#)
- [ISOImageryInstrument\\$delInstrumentationEventList\(\)](#)
- [ISOImageryInstrument\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

Method [addCitation\(\)](#): Adds citation

Usage:

```
ISOImageryInstrument$addCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method [delCitation\(\)](#): Deletes citation

Usage:

```
ISOImageryInstrument$delCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method [setIdentifier\(\)](#): Set identifier

Usage:

```
ISOImageryInstrument$setIdentifier(identifier)
```

Arguments:

identifier object of class [ISOMetaIdentifier](#) or [character](#)

Method setType(): Set type*Usage:*

```
ISOImageryInstrument$setType(type, locales = NULL)
```

Arguments:

type type

locales list of localized texts. Default is NULL

Method setDescription(): Set description*Usage:*

```
ISOImageryInstrument$setDescription(description, locales = NULL)
```

Arguments:

description description

locales list of localized texts. Default is NULL

Method addPlatform(): Adds platform*Usage:*

```
ISOImageryInstrument$addPlatform(platform)
```

Arguments:

platform object of class [ISOImageryPlatform](#)

Returns: TRUE if added, FALSE otherwise

Method delPlatform(): Deletes platform*Usage:*

```
ISOImageryInstrument$delPlatform(platform)
```

Arguments:

platform object of class [ISOImageryPlatform](#)

Returns: TRUE if deleted, FALSE otherwise

Method setOtherPropertyType(): setOtherPropertyType*Usage:*

```
ISOImageryInstrument$setOtherPropertyType(otherPropertyType)
```

Arguments:

otherPropertyType otherPropertyType object of class [ISORecordType](#)

Method setOtherProperty(): setOtherProperty*Usage:*

```
ISOImageryInstrument$setOtherProperty(otherProperty)
```

Arguments:

otherProperty otherProperty object of class [ISORecord](#)

Method addSensor(): Adds sensor

Usage:

ISOImageryInstrument\$addSensor(sensor)

Arguments:

sensor object of class [ISOImagerySensor](#)

Returns: TRUE if added, FALSE otherwise

Method delSensor(): Deletes sensor

Usage:

ISOImageryInstrument\$delSensor(sensor)

Arguments:

sensor object of class [ISOImagerySensor](#)

Returns: TRUE if deleted, FALSE otherwise

Method addInstrumentationEventList(): Adds instrumentation event list

Usage:

ISOImageryInstrument\$addInstrumentationEventList(instrumentEventList)

Arguments:

instrumentEventList object of class [ISOInstrumentationEventList](#)

Returns: TRUE if added, FALSE otherwise

Method delInstrumentationEventList(): Adds instrumentation event list

Usage:

ISOImageryInstrument\$delInstrumentationEventList(instrumentEventList)

Arguments:

instrumentEventList object of class [ISOInstrumentationEventList](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOImageryInstrument\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Instrument
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Instrument

Examples

```
md <- ISOImageryInstrument$new()
md$setIdentifier("identifier")
md$setType("type")
md$setDescription("description")
xml <- md$encode()
```

ISOImageryMetadata *ISOImageryMetadata*

Description

ISOImageryMetadata
ISOImageryMetadata

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Imagery Metadata

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOMetadata](#) -> ISOImageryMetadata

Public fields

acquisitionInformation acquisitionInformation [0..*]: ISOImageryAcquisitionInformation

Methods

Public methods:

- [ISOImageryMetadata\\$new\(\)](#)
- [ISOImageryMetadata\\$addAcquisitionInfo\(\)](#)
- [ISOImageryMetadata\\$delAcquisitionInfo\(\)](#)
- [ISOImageryMetadata\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOImageryMetadata\\$new\(xml = NULL\)](#)

Arguments:

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

Method addAcquisitionInfo(): Adds acquisition info

Usage:

```
ISOImageryMetadata$addAcquisitionInfo(acquisitionInfo)
```

Arguments:

acquisitionInfo object of class [ISOImageryAcquisitionInformation](#)

Returns: TRUE if added, FALSE otherwise

Method delAcquisitionInfo(): Deletes acquisition info

Usage:

```
ISOImageryMetadata$delAcquisitionInfo(acquisitionInfo)
```

Arguments:

acquisitionInfo object of class [ISOImageryAcquisitionInformation](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Metadata
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Metadata

Examples

```
#example 1 - WRITE: Create an ISO metadata and encode it as XML
#####
md = ISOImageryMetadata$new()
md$setFileIdentifier("my-metadata-identifier")
md$setParentIdentifier("my-parent-metadata-identifier")
md$setCharacterSet("utf8")
md$setLanguage("eng")
md$setDateStamp(ISOdate(2015, 1, 1, 1))
md$setMetadataStandardName("ISO 19115:2003/19139")
md$setMetadataStandardVersion("1.0")
md$setDataSetURI("my-dataset-identifier")

#add 3 contacts
for(i in 1:3){
  rp <- ISOResponsibleParty$new()
  rp$setIndividualName(paste0("someone", i))
}
```

```

rp$setOrganisationName("somewhere")
rp$setPositionName(paste0("someposition",i))
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice(paste0("myphonenummer",i))
phone$setFacsimile(paste0("myfacsimile",i))
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://somelink")
res$setName("somesourcenamename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
md$addContact(rp)
}

#VectorSpatialRepresentation
vsr <- ISOVectorSpatialRepresentation$new()
vsr$setTopologyLevel("geometryOnly")
geomObject <- ISOGeometricObjects$new()
geomObject$setGeometricObjectType("surface")
geomObject$setGeometricObjectCount(5L)
vsr$addGeometricObjects(geomObject)
md$addSpatialRepresentationInfo(vsr)

#ReferenceSystem
rs <- ISOReferenceSystem$new()
rsId <- ISOReferenceIdentifier$new(code = "4326", codeSpace = "EPSG")
rs$setReferenceSystemIdentifier(rsId)
md$addReferenceSystemInfo(rs)

#data identification
ident <- ISODataIdentification$new()
ident$setAbstract("abstract")
ident$setPurpose("purpose")
ident$addCredit("credit1")
ident$addCredit("credit2")
ident$addCredit("credit3")
ident$addStatus("completed")
ident$addLanguage("eng")
ident$addCharacterSet("utf8")
ident$addTopicCategory("biota")
ident$addTopicCategory("oceans")

#adding a point of contact
rp <- ISOResponsibleParty$new()

```

```

rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://somelink")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
ident$addPointOfContact(rp)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(as.Date(ISOdate(2015, 1, 1, 1)))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp)
ident$setCitation(ct)

#graphic overview
go1 <- ISOBrowseGraphic$new(
  fileName = "http://www.somefile.org/png1",
  fileDescription = "Map Overview 1",
  fileType = "image/png"
)
go2 <- ISOBrowseGraphic$new(
  fileName = "http://www.somefile.org/png2",
  fileDescription = "Map Overview 2",
  fileType = "image/png"
)
ident$addGraphicOverview(go1)
ident$addGraphicOverview(go2)

#maintenance information
mi <- ISOMaintenanceInformation$new()

```

```

mi$setMaintenanceFrequency("daily")
ident$addResourceMaintenance(mi)

#adding legal constraints
lc <- ISOLegalConstraints$new()
lc$addUseLimitation("limitation1")
lc$addUseLimitation("limitation2")
lc$addUseLimitation("limitation3")
lc$addAccessConstraint("copyright")
lc$addAccessConstraint("license")
lc$addUseConstraint("copyright")
lc$addUseConstraint("license")
ident$addResourceConstraints(lc)

#adding security constraints
sc <- ISOSecurityConstraints$new()
sc$setClassification("secret")
sc$setUserNote("ultra secret")
sc$setClassificationSystem("no classification in particular")
sc$setHandlingDescription("description")
ident$addResourceConstraints(sc)

#adding extent
extent <- ISOExtent$new()
bbox <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
extent$addGeographicElement(bbox)
ident$addExtent(extent)

#add keywords
kwds <- ISOKeywords$new()
kwds$addKeyword("keyword1")
kwds$addKeyword("keyword2")
kwds$setKeywordType("theme")
th <- ISOCitation$new()
th$setTitle("General")
th$addDate(d)
kwds$setThesaurusName(th)
ident$addKeywords(kwds)

#add an INSPIRE spatial data theme?
inspire_kwd <- ISOKeywords$new()
anc1 <- ISOAnchor$new(
  name = "Environmental monitoring facilities",
  href = "http://inspire.ec.europa.eu/theme/ef"
)
inspire_kwd$addKeyword(anc1)
inspire_kwd$setKeywordType("theme")
th <- ISOCitation$new()
th$setTitle(
  ISOAnchor$new(
    name = "GEMET - INSPIRE themes, version 1.0",
    href="http://www.eionet.europa.eu/gemet/inspire_themes"
  )
)

```

```

)
inspire_date <- ISODate$new()
inspire_date$setDate(as.Date("2008-06-01"))
inspire_date$setDateType("publication")
th$addDate(inspire_date)
inspire_kwd$setThesaurusName(th)
ident$addKeywords(inspire_kwd)

#supplementalInformation
ident$setSupplementalInformation("some additional information")

#spatial representation type
ident$addSpatialRepresentationType("vector")

md$addIdentificationInfo(ident)

#Distribution
distrib <- ISODistribution$new()
dto <- ISODigitalTransferOptions$new()
for(i in 1:3){
  or <- ISOOnlineResource$new()
  or$setLinkage(paste0("http://somelink",i))
  or$setName(paste0("name",i))
  or$setDescription(paste0("description",i))
  or$setProtocol("WWW:LINK-1.0-http--link")
  dto$addOnlineResource(or)
}
distrib$addDigitalTransferOptions(dto)
md$setDistributionInfo(distrib)

#create dataQuality object with a 'dataset' scope
dq <- ISODataQuality$new()
scope <- ISODataQualityScope$new()
scope$setLevel("dataset")
dq$setScope(scope)

#add data quality reports...

#add a report the data quality
dc <- ISODomainConsistency$new()
result <- ISOConformanceResult$new()
spec <- ISOCitation$new()
spec$setTitle("Data Quality check")
spec$addAlternateTitle("This is is some data quality check report")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dc$addResult(result)
dq$addReport(dc)

```

```

#add INSPIRE reports?
#INSPIRE - interoperability of spatial data sets and services
dc_inspire1 <- ISODomainConsistency$new()
cr_inspire1 <- ISOConformanceResult$new()
cr_inspire_spec1 <- ISOCitation$new()
cr_title1 <- paste(
  "Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC",
  "of the European Parliament and of the Council as regards interoperability of spatial data",
  "sets and services"
)
cr_inspire_spec1$setTitle(cr_title1)
cr_inspire1$setExplanation("See the referenced specification")
cr_inspire_date1 <- ISODate$new()
cr_inspire_date1$setDate(ISOdate(2010,12,8))
cr_inspire_date1$setDateType("publication")
cr_inspire_spec1$addDate(cr_inspire_date1)
cr_inspire1$setSpecification(cr_inspire_spec1)
cr_inspire1$setPass(TRUE)
dc_inspire1$addResult(cr_inspire1)
dq$addReport(dc_inspire1)
#INSPIRE - metadata
dc_inspire2 <- ISODomainConsistency$new()
cr_inspire2 <- ISOConformanceResult$new()
cr_inspire_spec2 <- ISOCitation$new()
cr_title2 <- paste(
  "COMMISSION REGULATION (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC",
  "of the European Parliament and of the Council as regards metadata"
)
cr_inspire_spec2$setTitle(cr_title2)
cr_inspire2$setExplanation("See the referenced specification")
cr_inspire_date2 <- ISODate$new()
cr_inspire_date2$setDate(ISOdate(2008,12,4))
cr_inspire_date2$setDateType("publication")
cr_inspire_spec2$addDate(cr_inspire_date2)
cr_inspire2$setSpecification(cr_inspire_spec2)
cr_inspire2$setPass(TRUE)
dc_inspire2$addResult(cr_inspire2)
dq$addReport(dc_inspire2)

#add lineage
lineage <- ISOLineage$new()
lineage$setStatement("statement")
dq$setLineage(lineage)

md$addDataQualityInfo(dq)

#Content Information
#-----
#add a feature catalogue description
fcd <- ISOFeatureCatalogueDescription$new()
fcd$setComplianceCode(FALSE)
fcd$addLanguage("eng")

```

```

fcd$setIncludedWithDataset(FALSE)
cit = ISOCitation$new()
cit$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
cit$addDate(d)
cit$setEdition("1.0")
cit$setEditionDate(as.Date(ISOdate(2015, 1, 1, 1)))
contact = ISOContact$new()
fcLink <- ISOOnlineResource$new()
fcLink$linkage("http://somelink/featurecatalogue")
contact$setOnlineResource(fcLink)
rp = ISOResponsibleParty$new()
rp$setRole("publisher")
rp$setContactInfo(contact)
cit$addCitedResponsibleParty(rp)
fcd$addFeatureCatalogueCitation(cit)
md$addContentInfo(fcd)

#XML representation of the ISOImageryMetadata
xml <- md$encode()

#example 2 - READ: Create an ISO imagery metadata reading from XML
#####

require(XML)
xmlfile <- system.file("extdata/examples", "metadata.xml", package = "geometa")
xml <- xmlParse(xmlfile)
md <- ISOImageryMetadata$new(xml = xml)

```

ISOImageryNominalResolution

ISOImageryNominalResolution

Description

ISOImageryNominalResolution

ISOImageryNominalResolution

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery nominal resolution

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> ISOImageryNominalResolution

Public fields

scanningResolution scanningResolution [0..1]: ISODistance
groundResolution groundResolution [0..1]: ISODistance

Methods**Public methods:**

- ISOImageryNominalResolution\$new()
- ISOImageryNominalResolution\$setScanningResolution()
- ISOImageryNominalResolution\$setGroundResolution()
- ISOImageryNominalResolution\$clone()

Method new(): Initializes object

Usage:

ISOImageryNominalResolution\$new(xml = NULL)

Arguments:

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

Method setScanningResolution(): Set scanning resolution

Usage:

ISOImageryNominalResolution\$setScanningResolution(resolution)

Arguments:

resolution object of class [ISODistance](#)

Method setGroundResolution(): Set ground resolution

Usage:

ISOImageryNominalResolution\$setGroundResolution(resolution)

Arguments:

resolution object of class [ISODistance](#)

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

Usage:

ISOImageryNominalResolution\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_LE_NominalResolution
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrl/2.0/mrl/#element_LE_NominalResolution

Examples

```
#encoding
dq <- ISOImageryNominalResolution$new()
d <- ISODistance$new(value = 1, uom = "m", useUomURI = TRUE)
dq$setScanningResolution(d)
dq$setGroundResolution(d)

#xml
xml <- dq$encode()
```

ISOImageryObjective *ISOImageryObjective*

Description

ISOImageryObjective
ISOImageryObjective

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery objective

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryObjective

Public fields

identifier identifier [1..1]: ISOMetaIdentifier
 priority priority [0..1]: character|ISOLocalisedCharacterString
 type type [0..*]: ISOImageryObjectiveType
 function function [0..*]: character|ISOLocalisedCharacterString
 extent extent [0..*]: ISOExtent
 sensingInstrument sensingInstrument [0..*]: ISOImageryInstrument
 pass pass [0..*]: ISOImageryPlatformPass
 objectiveOccurance objectiveOccurance [1..*]: ISOImageryEvent

Methods**Public methods:**

- [ISOImageryObjective\\$new\(\)](#)
- [ISOImageryObjective\\$setIdentifier\(\)](#)
- [ISOImageryObjective\\$setPriority\(\)](#)
- [ISOImageryObjective\\$addType\(\)](#)
- [ISOImageryObjective\\$delType\(\)](#)
- [ISOImageryObjective\\$addFunction\(\)](#)
- [ISOImageryObjective\\$delFunction\(\)](#)
- [ISOImageryObjective\\$addExtent\(\)](#)
- [ISOImageryObjective\\$delExtent\(\)](#)
- [ISOImageryObjective\\$addSensingInstrument\(\)](#)
- [ISOImageryObjective\\$delSensingInstrument\(\)](#)
- [ISOImageryObjective\\$addPlatformPass\(\)](#)
- [ISOImageryObjective\\$delPlatformPass\(\)](#)
- [ISOImageryObjective\\$addObjectiveOccurance\(\)](#)
- [ISOImageryObjective\\$delObjectiveOccurance\(\)](#)
- [ISOImageryObjective\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOImageryObjective$new(xml = NULL)`

Arguments:

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

Method [setIdentifier\(\)](#): Set identifier

Usage:

`ISOImageryObjective$setIdentifier(identifier)`

Arguments:

`identifier` object of class [ISOMetaIdentifier](#) or `character`

Method [setPriority\(\)](#): Set priority

Usage:

`ISOImageryObjective$setPriority(priority, locales = NULL)`

Arguments:

`priority` priority

`locales` list of localized texts. Default is NULL

Method [addType\(\)](#): Adds type

Usage:

`ISOImageryObjective$addType(type)`

Arguments:

type object of class [ISOImageryObjectiveType](#) or any [character](#) among values returned by `ISOImageryObjectiveType$values()`

Returns: TRUE if added, FALSE otherwise

Method `delType()`: Deletes type

Usage:

`ISOImageryObjective$delType(type)`

Arguments:

type object of class [ISOImageryObjectiveType](#) or any [character](#) among values returned by `ISOImageryObjectiveType$values()`

Returns: TRUE if deleted, FALSE otherwise

Method `addFunction()`: Adds function

Usage:

`ISOImageryObjective$addFunction(fun, locales = NULL)`

Arguments:

fun fun

locales list of localized texts. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method `delFunction()`: Deletes function

Usage:

`ISOImageryObjective$delFunction(fun, locales = NULL)`

Arguments:

fun fun

locales list of localized texts. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method `addExtent()`: Adds extent

Usage:

`ISOImageryObjective$addExtent(extent)`

Arguments:

extent extent, object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method `delExtent()`: Deletes extent

Usage:

`ISOImageryObjective$delExtent(extent)`

Arguments:

extent extent, object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addSensingInstrument(): Adds sensing instrument

Usage:

ISOImageryObjective\$addSensingInstrument(instrument)

Arguments:

instrument object of class [ISOImageryInstrument](#)

Returns: TRUE if added, FALSE otherwise

Method delSensingInstrument(): Deletes sensing instrument

Usage:

ISOImageryObjective\$delSensingInstrument(instrument)

Arguments:

instrument object of class [ISOImageryInstrument](#)

Returns: TRUE if deleted, FALSE otherwise

Method addPlatformPass(): Adds platform pass

Usage:

ISOImageryObjective\$addPlatformPass(pass)

Arguments:

pass object of class [ISOImageryPlatformPass](#)

Returns: TRUE if added, FALSE otherwise

Method delPlatformPass(): Deletes platform pass

Usage:

ISOImageryObjective\$delPlatformPass(pass)

Arguments:

pass object of class [ISOImageryPlatformPass](#)

Returns: TRUE if deleted, FALSE otherwise

Method addObjectiveOccurance(): Adds objective occurrence

Usage:

ISOImageryObjective\$addObjectiveOccurance(event)

Arguments:

event object of class [ISOImageryEvent](#)

Returns: TRUE if added, FALSE otherwise

Method delObjectiveOccurance(): Deletes objective occurrence

Usage:

ISOImageryObjective\$delObjectiveOccurance(event)

Arguments:

event object of class [ISOImageryEvent](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Objective
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Objective

Examples

```
#encoding
md <- ISOImageryObjective$new()
md$setIdentifier("identifier")
md$setPriority("urgent")
md$addType("survey")
md$addFunction("my_function")
evt <- ISOImageryEvent$new()
evt$setIdentifier("event_1")
evt$setTrigger("manual")
evt$setContext("pass")
evt$setSequence("instantaneous")
evt$setTime(Sys.time())
md$addObjectiveOccurance(evt)
extent <- ISOExtent$new()
bbox <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
extent$addGeographicElement(bbox)
time <- ISOTemporalExtent$new()
start <- ISOdate(2000, 1, 12, 12, 59, 45)
end <- ISOdate(2010, 8, 22, 13, 12, 43)
tp <- GMLTimePeriod$new(beginPosition = start, endPosition = end)
time$setTimePeriod(tp)
extent$addTemporalElement(time)
vert <- ISOVerticalExtent$new()
vert$setMinimumValue(0)
vert$setMaximumValue(19)
extent$addVerticalElement(vert)
md$addExtent(extent)
md$sensingInstrument = NA
md$pass = NA
xml <- md$encode()
```

ISOImageryObjectiveType
ISOImageryObjectiveType

Description

ISOImageryObjectiveType
ISOImageryObjectiveType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery ObjectiveType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOImageryObjectiveType

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

`ISOImageryObjectiveType$new(xml = NULL, value, description = NULL)`

Arguments:

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

`value` value

`description` description

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

Usage:

`ISOImageryObjectiveType$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_ObjectiveTypeCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/1.0/mac/#element_MI_ObjectiveTypeCode

Examples

```
#possible values
values <- ISOImageryObjectiveType$values(labels = TRUE)

#some def
survey <- ISOImageryObjectiveType$new(value = "survey")
```

ISOImageryOperation *ISOImageryOperation*

Description

ISOImageryOperation
ISOImageryOperation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery Operation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryOperation

Public fields

description description [0..1]: character|ISOLocalisedCharacterString
citation citation [0..1]: ISOCitation
identifier identifier [1..1]: ISOMetaIdentifier
status status [1..1]: ISOStatus
type type [0..1]: ISOImageryOperationType
parentOperation parentOperation [1..1]: ISOImageryOperation
childOperation childOperation [0..*]: ISOImageryOperation
platform platform [0..*]: ISOImageryPlatform
objective objective [0..*]: ISOImageryObjective

plan plan [0..1]: ISOImageryPlan
 significantEvent significantEvent [0..*]: ISOImageryEvent
 otherPropertyType otherPropertyType [0..1] : ISORecordType (=> ISO 19115-3)
 otherProperty otherProperty [0..1] : ISORecord (=> ISO 19115-3)

Methods

Public methods:

- [ISOImageryOperation\\$new\(\)](#)
- [ISOImageryOperation\\$setDescription\(\)](#)
- [ISOImageryOperation\\$setCitation\(\)](#)
- [ISOImageryOperation\\$setIdentifier\(\)](#)
- [ISOImageryOperation\\$setStatus\(\)](#)
- [ISOImageryOperation\\$setType\(\)](#)
- [ISOImageryOperation\\$setParentOperation\(\)](#)
- [ISOImageryOperation\\$addChildOperation\(\)](#)
- [ISOImageryOperation\\$delChildOperation\(\)](#)
- [ISOImageryOperation\\$addPlatform\(\)](#)
- [ISOImageryOperation\\$delPlatform\(\)](#)
- [ISOImageryOperation\\$addObjective\(\)](#)
- [ISOImageryOperation\\$delObjective\(\)](#)
- [ISOImageryOperation\\$setPlan\(\)](#)
- [ISOImageryOperation\\$addSignificantEvent\(\)](#)
- [ISOImageryOperation\\$delSignificantEvent\(\)](#)
- [ISOImageryOperation\\$setOtherPropertyType\(\)](#)
- [ISOImageryOperation\\$setOtherProperty\(\)](#)
- [ISOImageryOperation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOImageryOperation$new(xml = NULL)`

Arguments:

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

Method `setDescription()`: Set description

Usage:

`ISOImageryOperation$setDescription(description, locales = NULL)`

Arguments:

`description` description

`locales` list of localized texts. Default is NULL

Method `setCitation()`: Set citation

Usage:

ISOImageryOperation\$setCitation(citation)

Arguments:

citation object of class [ISOCitation](#)

Method setIdentifier(): Set identifier

Usage:

ISOImageryOperation\$setIdentifier(identifier)

Arguments:

identifier object of class [ISOMetaIdentifier](#) or [character](#)

Method setStatus(): Set status

Usage:

ISOImageryOperation\$setStatus(status)

Arguments:

status object of class [ISOStatus](#) or any [character](#) among values returned by [ISOStatus\\$values\(\)](#)

Method setType(): Set type

Usage:

ISOImageryOperation\$setType(type)

Arguments:

type object of class [ISOImageryOperationType](#) or any [character](#) among values returned by [ISOImageryOperationType\\$values\(\)](#)

Method setParentOperation(): Set parent operation

Usage:

ISOImageryOperation\$setParentOperation(operation)

Arguments:

operation object of class [ISOImageryOperation](#)

Method addChildOperation(): Adds child operation

Usage:

ISOImageryOperation\$addChildOperation(operation)

Arguments:

operation object of class [ISOImageryOperation](#)

Returns: TRUE if added, FALSE otherwise

Method delChildOperation(): Deletes child operation

Usage:

ISOImageryOperation\$delChildOperation(operation)

Arguments:

operation object of class [ISOImageryOperation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addPlatform(): Adds platform

Usage:

ISOImageryOperation\$addPlatform(platform)

Arguments:

platform object of class [ISOImageryPlatform](#)

Returns: TRUE if added, FALSE otherwise

Method delPlatform(): Deletes platform

Usage:

ISOImageryOperation\$delPlatform(platform)

Arguments:

platform object of class [ISOImageryPlatform](#)

Returns: TRUE if deleted, FALSE otherwise

Method addObjective(): Adds objective

Usage:

ISOImageryOperation\$addObjective(objective)

Arguments:

objective object of class [ISOImageryObjective](#)

Returns: TRUE if added, FALSE otherwise

Method delObjective(): Deletes objective

Usage:

ISOImageryOperation\$delObjective(objective)

Arguments:

objective object of class [ISOImageryObjective](#)

Returns: TRUE if deleted, FALSE otherwise

Method setPlan(): Set plan

Usage:

ISOImageryOperation\$setPlan(plan)

Arguments:

plan object of class [ISOImageryPlan](#)

Method addSignificantEvent(): Adds significant event

Usage:

ISOImageryOperation\$addSignificantEvent(event)

Arguments:

event object of class [ISOImageryEvent](#)

Returns: TRUE if added, FALSE otherwise

Method delSignificantEvent(): Deletes significant event

Usage:

ISOImageryOperation\$delSignificantEvent(event)

Arguments:

event object of class [ISOImageryEvent](#)

Returns: TRUE if deleted, FALSE otherwise

Method setOtherPropertyType(): setOtherPropertyType

Usage:

ISOImageryOperation\$setOtherPropertyType(otherPropertyType)

Arguments:

otherPropertyType otherPropertyType object of class [ISORecordType](#)

Method setOtherProperty(): setOtherProperty

Usage:

ISOImageryOperation\$setOtherProperty(otherProperty)

Arguments:

otherProperty otherProperty object of class [ISORecord](#)

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

Usage:

ISOImageryOperation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Operation
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Operation

ISOImageryOperationType
ISOImageryOperationType

Description

ISOImageryOperationType
ISOImageryOperationType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Imagery Operation type

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOImageryOperationType

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
ISOImageryOperationType$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_OperationTypeCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/1.0/mac/#element_MI_OperationTypeCode

Examples

```
#possible values
values <- ISOImageryOperationType$values(labels = TRUE)

#some def
real <- ISOImageryOperationType$new(value = "real")
```

ISOImageryPlan

ISOImageryPlan

Description

ISOImageryPlan

ISOImageryPlan

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery Plan

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryPlan

Public fields

type type [0..1]: ISOImageryGeometryType

status status [1..1]: ISOProgress

citation citation [1..1]: ISOCitation

operation operation [0..*]: ISOImageryOperation

satisfiedRequirement satisfiedRequirement [0..*]: ISOImageryRequirement

Methods**Public methods:**

- [ISOImageryPlan\\$new\(\)](#)
- [ISOImageryPlan\\$setType\(\)](#)
- [ISOImageryPlan\\$setStatus\(\)](#)
- [ISOImageryPlan\\$setCitation\(\)](#)
- [ISOImageryPlan\\$addOperation\(\)](#)
- [ISOImageryPlan\\$delOperation\(\)](#)
- [ISOImageryPlan\\$addSatisfiedRequirement\(\)](#)
- [ISOImageryPlan\\$delSatisfiedRequirement\(\)](#)
- [ISOImageryPlan\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

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

Arguments:

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

Method `setType()`: Set type

Usage:

```
ISOImageryPlan$setType(type)
```

Arguments:

`type` object of class [ISOImageryGeometryType](#) or any [character](#) among values returned by [ISOImageryGeometryType\\$values\(\)](#)

Method `setStatus()`: Set status

Usage:

```
ISOImageryPlan$setStatus(status)
```

Arguments:

`status` object of class [ISOStatus](#) or any [character](#) among values returned by [ISOStatus\\$values\(\)](#)

Method `setCitation()`: Set citation

Usage:

```
ISOImageryPlan$setCitation(citation)
```

Arguments:

`citation` object of class [ISOCitation](#)

Method `addOperation()`: Adds operation

Usage:

```
ISOImageryPlan$addOperation(operation)
```

Arguments:

`operation` object of class [ISOImageryOperation](#)

Returns: TRUE if added, FALSE otherwise

Method delOperation(): Deletes operation

Usage:

ISOImageryPlan\$delOperation(operation)

Arguments:

operation object of class [ISOImageryOperation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addSatisfiedRequirement(): Adds satisfied requirement

Usage:

ISOImageryPlan\$addSatisfiedRequirement(requirement)

Arguments:

requirement object of class [ISOImageryRequirement](#)

Returns: TRUE if added, FALSE otherwise

Method delSatisfiedRequirement(): Deletes satisfied requirement

Usage:

ISOImageryPlan\$delSatisfiedRequirement(requirement)

Arguments:

requirement object of class [ISOImageryRequirement](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOImageryPlan\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Plan
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Plan

Examples

```

md <- ISOImageryPlan$new()
md$setType("point")
md$setStatus("completed")

#add citation
rp1 <- ISOResponsibleParty$new()
rp1$setIndividualName("someone1")
rp1$setOrganisationName("somewhere1")
rp1$setPositionName("someposition1")
rp1$setRole("pointOfContact")
contact1 <- ISOContact$new()
phone1 <- ISOTelephone$new()
phone1$setVoice("myphonenumber1")
phone1$setFacsimile("myfacsimile1")
contact1$setPhone(phone1)
address1 <- ISOAddress$new()
address1$setDeliveryPoint("theaddress1")
address1$setCity("thecity1")
address1$setPostalCode("111")
address1$setCountry("France")
address1$setEmail("someone1@theorg.org")
contact1$setAddress(address1)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact1$setOnlineResource(res)
rp1$setContactInfo(contact1)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp1)
md$setCitation(ct)
xml <- md$encode()

```

Description

ISOImageryPlatform

ISOImageryPlatform

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery platform

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryPlatform

Public fields

citation citation [0..*]: ISOCitation

identifier identifier [1..1]: ISOMetaIdentifier

description description [0..1]: character|ISOLocalisedCharacterString

sponsor sponsor [0..*]: ISOResponsibleParty

instrument instrument [0..*]: ISOImageryInstrument

otherPropertyType otherPropertyType [0..1]: ISORecordType (=> ISO 19115-3)

otherProperty otherProperty [0..1]: ISORecord (=> ISO 19115-3)

history history [0..*]: ISOInstrumentationEventList (=> ISO 19115-3)

Methods**Public methods:**

- [ISOImageryPlatform\\$new\(\)](#)
- [ISOImageryPlatform\\$addCitation\(\)](#)
- [ISOImageryPlatform\\$delCitation\(\)](#)
- [ISOImageryPlatform\\$setIdentifier\(\)](#)
- [ISOImageryPlatform\\$setDescription\(\)](#)
- [ISOImageryPlatform\\$addSponsor\(\)](#)
- [ISOImageryPlatform\\$delSponsor\(\)](#)
- [ISOImageryPlatform\\$addInstrument\(\)](#)
- [ISOImageryPlatform\\$delInstrument\(\)](#)
- [ISOImageryPlatform\\$setOtherPropertyType\(\)](#)
- [ISOImageryPlatform\\$setOtherProperty\(\)](#)
- [ISOImageryPlatform\\$addInstrumentationEventList\(\)](#)
- [ISOImageryPlatform\\$delInstrumentationEventList\(\)](#)
- [ISOImageryPlatform\\$clone\(\)](#)

Method new(): Initializes object

Usage:

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

Arguments:

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

Method addCitation(): Adds citation

Usage:

```
ISOImageryPlatform$addCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method delCitation(): Deletes citation

Usage:

```
ISOImageryPlatform$delCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method setIdentifier(): Set identifier

Usage:

```
ISOImageryPlatform$setIdentifier(identifier)
```

Arguments:

identifier object of class [ISOMetaIdentifier](#) or *character*

Method setDescription(): Set description

Usage:

```
ISOImageryPlatform$setDescription(description, locales = NULL)
```

Arguments:

description description

locales list of localized texts. Default is NULL

Method addSponsor(): Adds sponsor

Usage:

```
ISOImageryPlatform$addSponsor(sponsor)
```

Arguments:

sponsor object of class [ISOResponsibleParty](#)

Returns: TRUE if added, FALSE otherwise

Method delSponsor(): Deletes sponsor

Usage:

ISOImageryPlatform\$delSponsor(sponsor)

Arguments:

sponsor object of class [ISOResponsibleParty](#)

Returns: TRUE if deleted, FALSE otherwise

Method addInstrument(): Adds instrument

Usage:

ISOImageryPlatform\$addInstrument(instrument)

Arguments:

instrument object of class [ISOImageryInstrument](#)

Returns: TRUE if added, FALSE otherwise

Method delInstrument(): Deletes instrument

Usage:

ISOImageryPlatform\$delInstrument(instrument)

Arguments:

instrument object of class [ISOImageryInstrument](#)

Returns: TRUE if deleted, FALSE otherwise

Method setOtherPropertyType(): setOtherPropertyType

Usage:

ISOImageryPlatform\$setOtherPropertyType(otherPropertyType)

Arguments:

otherPropertyType otherPropertyType object of class [ISORecordType](#)

Method setOtherProperty(): setOtherProperty

Usage:

ISOImageryPlatform\$setOtherProperty(otherProperty)

Arguments:

otherProperty otherProperty object of class [ISORecord](#)

Method addInstrumentationEventList(): Adds instrumentation event list

Usage:

ISOImageryPlatform\$addInstrumentationEventList(instrumentEventList)

Arguments:

instrumentEventList object of class [ISOInstrumentationEventList](#)

Returns: TRUE if added, FALSE otherwise

Method delInstrumentationEventList(): Adds instrumentation event list

Usage:

ISOImageryPlatform\$delInstrumentationEventList(instrumentEventList)

Arguments:

instrumentEventList object of class [ISOInstrumentationEventList](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Platform
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Platform

Examples

```
md <- ISOImageryPlatform$new()

#add citation
rp1 <- ISOResponsibleParty$new()
rp1$setIndividualName("someone1")
rp1$setOrganisationName("somewhere1")
rp1$setPositionName("someposition1")
rp1$setRole("pointOfContact")
contact1 <- ISOContact$new()
phone1 <- ISOTelephone$new()
phone1$setVoice("myphonenumber1")
phone1$setFacsimile("myfacsimile1")
contact1$setPhone(phone1)
address1 <- ISOAddress$new()
address1$setDeliveryPoint("theaddress1")
address1$setCity("thecity1")
address1$setPostalCode("111")
address1$setCountry("France")
address1$setEmail("someone1@theorg.org")
contact1$setAddress(address1)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact1$setOnlineResource(res)
rp1$setContactInfo(contact1)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
```

```

d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp1)
md$addCitation(ct)

md$setIdentifier("identifier")
md$setDescription("some description")

xml <- md$encode()

```

ISOImageryPlatformPass

ISOImageryPlatformPass

Description

ISOImageryPlatformPass

ISOImageryPlatformPass

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery PlatformPass

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryPlatformPass

Public fields

identifier identifier [1..1]: ISOMetaIdentifier

extent extent [0..1]: ?

relatedEvent relatedEvent [0..*]: ISOImageryEvent

Methods**Public methods:**

- [ISOImageryPlatformPass\\$new\(\)](#)
- [ISOImageryPlatformPass\\$setIdentifier\(\)](#)
- [ISOImageryPlatformPass\\$setExtent\(\)](#)
- [ISOImageryPlatformPass\\$addEvent\(\)](#)
- [ISOImageryPlatformPass\\$delEvent\(\)](#)
- [ISOImageryPlatformPass\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOImageryPlatformPass$new(xml = NULL)`

Arguments:

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

Method `setIdentifier()`: Set identifier

Usage:

`ISOImageryPlatformPass$setIdentifier(identifier)`

Arguments:

`identifier` object of class [ISOMetaIdentifier](#) or `character`

Method `setExtent()`: Set extent

Usage:

`ISOImageryPlatformPass$setExtent(extent)`

Arguments:

`extent` simple feature geometry object from **sf**

Method `addEvent()`: Adds event

Usage:

`ISOImageryPlatformPass$addEvent(event)`

Arguments:

`event` object of class [ISOImageryEvent](#)

Returns: TRUE if added, FALSE otherwise

Method `delEvent()`: Deletes event

Usage:

`ISOImageryPlatformPass$delEvent(event)`

Arguments:

`event` object of class [ISOImageryEvent](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

`ISOImageryPlatformPass$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_PlatformPass
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_PlatformPass

Examples

```
md <- ISOImageryPlatformPass$new()
md$setIdentifier("identifier")

require(sf)
outer = matrix(c(0,0,10,0,10,10,0,10,0,0),ncol=2, byrow=TRUE)
hole1 = matrix(c(1,1,1,2,2,2,2,1,1,1),ncol=2, byrow=TRUE)
hole2 = matrix(c(5,5,5,6,6,6,6,5,5,5),ncol=2, byrow=TRUE)
pts = list(outer, hole1, hole2)
pl = st_polygon(pts)
md$setExtent(pl)

xml <- md$encode()
```

ISOImageryPolarisationOrientation

ISOImageryPolarisationOrientation

Description

ISOImageryPolarisationOrientation

ISOImageryPolarisationOrientation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Imagery Polarisation orientation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOImageryPolarisationOrientation

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISOImageryPolarisationOrientation$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_PolarisationOrientationCode

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MI_PolarisationOrientationCode

Examples

```
#possible values
values <- ISOImageryPolarisationOrientation$values(labels = TRUE)

#some def
h <- ISOImageryPolarisationOrientation$new(value = "horizontal")
```

ISOImageryPriority *ISOImageryPriority*

Description

ISOImageryPriority

ISOImageryPriority

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery priority

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOImageryPriority

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
ISOImageryPriority$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_PriorityCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/1.0/mac/#element_MI_PriorityCode

Examples

```
#possible values
values <- ISOImageryPriority$values(labels = TRUE)

#some def
highImp <- ISOImageryPriority$new(value = "highImportance")
```

ISOImageryProcessing *ISOImageryProcessing*

Description

ISOImageryProcessing

ISOImageryProcessing

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery processing

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryProcessing

Public fields

identifier identifier [1..1]: ISOMetaIdentifier
 softwareReference softwareReference [0..1]: ISOCitation
 procedureDescription procedureDescription [0..1]: character!ISOLocalisedCharacterString
 documentation documentation [0..*]: ISOCitation
 runTimeParameters runTimeParameters [0..1]: character
 algorithm algorithm [0..*]: ISOImageryAlgorithm

Methods**Public methods:**

- [ISOImageryProcessing\\$new\(\)](#)
- [ISOImageryProcessing\\$setIdentifier\(\)](#)
- [ISOImageryProcessing\\$addSoftwareReference\(\)](#)
- [ISOImageryProcessing\\$delSoftwareReference\(\)](#)
- [ISOImageryProcessing\\$setProcedureDescription\(\)](#)
- [ISOImageryProcessing\\$addDocumentation\(\)](#)
- [ISOImageryProcessing\\$delDocumentation\(\)](#)
- [ISOImageryProcessing\\$setRunTimeParameters\(\)](#)
- [ISOImageryProcessing\\$addAlgorithm\(\)](#)
- [ISOImageryProcessing\\$delAlgorithm\(\)](#)
- [ISOImageryProcessing\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

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

Arguments:

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

Method [setIdentifier\(\)](#): Set identifier

Usage:

```
ISOImageryProcessing$setIdentifier(identifier)
```

Arguments:

identifier object of class [ISOMetaIdentifier](#) or [character](#)

Method [addSoftwareReference\(\)](#): Adds software reference

Usage:

```
ISOImageryProcessing$addSoftwareReference(softwareReference)
```

Arguments:

softwareReference object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method [delSoftwareReference\(\)](#): Deletes software reference

Usage:

```
ISOImageryProcessing$delSoftwareReference(softwareReference)
```

Arguments:

softwareReference object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method [setProcedureDescription\(\)](#): Set procedure description

Usage:

```
ISOImageryProcessing$setProcedureDescription(  
    procedureDescription,  
    locales = NULL  
)
```

Arguments:

procedureDescription procedure description
locales list of localized texts. Default is NULL

Method addDocumentation(): Adds documentation

Usage:

```
ISOImageryProcessing$addDocumentation(documentation)
```

Arguments:

documentation object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method delDocumentation(): Deletes documentation

Usage:

```
ISOImageryProcessing$delDocumentation(documentation)
```

Arguments:

documentation object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method setRunTimeParameters(): Set runtime parameters

Usage:

```
ISOImageryProcessing$setRunTimeParameters(params)
```

Arguments:

params parameters

Method addAlgorithm(): Adds algorithm

Usage:

```
ISOImageryProcessing$addAlgorithm(algorithm)
```

Arguments:

algorithm object of class [ISOImageryAlgorithm](#)

Returns: TRUE if added, FALSE otherwise

Method delAlgorithm(): Deletes algorithm

Usage:

```
ISOImageryProcessing$delAlgorithm(algorithm)
```

Arguments:

algorithm object of class [ISOImageryAlgorithm](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_LE_Processing
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LE_Processing

Examples

```
md <- ISOImageryProcessing$new()

#add citation
rp1 <- ISOResponsibleParty$new()
rp1$setIndividualName("someone1")
rp1$setOrganisationName("somewhere1")
rp1$setPositionName("someposition1")
rp1$setRole("pointOfContact")
contact1 <- ISOContact$new()
phone1 <- ISOTelephone$new()
phone1$setVoice("myphonenumber1")
phone1$setFacsimile("myfacsimile1")
contact1$setPhone(phone1)
address1 <- ISOAddress$new()
address1$setDeliveryPoint("theaddress1")
address1$setCity("thecity1")
address1$setPostalCode("111")
address1$setCountry("France")
address1$setEmail("someone1@theorg.org")
contact1$setAddress(address1)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact1$setOnlineResource(res)
rp1$setContactInfo(contact1)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp1)

md$setIdentifier("identifier")
md$setProcedureDescription("some description")
md$addSoftwareReference(ct)
```

```
md$addDocumentation(ct)
md$setRunTimeParameters("params")

xml <- md$encode()
```

ISOImageryProcessStep *ISOImageryProcessStep*

Description

ISOImageryProcessStep
ISOImageryProcessStep

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery process step

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOProcessStep](#) ->
[ISOImageryProcessStep](#)

Public fields

processingInformation processingInformation [0..1]: ISOImageryProcessing
output output [0..*]: list of ISOImagerySource
report report [0..*]: list of ISOImageryProcessStepReport

Methods

Public methods:

- [ISOImageryProcessStep\\$new\(\)](#)
- [ISOImageryProcessStep\\$setProcessingInformation\(\)](#)
- [ISOImageryProcessStep\\$addOutput\(\)](#)
- [ISOImageryProcessStep\\$delOutput\(\)](#)
- [ISOImageryProcessStep\\$addReport\(\)](#)
- [ISOImageryProcessStep\\$delReport\(\)](#)
- [ISOImageryProcessStep\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

ISOImageryProcessStep\$new(xml = NULL)

Arguments:

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

Method setProcessingInformation(): Set processing info

Usage:

ISOImageryProcessStep\$setProcessingInformation(processingInfo)

Arguments:

processingInfo object of class [ISOImageryProcessing](#)

Method addOutput(): Adds output

Usage:

ISOImageryProcessStep\$addOutput(output)

Arguments:

output object of class [ISOImagerySource](#)

Returns: TRUE if added, FALSE otherwise

Method delOutput(): Deletes output

Usage:

ISOImageryProcessStep\$delOutput(output)

Arguments:

output object of class [ISOImagerySource](#)

Returns: TRUE if deleted, FALSE otherwise

Method addReport(): Adds report

Usage:

ISOImageryProcessStep\$addReport(report)

Arguments:

report object of class [ISOImageryProcessStepReport](#)

Returns: TRUE if added, FALSE otherwise

Method delReport(): Deletes report

Usage:

ISOImageryProcessStep\$delReport(report)

Arguments:

report object of class [ISOImageryProcessStepReport](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOImageryProcessStep\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_LE_ProcessStep
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LE_ProcessStep

Examples

```
ps <- ISOImageryProcessStep$new()
ps$setDescription("description")
ps$setRationale("rationale")
ps$setDateTime( ISOdate(2015, 1, 1, 23, 59, 59))
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone") #and more responsible party properties..
ps$addProcessor(rp)

#specific methods to ISO 19115-2
process <- ISOImageryProcessing$new()

#add citation
rp1 <- ISOResponsibleParty$new()
rp1$setIndividualName("someone1")
rp1$setOrganisationName("somewhere1")
rp1$setPositionName("someposition1")
rp1$setRole("pointOfContact")
contact1 <- ISOContact$new()
phone1 <- ISOTelephone$new()
phone1$setVoice("myphonenumber1")
phone1$setFacsimile("myfacsimile1")
contact1$setPhone(phone1)
address1 <- ISOAddress$new()
address1$setDeliveryPoint("theaddress1")
address1$setCity("thecity1")
address1$setPostalCode("111")
address1$setCountry("France")
address1$setEmail("someone1@theorg.org")
contact1$setAddress(address1)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact1$setOnlineResource(res)
rp1$setContactInfo(contact1)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
```

```

ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp1)

process$setIdentifier("identifier")
process$setProcedureDescription("some description")
process$addSoftwareReference(ct)
process$addDocumentation(ct)
process$setRunTimeParameters("params")
ps$setProcessingInformation(process)

#output
trg <- ISOImagerySource$new()
trg$setProcessedLevel("level")
res <- ISOImageryNominalResolution$new()
d <- ISODistance$new(value = 1, uom = "m", useUomURI = TRUE)
res$setScanningResolution(d)
trg$setResolution(res)
ps$addOutput(trg)

#report
rep <- ISOImageryProcessStepReport$new()
rep$setName("report")
rep$setDescription("description")
rep$setFileType("filetype")
ps$addReport(rep)

xml <- ps$encode()

```

ISOImageryProcessStepReport

ISOImageryProcessStepReport

Description

ISOImageryProcessStepReport

ISOImageryProcessStepReport

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery ProcessStepReport

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryProcessStepReport

Public fields

name name [1..1]: character!ISOLocalisedCharacterString
description description [0..1]: character!ISOLocalisedCharacterString
fileType fileType [0..1]: character!ISOLocalisedCharacterString

Methods**Public methods:**

- [ISOImageryProcessStepReport\\$new\(\)](#)
- [ISOImageryProcessStepReport\\$setName\(\)](#)
- [ISOImageryProcessStepReport\\$setDescription\(\)](#)
- [ISOImageryProcessStepReport\\$setFileType\(\)](#)
- [ISOImageryProcessStepReport\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOImageryProcessStepReport\$new(xml = NULL)

Arguments:

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

Method setName(): Set name

Usage:

ISOImageryProcessStepReport\$setName(name, locales = NULL)

Arguments:

name name

locales list of localized texts. Default is NULL

Method setDescription(): Set description

Usage:

ISOImageryProcessStepReport\$setDescription(description, locales = NULL)

Arguments:

description description

locales list of localized texts. Default is NULL

Method setFileType(): Set file type

Usage:

ISOImageryProcessStepReport\$setFileType(fileType, locales = NULL)

Arguments:

fileType file type

locales list of localized texts. Default is NULL

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

Usage:

```
ISOImageryProcessStepReport$new(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_LE_ProcessStepReport
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LE_ProcessStepReport

Examples

```
md <- ISOImageryProcessStepReport$new()
md$setName("my_report")
md$setDescription("description")
md$setFileType("md")
xml <- md$encode()
```

ISOImageryRangeElementDescription

ISOImageryRangeElementDescription

Description

ISOImageryRangeElementDescription

ISOImageryRangeElementDescription

Format

R6Class object.

Value

Object of R6Class for modelling an ISOImageryRangeElementDescription

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryRangeElementDescription

Public fields

name name [0..1] : character
definition definition [0..1] : character
rangeElement rangeElement [0..*] : ISORecord

Methods**Public methods:**

- [ISOImageryRangeElementDescription\\$new\(\)](#)
- [ISOImageryRangeElementDescription\\$setName\(\)](#)
- [ISOImageryRangeElementDescription\\$setDefinition\(\)](#)
- [ISOImageryRangeElementDescription\\$addRangeElement\(\)](#)
- [ISOImageryRangeElementDescription\\$delRangeElement\(\)](#)
- [ISOImageryRangeElementDescription\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOImageryRangeElementDescription$new(xml = NULL)`

Arguments:

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

Method [setName\(\)](#): Set name

Usage:

`ISOImageryRangeElementDescription$setName(name, locales = NULL)`

Arguments:

name name

locales list of localized texts. Default is NULL

Method [setDefinition\(\)](#): Set definition

Usage:

`ISOImageryRangeElementDescription$setDefinition(definition, locales = NULL)`

Arguments:

definition definition

locales list of localized texts. Default is NULL

Method [addRangeElement\(\)](#): Adds range element

Usage:

`ISOImageryRangeElementDescription$addRangeElement(record)`

Arguments:

record object of class [ISORecord](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method delRangeElement(): Deletes range element

Usage:

ISOImageryRangeElementDescription\$delRangeElement(record)

Arguments:

record object of class [ISORecord](#) or [character](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

ISOImageryRangeElementDescription\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_RangeElementDescription
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MI_RangeElementDescription

Examples

```
#create object
md <- ISOImageryRangeElementDescription$new()
md$setName("name")
md$setDefinition("description")
md$addRangeElement("record1")
md$addRangeElement("record2")
xml <- md$encode()
```

ISOImageryRequestedDate

ISOImageryRequestedDate

Description

ISOImageryRequestedDate

ISOImageryRequestedDate

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery requested date

Super classes

[geometal::geometalLogger](#) -> [geometal::ISOAbstractObject](#) -> ISOImageryRequestedDate

Public fields

requestedDateOfCollection requestedDateOfCollection

latestAcceptableDate latestAcceptableDate

Methods**Public methods:**

- [ISOImageryRequestedDate\\$new\(\)](#)
- [ISOImageryRequestedDate\\$setRequestedDateOfCollection\(\)](#)
- [ISOImageryRequestedDate\\$setLatestAcceptableDate\(\)](#)
- [ISOImageryRequestedDate\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOImageryRequestedDate\\$new\(xml = NULL\)](#)

Arguments:

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

Method [setRequestedDateOfCollection\(\)](#): Set requested date of collection

Usage:

[ISOImageryRequestedDate\\$setRequestedDateOfCollection\(date\)](#)

Arguments:

date object of class [POSIXct](#)

Method [setLatestAcceptableDate\(\)](#): Set latest acceptable date

Usage:

[ISOImageryRequestedDate\\$setLatestAcceptableDate\(date\)](#)

Arguments:

date object of class [POSIXct](#)

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

Usage:

[ISOImageryRequestedDate\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_RequestedDate
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_RequestedDate

Examples

```
#create band range dimension
md <- ISOImageryRequestedDate$new()
md$setRequestedDateOfCollection(Sys.time())
md$setLatestAcceptableDate(Sys.time())
xml <- md$encode()
```

ISOImageryRequirement *ISOImageryRequirement*

Description

ISOImageryRequirement
ISOImageryRequirement

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery requirement

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryRequirement

Public fields

citation citation [1..1]: ISOCitation
 identifier identifier [1..1]: ISOMetaIdentifier
 requestor requestor [0..*]: ISOResponsibleParty
 recipient recipient [0..*]: ISOResponsibleParty
 priority priority [1..1]: ISOImageryPriority
 requestedDate requestedDate [1..1]: ISOImageryRequestedDate
 expiryDate expiryDate [1..1]: POSIXt
 satisfiedPlan satisfiedPlan [0..*]: ISOImageryPlan

Methods**Public methods:**

- [ISOImageryRequirement\\$new\(\)](#)
- [ISOImageryRequirement\\$setCitation\(\)](#)
- [ISOImageryRequirement\\$setIdentifier\(\)](#)
- [ISOImageryRequirement\\$addRequestor\(\)](#)
- [ISOImageryRequirement\\$delRequestor\(\)](#)
- [ISOImageryRequirement\\$addRecipient\(\)](#)
- [ISOImageryRequirement\\$delRecipient\(\)](#)
- [ISOImageryRequirement\\$setPriority\(\)](#)
- [ISOImageryRequirement\\$setRequestedDate\(\)](#)
- [ISOImageryRequirement\\$setExpiryDate\(\)](#)
- [ISOImageryRequirement\\$addSatisfiedPlan\(\)](#)
- [ISOImageryRequirement\\$delSatisfiedPlan\(\)](#)
- [ISOImageryRequirement\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOImageryRequirement$new(xml = NULL)`

Arguments:

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

Method [setCitation\(\)](#): Set citation

Usage:

`ISOImageryRequirement$setCitation(citation)`

Arguments:

citation object of class [ISOCitation](#)

Method [setIdentifier\(\)](#): Set identifier

Usage:

`ISOImageryRequirement$setIdentifier(identifier)`

Arguments:

identifier object of class [ISOMetaIdentifier](#) or *character*

Method [addRequestor\(\)](#): Adds requestor

Usage:

`ISOImageryRequirement$addRequestor(requestor)`

Arguments:

requestor object of class [ISOResponsibleParty](#)

Returns: TRUE if added, FALSE otherwise

Method [delRequestor\(\)](#): Deletes requestor

Usage:

ISOImageryRequirement\$delRequestor(requestor)

Arguments:

requestor object of class [ISOResponsibleParty](#)

Returns: TRUE if deleted, FALSE otherwise

Method addRecipient(): Adds recipient*Usage:*

ISOImageryRequirement\$addRecipient(recipient)

Arguments:

recipient object of class [ISOResponsibleParty](#)

Returns: TRUE if added, FALSE otherwise

Method delRecipient(): Deletes recipient*Usage:*

ISOImageryRequirement\$delRecipient(recipient)

Arguments:

recipient object of class [ISOResponsibleParty](#)

Returns: TRUE if deleted, FALSE otherwise

Method setPriority(): Set priority*Usage:*

ISOImageryRequirement\$setPriority(priority)

Arguments:

priority object of class [ISOImageryPriority](#) or any [character](#) among values returned by [ISOImageryPriority\\$values](#)

Method setRequestedDate(): Set requested date*Usage:*

ISOImageryRequirement\$setRequestedDate(date)

Arguments:

date object of class [ISOImageryRequestedDate](#)

Method setExpiryDate(): Set expiry date*Usage:*

ISOImageryRequirement\$setExpiryDate(date)

Arguments:

date object of class [POSIXct](#)

Method addSatisfiedPlan(): Adds satisfied plan*Usage:*

ISOImageryRequirement\$addSatisfiedPlan(plan)

Arguments:

plan object of class [ISOImageryPlan](#)

Returns: TRUE if added, FALSE otherwise

Method delSatisfiedPlan(): Deletes satisfied plan

Usage:

```
ISOImageryRequirement$delSatisfiedPlan(plan)
```

Arguments:

plan object of class [ISOImageryPlan](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_Requirement
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Requirement

Examples

```
md <- ISOImageryRequirement$new()
md$setIdentifier("identifier")
#add citation
rp1 <- ISOResponsibleParty$new()
rp1$setIndividualName("someone1")
rp1$setOrganisationName("somewhere1")
rp1$setPositionName("someposition1")
rp1$setRole("pointOfContact")
contact1 <- ISOContact$new()
phone1 <- ISOTelephone$new()
phone1$setVoice("myphonenumber1")
phone1$setFacsimile("myfacsimile1")
contact1$setPhone(phone1)
address1 <- ISOAddress$new()
address1$setDeliveryPoint("theaddress1")
address1$setCity("thecity1")
address1$setPostalCode("111")
address1$setCountry("France")
address1$setEmail("someone1@theorg.org")
contact1$setAddress(address1)
res <- ISOOnlineResource$new()
```

```

res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact1$setOnlineResource(res)
rp2 <- ISOResponsibleParty$new()
rp2$setIndividualName("someone2")
rp2$setOrganisationName("somewhere2")
rp2$setPositionName("someposition2")
rp2$setRole("pointOfContact")
contact2 <- ISOContact$new()
phone2 <- ISOTelephone$new()
phone2$setVoice("myphonenumber2")
phone2$setFacsimile("myfacsimile2")
contact1$setPhone(phone2)
address2 <- ISOAddress$new()
address2$setDeliveryPoint("theaddress2")
address2$setCity("thecity2")
address2$setPostalCode("111")
address2$setCountry("France")
address2$setEmail("someone2@theorg.org")
contact2$setAddress(address2)
contact2$setOnlineResource(res)
rp2$setContactInfo(contact2)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp1)
md$setCitation(ct)
md$addRequestor(rp1)
md$addRecipient(rp2)
md$setPriority("highImportance")

rd <- ISOImageryRequestedDate$new()
rd$setRequestedDateOfCollection(Sys.time())
rd$setLatestAcceptableDate(Sys.time())
md$setRequestedDate(rd)
md$setExpiryDate(Sys.time())
xml <- md$encode()

```

Description

ISOImageryRevision
ISOImageryRevision

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery revision

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImageryRevision

Public fields

description description [0..1]: character
author author [1..1]: ISOAbstractResponsibility
dateInfo dateInfo [1..1]: ISOAbstractTypedDate

Methods**Public methods:**

- [ISOImageryRevision\\$new\(\)](#)
- [ISOImageryRevision\\$setDescription\(\)](#)
- [ISOImageryRevision\\$setAuthor\(\)](#)
- [ISOImageryRevision\\$setDateInfo\(\)](#)
- [ISOImageryRevision\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOImageryRevision\\$new](#)(xml = NULL)

Arguments:

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

Method [setDescription\(\)](#): Set description

Usage:

[ISOImageryRevision\\$setDescription](#)(description, locales = NULL)

Arguments:

description description

locales list of localized editions. Default is NULL

Method [setAuthor\(\)](#): Set author

Usage:

ISOImageryRevision\$setAuthor(author)

Arguments:

author author

Method setDateInfo(): Set date info*Usage:*

ISOImageryRevision\$setDateInfo(dateInfo)

Arguments:

dateInfo dateInfo

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

ISOImageryRevision\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Revision

ISOImagerySensor *ISOImagerySensor*

Description

ISOImagerySensor

ISOImagerySensor

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO imagery sensor**Super classes**
[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOImageryInstrument](#)
-> ISOImagerySensor

Public fields

hosted hosted [0..*] : ISOImageryInstrument

Methods**Public methods:**

- [ISOImagerySensor\\$new\(\)](#)
- [ISOImagerySensor\\$addInstrument\(\)](#)
- [ISOImagerySensor\\$delInstrument\(\)](#)
- [ISOImagerySensor\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOImagerySensor$new(xml = NULL)`

Arguments:

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

Method [addInstrument\(\)](#): Adds instrument

Usage:

`ISOImagerySensor$addInstrument(instrument)`

Arguments:

instrument object of class [ISOImageryInstrument](#)

Returns: TRUE if added, FALSE otherwise

Method [delInstrument\(\)](#): Deletes instrument

Usage:

`ISOImagerySensor$delInstrument(instrument)`

Arguments:

instrument object of class [ISOImageryInstrument](#)

Returns: TRUE if deleted, FALSE otherwise

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

Usage:

`ISOImagerySensor$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_Sensor

ISOImagerySensorType *ISOImagerySensorType*

Description

ISOImagerySensorType

ISOImagerySensorType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery sensor type

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOImagerySensorType

Methods

Public methods:

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

Method `new()`: Initializes object

Usage:

```
ISOImagerySensorType$new(xml = NULL, value = NULL, description = NULL)
```

Arguments:

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

value value

description description

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_SensoryTypeCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/1.0/mac/#element_MI_SensoryTypeCode

Examples

```
md <- ISOImagerySensorType$new(value = "type")
```

ISOImagerySequence *ISOImagerySequence*

Description

ISOImagerySequence
ISOImagerySequence

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery sequence

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOImagerySequence

Methods**Public methods:**

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

Method `new()`: Initializes object

Usage:

```
ISOImagerySequence$new(xml = NULL, value, description = NULL)
```

Arguments:

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

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOImagerySequence$clone(deep = FALSE)
```

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_SequenceCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/1.0/mac/#element_MI_SequenceCode

Examples

```
#possible values
values <- ISOImagerySequence$values(labels = TRUE)

#some def
inst <- ISOImagerySequence$new(value = "instantaneous")
```

ISOImagerySource	<i>ISOImagerySource</i>
------------------	-------------------------

Description

ISOImagerySource

ISOImagerySource

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery source

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOImagerySource

Public fields

```
processedLevel processedLevel [0..1]: ISOMetaIdentifier
resolution resolution [0..1]: ISOImageryNominalResolution
```

Methods**Public methods:**

- [ISOImagerySource\\$new\(\)](#)
- [ISOImagerySource\\$setProcessedLevel\(\)](#)
- [ISOImagerySource\\$setResolution\(\)](#)
- [ISOImagerySource\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOImagerySource$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setProcessedLevel()`: Set processed level

Usage:

`ISOImagerySource$setProcessedLevel(processedLevel)`

Arguments:

`processedLevel` object of class [ISOMetaIdentifier](#) or `character`

Method `setResolution()`: Set resolution

Usage:

`ISOImagerySource$setResolution(resolution)`

Arguments:

`resolution` object of class [ISOImageryNominalResolution](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOImagerySource$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_LE_Source
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LE_Source

Examples

```
md <- ISOImagerySource$new()
md$setProcessedLevel("identifier")
res <- ISOImageryNominalResolution$new()
d <- ISODistance$new(value = 1, uom = "m", useUomURI = TRUE)
res$setScanningResolution(d)
md$setResolution(res)

xml <- md$encode()
```

ISOImageryTransferFunctionType

ISOImageryTransferFunctionType

Description

ISOImageryTransferFunctionType

ISOImageryTransferFunctionType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery transfer function type

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOImageryTransferFunctionType

Methods**Public methods:**

- [ISOImageryTransferFunctionType\\$new\(\)](#)
- [ISOImageryTransferFunctionType\\$clone\(\)](#)

Method new(): Initializes object

Usage:

`ISOImageryTransferFunctionType$new(xml = NULL, value, description = NULL)`

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOImageryTransferFunctionType$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_TransferFunctionTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MI_TransferFunctionTypeCode

Examples

```
#possible values
values <- ISOImageryTransferFunctionType$values(labels = TRUE)

#some def
log <- ISOImageryTransferFunctionType$new(value = "logarithmic")
```

ISOImageryTrigger	<i>ISOImageryTrigger</i>
-------------------	--------------------------

Description

ISOImageryTrigger

ISOImageryTrigger

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery trigger

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue
-> ISOImageryTrigger
```

Methods

Public methods:

- [ISOImageryTrigger\\$new\(\)](#)
- [ISOImageryTrigger\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOImageryTrigger$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOImageryTrigger$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_TriggerCode

- 19115-3 https://schemas.isotc211.org/19115/-3/mac/1.0/mac/#element_MI_TriggerCode

Examples

```
#possible values
values <- ISOImageryTrigger$values(labels = TRUE)

#some def
auto <- ISOImageryTrigger$new(value = "automatic")
```

ISOImageryUsability *ISOImageryUsability*

Description

ISOImageryUsability

ISOImageryUsability

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery usability

Methods inherited from [ISODataQualityAbstractElement](#)

See methods description at [ISODataQualityAbstractElement](#)

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractQualityElement](#)
-> [geometa::ISODataQualityAbstractElement](#) -> [ISOImageryUsability](#)

Methods**Public methods:**

- [ISOImageryUsability\\$new\(\)](#)
- [ISOImageryUsability\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOImageryUsability\\$new](#)(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOImageryUsability\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115-2:2009 - Geographic information – Metadata Part 2: Extensions for imagery and gridded data

ISOImagingCondition *ISOImagingCondition*

Description

ISOImagingCondition

ISOImagingCondition

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOImagingCondition

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOImagingCondition

Methods

Public methods:

- [ISOImagingCondition\\$new\(\)](#)
- [ISOImagingCondition\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOImagingCondition$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOImagingCondition$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_ImagingConditionCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_ImagingConditionCode

Examples

```
#possible values
values <- ISOImagingCondition$values(labels = TRUE)

#ImagingCondition
ImagingCondition <- ISOImagingCondition$new(value = "rain")
```

ISOIndirectEvaluation *ISOIndirectEvaluation*

Description

ISOIndirectEvaluation
ISOIndirectEvaluation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO indirect evaluation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOEvaluationMethod](#)
-> ISOIndirectEvaluation

Methods**Public methods:**

- [ISOIndirectEvaluation\\$new\(\)](#)
- [ISOIndirectEvaluation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOIndirectEvaluation$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOIndirectEvaluation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_IndirectEvaluation

ISOIndividual

ISOIndividual

Description

ISOIndividual

ISOIndividual

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO individual

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractParty](#)
-> ISOIndividual

Public fields

positionName positionName

Methods**Public methods:**

- [ISOIndividual\\$new\(\)](#)
- [ISOIndividual\\$setPositionName\(\)](#)
- [ISOIndividual\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOIndividual$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method `setPositionName()`: Set position name

Usage:

```
ISOIndividual$setPositionName(positionName, locales = NULL)
```

Arguments:

positionName position name

locales list of localized texts. Default is NULL

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOIndividual$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Individual

ISOInheritanceRelation

ISOInheritanceRelation

Description

ISOInheritanceRelation

ISOInheritanceRelation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOInheritanceRelation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOInheritanceRelation

Public fields

name name [0..1]: character
 description description [0..1]: character
 uniqueInstance uniqueInstance: logical
 subtype subtype [1..1]: ISOFeatureType
 supertype supertype [1..1]: ISOFeatureType

Methods**Public methods:**

- [ISOInheritanceRelation\\$setName\(\)](#)
- [ISOInheritanceRelation\\$setDescription\(\)](#)
- [ISOInheritanceRelation\\$setUniqueInstance\(\)](#)
- [ISOInheritanceRelation\\$setSubtype\(\)](#)
- [ISOInheritanceRelation\\$setSupertype\(\)](#)
- [ISOInheritanceRelation\\$clone\(\)](#)

Method setName(): Set name

Usage:

ISOInheritanceRelation\$setName(name, locales = NULL)

Arguments:

name name
 locales list of localized texts. Default is NULL

Method setDescription(): Set description

Usage:

ISOInheritanceRelation\$setDescription(description, locales = NULL)

Arguments:

description description
 locales list of localized texts. Default is NULL

Method setUniqueInstance(): Set unique instance

Usage:

ISOInheritanceRelation\$setUniqueInstance(uniqueInstance)

Arguments:

uniqueInstance object of class [logical](#)

Method setSubtype(): Set sub feature type

Usage:

ISOInheritanceRelation\$setSubtype(featureType)

Arguments:

featureType object of class [ISOFeatureType](#)

Method setSupertype(): Set super feature type

Usage:

ISOInheritanceRelation\$setSupertype(featureType)

Arguments:

featureType object of class [ISOFeatureType](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOInheritanceRelation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOInitiative

ISOInitiative

Description

ISOInitiative

ISOInitiative

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOInitiative

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractAggregate](#)
-> ISOInitiative

Methods**Public methods:**

- [ISOInitiative\\$new\(\)](#)
- [ISOInitiative\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOInitiative\\$new](#)(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOInitiative\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOInitiativeType

ISOInitiativeType

Description

ISOInitiativeType

ISOInitiativeType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO InitiativeType

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue  
-> ISOInitiativeType
```

Methods**Public methods:**

- [ISOInitiativeType\\$new\(\)](#)
- [ISOInitiativeType\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOInitiativeType$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOInitiativeType$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DS_InitiativeTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_DS_InitiativeTypeCode

Examples

```
#possible values  
values <- ISOInitiativeType$values(labels = TRUE)  
  
#geomOnly  
geomOnly <- ISOInitiativeType$new(value = "campaign")
```

ISOInstrumentationEvent

ISOInstrumentationEvent

Description

ISOInstrumentationEvent

ISOInstrumentationEvent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery instrumentation event

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOInstrumentationEvent

Public fields

citation citation [0..*]: ISOAbstractCitation

description description [1..1]: character

extent extent [0..*]: ISOAbstractExtent

type type [1..*]: ISOInstrumentationEventType

revisionHistory revisionHistory [0..*]: ISOImageryRevision

Methods

Public methods:

- [ISOInstrumentationEvent\\$new\(\)](#)
- [ISOInstrumentationEvent\\$addCitation\(\)](#)
- [ISOInstrumentationEvent\\$delCitation\(\)](#)
- [ISOInstrumentationEvent\\$setDescription\(\)](#)
- [ISOInstrumentationEvent\\$addExtent\(\)](#)
- [ISOInstrumentationEvent\\$delExtent\(\)](#)
- [ISOInstrumentationEvent\\$addType\(\)](#)
- [ISOInstrumentationEvent\\$delType\(\)](#)
- [ISOInstrumentationEvent\\$addRevision\(\)](#)
- [ISOInstrumentationEvent\\$delRevision\(\)](#)
- [ISOInstrumentationEvent\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

ISOInstrumentationEvent\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method addCitation(): Adds citation*Usage:*

ISOInstrumentationEvent\$addCitation(citation)

Arguments:

citation citation object of class [ISOAbstractCitation](#)

Returns: TRUE if added, FALSE otherwise

Method delCitation(): Deletes citation*Usage:*

ISOInstrumentationEvent\$delCitation(citation)

Arguments:

citation citation object of class [ISOAbstractCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method setDescription(): Set description*Usage:*

ISOInstrumentationEvent\$setDescription(description, locales = NULL)

Arguments:

description description

locales list of localized editions. Default is NULL

Method addExtent(): Adds extent*Usage:*

ISOInstrumentationEvent\$addExtent(extent)

Arguments:

extent extent object of class [ISOAbstractExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delExtent(): Deletes extent*Usage:*

ISOInstrumentationEvent\$delExtent(extent)

Arguments:

extent extent object of class [ISOAbstractExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addType(): Adds type*Usage:*

ISOInstrumentationEvent\$addType(type)

Arguments:

type type object of class [ISOInstrumentationEventType](#) or any [character](#) value listed by ISOInstrumentationEventTyp

Returns: TRUE if added, FALSE otherwise

Method delType(): Deletes type

Usage:

ISOInstrumentationEvent\$delType(type)

Arguments:

type type object of class [ISOInstrumentationEventType](#) or any [character](#) value listed by ISOInstrumentationEventTyp

Returns: TRUE if deleted, FALSE otherwise

Method addRevision(): Adds revision

Usage:

ISOInstrumentationEvent\$addRevision(revision)

Arguments:

revision revision object of class [ISOImageryRevision](#)

Returns: TRUE if added, FALSE otherwise

Method delRevision(): Deletes revision

Usage:

ISOInstrumentationEvent\$delRevision(revision)

Arguments:

revision revision object of class [ISOImageryRevision](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOInstrumentationEvent\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_InstrumentationEvent

ISOInstrumentationEventList
ISOInstrumentationEventList

Description

ISOInstrumentationEventList
ISOInstrumentationEventList

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO imagery instrumentation event list

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOInstrumentationEventList

Public fields

citation citation [1..1] : ISOAbstractCitation
description description [1..1] : character
locale locale [0..1] : ISOLocale
metadataConstraints metadataConstraints [0..*] : ISOAbstractConstraints
instrumentationEvent instrumentationEvent [0..*] : ISOInstrumentationEvent

Methods

Public methods:

- [ISOInstrumentationEventList\\$new\(\)](#)
- [ISOInstrumentationEventList\\$setCitation\(\)](#)
- [ISOInstrumentationEventList\\$setDescription\(\)](#)
- [ISOInstrumentationEventList\\$setLocale\(\)](#)
- [ISOInstrumentationEventList\\$addMetadataConstraints\(\)](#)
- [ISOInstrumentationEventList\\$delMetadataConstraints\(\)](#)
- [ISOInstrumentationEventList\\$addInstrumentationEvent\(\)](#)
- [ISOInstrumentationEventList\\$delInstrumentationEvent\(\)](#)
- [ISOInstrumentationEventList\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

ISOInstrumentationEventList\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setCitation(): Set citation

Usage:

ISOInstrumentationEventList\$setCitation(citation)

Arguments:

citation citation

Method setDescription(): Set description

Usage:

ISOInstrumentationEventList\$setDescription(description, locales = NULL)

Arguments:

description description

locales list of localized editions. Default is NULL

Method setLocale(): Set locale

Usage:

ISOInstrumentationEventList\$setLocale(locale)

Arguments:

locale locale

Method addMetadataConstraints(): Adds metadata constraints

Usage:

ISOInstrumentationEventList\$addMetadataConstraints(metadataConstraints)

Arguments:

metadataConstraints metadataConstraints

Returns: TRUE if added, FALSE otherwise

Method delMetadataConstraints(): Deletes metadata constraints

Usage:

ISOInstrumentationEventList\$delMetadataConstraints(metadataConstraints)

Arguments:

metadataConstraints metadataConstraints

Returns: TRUE if deleted, FALSE otherwise

Method addInstrumentationEvent(): Adds instrumentation event

Usage:

ISOInstrumentationEventList\$addInstrumentationEvent(instrumentationEvent)

Arguments:

instrumentationEvent instrumentationEvent

Returns: TRUE if added, FALSE otherwise

Method delInstrumentationEvent(): Deletes instrumentation event

Usage:

```
ISOInstrumentationEventList$delInstrumentationEvent(instrumentationEvent)
```

Arguments:

```
instrumentationEvent instrumentationEvent
```

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOInstrumentationEventList$clone(deep = FALSE)
```

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_InstrumentationEventList

ISOInstrumentationEventType

ISOInstrumentationEventType

Description

ISOInstrumentationEventType

ISOInstrumentationEventType

Format

R6Class object.

Value

Object of R6Class for modelling an ISO instrumentation event type

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOInstrumentationEventType

Methods

Public methods:

- [ISOInstrumentationEventType\\$new\(\)](#)
- [ISOInstrumentationEventType\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOInstrumentationEventType$new(xml = NULL, value, description = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

`value` value

`description` description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOInstrumentationEventType$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- 19139 https://schemas.isotc211.org/19115/-2/gmi/1.0/gmi/#element_MI_InstrumentationEventTypeCode
- 19115-3 https://schemas.isotc211.org/19115/-3/mac/2.0/mac/#element_MI_InstrumentationEventTypeCode

Examples

```
## Not run:  
setMetadataStandard("19115-3")  
md <- ISOInstrumentationEventType$new("type")  
setMetadataStandard("19139")  
  
## End(Not run)
```

ISOKeywordClass	<i>ISOKeywordClass</i>
-----------------	------------------------

Description

ISOKeywordClass

ISOKeywordClass

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling a ISO keyword class**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOKeywordClass**Public fields**

className className

conceptIdentifier conceptIdentifier

ontology ontology

Methods**Public methods:**

- [ISOKeywordClass\\$new\(\)](#)
- [ISOKeywordClass\\$setClassName\(\)](#)
- [ISOKeywordClass\\$setConceptIdentifier\(\)](#)
- [ISOKeywordClass\\$setOntology\(\)](#)
- [ISOKeywordClass\\$clone\(\)](#)

Method [new\(\)](#): Initializes object*Usage:*[ISOKeywordClass\\$new\(xml = NULL\)](#)*Arguments:*xml object of class [XMLInternalNode-class](#)**Method** [setClassName\(\)](#): Set class name*Usage:*[ISOKeywordClass\\$setClassName\(className, locales = NULL\)](#)

Arguments:

className className

locales list of localized texts. Default is NULL

Method setConceptIdentifier(): Set concept identifier

Usage:

ISOKeywordClass\$setConceptIdentifier(conceptIdentifier)

Arguments:

conceptIdentifier conceptIdentifier, object of class [ISOURI](#)

Method setOntology(): Set ontology

Usage:

ISOKeywordClass\$setOntology(ontology)

Arguments:

ontology ontology, object inheriting class [ISOAbstractParty](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOKeywordClass\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_KeywordClass

ISOKeywords

ISOKeywords

Description

ISOKeywords

ISOKeywords

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a ISO set of keywords

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOKeywords

Public fields

keyword keyword

type type

thesaurusName thesaurus name

Methods**Public methods:**

- [ISOKeywords\\$new\(\)](#)
- [ISOKeywords\\$addKeyword\(\)](#)
- [ISOKeywords\\$delKeyword\(\)](#)
- [ISOKeywords\\$setKeywordType\(\)](#)
- [ISOKeywords\\$setThesaurusName\(\)](#)
- [ISOKeywords\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOKeywords\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [addKeyword\(\)](#): Adds keyword

Usage:

[ISOKeywords\\$addKeyword\(keyword, locales = NULL\)](#)

Arguments:

keyword keyword

locales list of localized texts. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method [delKeyword\(\)](#): Deletes keyword

Usage:

[ISOKeywords\\$delKeyword\(keyword, locales = NULL\)](#)

Arguments:

keyword keyword

locales list of localized texts. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method [setKeywordType\(\)](#): Set keyword type

Usage:

```
ISOKeywords$setKeywordType(keywordType)
```

Arguments:

keywordType object of class [ISOKeywordType](#) or any [character](#) among values returned by `ISOKeywordType$values()`

Method `setThesaurusName()`: Set thesaurus name

Usage:

```
ISOKeywords$setThesaurusName(thesaurusName)
```

Arguments:

thesaurusName object of class [ISOCitation](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOKeywords$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Keywords
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_Keywords

Examples

```
#a basic keyword set
md <- ISOKeywords$new()
md$addKeyword("keyword1")
md$addKeyword("keyword2")
md$setKeywordType("theme")
th <- ISOCitation$new()
th$setTitle("General")
md$setThesaurusName(th)
xml <- md$encode()

#a keyword set with anchors
md <- ISOKeywords$new()
kwd1 <- ISOAnchor$new(
  name = "keyword1",
  href = "http://myvocabulary.geometa/keyword1"
)
md$addKeyword(kwd1)
kwd2 <- ISOAnchor$new(
  name = "keyword2",
  href = "http://myvocabulary.geometa/keyword2"
```

```

)
md$addKeyword(kwd2)
md$setKeywordType("theme")
xml <- md$encode()

#Example for INSPIRE (GEMET Spatial Data Theme)
inspire_kwd <- ISOKeywords$new()
anc1 <- ISOAnchor$new(
  name = "Environmental monitoring facilities",
  href = "http://inspire.ec.europa.eu/theme/ef"
)
inspire_kwd$addKeyword(anc1)
inspire_kwd$setKeywordType("theme")
th <- ISOCitation$new()
th$setTitle(
  ISOAnchor$new(
    name = "GEMET - INSPIRE themes, version 1.0",
    href="http://www.eionet.europa.eu/gemet/inspire_themes"
  )
)
inspire_date <- ISODate$new()
inspire_date$setDate(as.Date("2008-06-01"))
inspire_date$setDateType("publication")
th$addDate(inspire_date)
inspire_kwd$setThesaurusName(th)

```

ISOKeywordType	<i>ISOKeywordType</i>
----------------	-----------------------

Description

ISOKeywordType
ISOKeywordType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO KeywordType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOKeywordType

Methods

Public methods:

- [ISOKeywordType\\$new\(\)](#)
- [ISOKeywordType\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOKeywordType$new(xml = NULL, value, description = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

`value` value

`description` description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOKeywordType$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_KeywordTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_KeywordTypeCode

Examples

```
#possible values
values <- ISOKeywordType$values(labels = TRUE)

#place keywordType
place <- ISOKeywordType$new(value = "place")
```

ISOLanguage

ISOLanguage

Description

ISOLanguage

ISOLanguage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Language

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOLanguage

Methods

Public methods:

- [ISOLanguage\\$new\(\)](#)
- [ISOLanguage\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOLanguage$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOLanguage$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_LanguageCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/lan/1.0/lan/#element_LanguageCode

Examples

```
#possible values
values <- ISOLanguage$values(labels = TRUE)

#english language
eng <- ISOLanguage$new(value = "eng")
```

ISOLegalConstraints *ISOLegalConstraints*

Description

ISOLegalConstraints

ISOLegalConstraints

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO LegalConstraints

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOConstraints](#) ->
ISOLegalConstraints

Public fields

accessConstraints accessConstraints [0..*]: ISORestriction

useConstraints useConstraints [0..*]: ISORestriction

otherConstraints otherConstraints [0..*]: character

Methods**Public methods:**

- [ISOLegalConstraints\\$new\(\)](#)
- [ISOLegalConstraints\\$addAccessConstraint\(\)](#)
- [ISOLegalConstraints\\$delAccessConstraint\(\)](#)
- [ISOLegalConstraints\\$addUseConstraint\(\)](#)
- [ISOLegalConstraints\\$delUseConstraint\(\)](#)
- [ISOLegalConstraints\\$addOtherConstraint\(\)](#)
- [ISOLegalConstraints\\$delOtherConstraint\(\)](#)
- [ISOLegalConstraints\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

`ISOLegalConstraints$new(xml = NULL)`

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [addAccessConstraint\(\)](#): Adds access constraint

Usage:

`ISOLegalConstraints$addAccessConstraint(constraint)`

Arguments:

constraint object of class [ISORestriction](#)

Returns: TRUE if added, FALSE otherwise

Method [delAccessConstraint\(\)](#): Deletes access constraint

Usage:

`ISOLegalConstraints$delAccessConstraint(constraint)`

Arguments:

constraint object of class [ISORestriction](#)

Returns: TRUE if deleted, FALSE otherwise

Method [addUseConstraint\(\)](#): Adds use constraint

Usage:

`ISOLegalConstraints$addUseConstraint(constraint)`

Arguments:

constraint object of class [ISORestriction](#)

Returns: TRUE if added, FALSE otherwise

Method [delUseConstraint\(\)](#): Deletes use constraint

Usage:

`ISOLegalConstraints$delUseConstraint(constraint)`

Arguments:

constraint object of class [ISORestriction](#)

Returns: TRUE if deleted, FALSE otherwise

Method addOtherConstraint(): Adds other constraint

Usage:

```
ISOLegalConstraints$addOtherConstraint(constraint, locales = NULL)
```

Arguments:

constraint object of class [character](#)

locales list of localized names. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method delOtherConstraint(): Deletes other constraint

Usage:

```
ISOLegalConstraints$delOtherConstraint(constraint, locales = NULL)
```

Arguments:

constraint object of class [character](#)

locales list of localized names. Default is NULL

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOLegalConstraints$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_LegalConstraints
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mco/1.0/mco/#element_MD_LegalConstraints

Examples

```
#create object
md <- ISOLegalConstraints$new()
md$addUseLimitation("limitation1")
md$addUseLimitation("limitation2")
md$addUseLimitation("limitation3")
md$addAccessConstraint("copyright")
md$addAccessConstraint("license")
md$addUseConstraint("copyright")
md$addUseConstraint("license")

xml <- md$encode()
```

ISOLength

ISOLength

Description

ISOLength

ISOLength

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Length measure

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOMeasure](#) -> ISOLength

Methods

Public methods:

- [ISOLength\\$new\(\)](#)
- [ISOLength\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOLength$new(xml = NULL, value, uom, useUomURI = FALSE)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

uom uom symbol of unit of measure used

useUomURI use uom URI. Default is FALSE

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOLength$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Length
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Length

ISOLineage

*ISOLineage***Description**

ISOLineage

ISOLineage

Format

R6Class object.

Value

Object of R6Class for modelling an ISO Lineage

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> ISOLineage

Public fields

statement statement [0..1]: character

processStep processStep [0..*]: ISOProcessStep

source source [0..*]: ISOSource

Methods**Public methods:**

- ISOLineage\$new()
- ISOLineage\$setStatement()
- ISOLineage\$addProcessStep()
- ISOLineage\$delProcessStep()
- ISOLineage\$addSource()
- ISOLineage\$delSource()
- ISOLineage\$clone()

Method new(): Initializes object*Usage:*

ISOLineage\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method `setStatement()`: Set statement

Usage:

```
ISOLineage$setStatement(statement, locales = NULL)
```

Arguments:

statement statement

locales list of localized texts. Default is NULL

Method `addProcessStep()`: Adds process step

Usage:

```
ISOLineage$addProcessStep(processStep)
```

Arguments:

processStep object of class [ISOProcessStep](#)

Returns: TRUE if added, FALSE otherwise

Method `delProcessStep()`: Deletes process step

Usage:

```
ISOLineage$delProcessStep(processStep)
```

Arguments:

processStep object of class [ISOProcessStep](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addSource()`: Adds source

Usage:

```
ISOLineage$addSource(source)
```

Arguments:

source object of class [ISOSource](#)

Returns: TRUE if added, FALSE otherwise

Method `delSource()`: Deletes source

Usage:

```
ISOLineage$delSource(source)
```

Arguments:

source object of class [ISOSource](#)

Returns: TRUE if deleted, FALSE otherwise

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOLineage$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_LI_Lineage
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LI_Lineage

Examples

```

lineage <- ISOLineage$new()
lineage$setStatement("statement")

#add a process step
ps <- ISOProcessStep$new()
ps$setDescription("description")
ps$setRationale("rationale")
ps$setDateTime( ISOdate(2015, 1, 1, 23, 59, 59))
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone") #and more responsible party properties..
ps$addProcessor(rp)
lineage$addProcessStep(ps)

#add a source
src <- ISOSource$new()
src$setDescription("description")
src$setScaleDenominator(1L)
rs <- ISOReferenceSystem$new()
rsId <- ISOReferenceIdentifier$new(code = "4326", codeSpace = "EPSG")
rs$setReferenceSystemIdentifier(rsId)
src$setReferenceSystem(rs)
cit <- ISOCitation$new()
cit$setTitle("sometitle") #and more citation properties...
src$setCitation(cit)
extent <- ISOExtent$new()
bbox <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
extent$addGeographicElement(bbox)
src$addExtent(extent)
lineage$addSource(src)

xml <- lineage$encode()

```

ISOListedValue

ISOListedValue

Description

ISOListedValue

ISOListedValue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOListedValue

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOListedValue

Public fields

label label: character

code code [0..1]: character

definition definition [0..1]: character

definitionReference definitionReference [0..1]: ISODefinitionReference

Methods**Public methods:**

- [ISOListedValue\\$new\(\)](#)
- [ISOListedValue\\$setLabel\(\)](#)
- [ISOListedValue\\$setCode\(\)](#)
- [ISOListedValue\\$setDefinition\(\)](#)
- [ISOListedValue\\$setDefinitionReference\(\)](#)
- [ISOListedValue\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
ISOListedValue$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [setLabel\(\)](#): Set label

Usage:

```
ISOListedValue$setLabel(label, locales = NULL)
```

Arguments:

label label

locales list of localized texts. Default is NULL

Method [setCode\(\)](#): Set code

Usage:

```
ISOListedValue$setCode(code, locales = NULL)
```

Arguments:

code code
locales list of localized texts. Default is NULL

Method setDefinition(): Set definition*Usage:*

```
ISOListedValue$setDefinition(definition, locales = NULL)
```

Arguments:

definition definition
locales list of localized texts. Default is NULL

Method setDefinitionReference(): Set definition reference*Usage:*

```
ISOListedValue$setDefinitionReference(definitionReference)
```

Arguments:

definitionReference object of class [ISODefinitionReference](#)

Method clone(): The objects of this class are cloneable with this method.*Usage:*

```
ISOListedValue$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

Examples

```
val <- ISOListedValue$new()
val$setCode("code1")
val$setLabel("label1")
val$setDefinition("definition1")
xml <- val$encode()
```

ISOLocale

ISOLocale

Description

ISOLocale

ISOLocale

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Locale

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOLocale

Public fields

languageCode languageCode [1..1]: ISOLanguage (ISO 19139)

language language [1..1]: ISOLanguage (ISO 19115-3)

country country [0..1]: ISOCountry

characterEncoding characterEncoding [1..1]: ISOCharacterSet

Methods

Public methods:

- [ISOLocale\\$new\(\)](#)
- [ISOLocale\\$setId\(\)](#)
- [ISOLocale\\$setLanguage\(\)](#)
- [ISOLocale\\$setCountry\(\)](#)
- [ISOLocale\\$setCharacterSet\(\)](#)
- [ISOLocale\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOLocale$new(  
  xml = NULL,  
  id = NULL,  
  language = NULL,  
  country = NULL,  
  characterEncoding = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
id id
language language
country country
characterEncoding characterEncoding

Method setId(): Set ID*Usage:*

ISOLocale\$setId(id)

Arguments:

id id

Method setLanguage(): Set language*Usage:*

ISOLocale\$setLanguage(language)

Arguments:

language object of class [ISOLanguage](#) or any [character](#) among values returned by ISOLanguage\$values()

Method setCountry(): Set country*Usage:*

ISOLocale\$setCountry(country)

Arguments:

country object of class [ISOCountry](#) or any [character](#) among values returned by ISOCountry\$values()
or any other ISO-2 country code

Method setCharacterSet(): Set character set*Usage:*

ISOLocale\$setCharacterSet(charset)

Arguments:

charset object of class [ISOCharacterSet](#) or any [character](#) among values returned by ISOCharacterSet\$values()

Method clone(): The objects of this class are cloneable with this method.*Usage:*

ISOLocale\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_PT_Locale
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/lan/1.0/lan/#element_PT_Locale

Examples

```
loc <- ISOLocale$new()
loc$setId("eng")
loc$setLanguage("eng")
loc$setCountry("UK")
loc$setCharacterSet("utf8")
```

ISOLocaleContainer	<i>ISOLocaleContainer</i>
--------------------	---------------------------

Description

ISOLocaleContainer
ISOLocaleContainer

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO LocaleContainer

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOLocaleContainer

Public fields

language language [1..1]: ISOLanguage
country country [0..1]: ISOCountry
characterEncoding character encoding [0..1]: ISOCharacterSet
description description [1..1]
locale locale [1..1]
date date [1..*]
responsibleParty responsibleParty [1..*]
localisedString localisedString [1..*]

Methods**Public methods:**

- [ISOLocaleContainer\\$new\(\)](#)
- [ISOLocaleContainer\\$setLanguage\(\)](#)
- [ISOLocaleContainer\\$setCountry\(\)](#)
- [ISOLocaleContainer\\$setCharacterEncoding\(\)](#)
- [ISOLocaleContainer\\$setDescription\(\)](#)
- [ISOLocaleContainer\\$setLocale\(\)](#)
- [ISOLocaleContainer\\$addDate\(\)](#)
- [ISOLocaleContainer\\$delDate\(\)](#)
- [ISOLocaleContainer\\$addResponsibleParty\(\)](#)
- [ISOLocaleContainer\\$delResponsibleParty\(\)](#)
- [ISOLocaleContainer\\$addLocalisedString\(\)](#)
- [ISOLocaleContainer\\$delLocalisedString\(\)](#)
- [ISOLocaleContainer\\$clone\(\)](#)

Method new(): Initializes object

Usage:

`ISOLocaleContainer$new(xml = NULL)`

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setLanguage(): Set language

Usage:

`ISOLocaleContainer$setLanguage(language)`

Arguments:

language object of class [ISOLanguage](#) or [character](#)

Method setCountry(): Set country

Usage:

`ISOLocaleContainer$setCountry(country)`

Arguments:

country object of class [ISOCountry](#) or [character](#)

Method setCharacterEncoding(): Set character encoding

Usage:

`ISOLocaleContainer$setCharacterEncoding(characterEncoding)`

Arguments:

characterEncoding object of class [ISOCharacterSet](#) or [character](#)

Method setDescription(): Set description

Usage:

ISOLocaleContainer\$setDescription(description, locales = NULL)

Arguments:

description description

locales list of localized texts. Default is NULL

Method setLocale(): Set locale

Usage:

ISOLocaleContainer\$setLocale(locale)

Arguments:

locale object of class [ISOLocale](#)

Method addDate(): Adds date

Usage:

ISOLocaleContainer\$addDate(date)

Arguments:

date object of class [ISODate](#)

Returns: TRUE if added, FALSE otherwise

Method delDate(): Deletes date

Usage:

ISOLocaleContainer\$delDate(date)

Arguments:

date object of class [ISODate](#)

Returns: TRUE if deleted, FALSE otherwise

Method addResponsibleParty(): Adds responsible party

Usage:

ISOLocaleContainer\$addResponsibleParty(responsibleParty)

Arguments:

responsibleParty object of class [ISOResponsibleParty](#) (in ISO 19139) or [ISOResponsibility](#) (in ISO 19115-3)

Returns: TRUE if added, FALSE otherwise

Method delResponsibleParty(): Deletes responsible party

Usage:

ISOLocaleContainer\$delResponsibleParty(responsibleParty)

Arguments:

responsibleParty object of class [ISOResponsibleParty](#) (in ISO 19139) or [ISOResponsibility](#) (in ISO 19115-3)

Returns: TRUE if deleted, FALSE otherwise

Method addLocalisedString(): Adds localised string

Usage:

ISOLocaleContainer\$addLocalisedString(string)

Arguments:

string object of class [character](#)

Returns: TRUE if added, FALSE otherwise

Method delLocalisedString(): Deletes localised string

Usage:

ISOLocaleContainer\$delLocalisedString(string)

Arguments:

string object of class [character](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOLocaleContainer\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_PT_LocaleContainer
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/lan/1.0/lan/#element_PT_LocaleContainer

ISOLocalisedCharacterString

ISOLocalisedCharacterString

Description

ISOLocalisedCharacterString

ISOLocalisedCharacterString

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO LocalisedCharacterString

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOBaseCharacterString  
-> ISOLocalisedCharacterString
```

Methods**Public methods:**

- [ISOLocalisedCharacterString\\$new\(\)](#)
- [ISOLocalisedCharacterString\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOLocalisedCharacterString$new(xml = NULL, locale = NULL, value)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

locale locale

value value

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOLocalisedCharacterString$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_LocalisedCharacterString
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/lan/1.0/lan/#element_LocalisedCharacterString

Examples

```
str <- ISOLocalisedCharacterString$new(locale = "FR", value = "ma description")  
str$encode()
```

ISOLocalName	<i>ISOLocalName</i>
--------------	---------------------

Description

ISOLocalName

ISOLocalName

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO LocalName**Super classes**

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLCodeType](#) -> [geometa::ISOAbstractGeneralization](#)
 -> ISOLocalName

Public fields

value value

Methods**Public methods:**

- [ISOLocalName\\$new\(\)](#)
- [ISOLocalName\\$clone\(\)](#)

Method [new\(\)](#): Initializes object*Usage:*[ISOLocalName\\$new](#)(xml = NULL, value = NULL)*Arguments:*xml object of class [XMLInternalNode-class](#)

value value

Method [clone\(\)](#): The objects of this class are cloneable with this method.*Usage:*[ISOLocalName\\$clone](#)(deep = FALSE)*Arguments:*

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_LocalName

ISOMaintenanceFrequency

ISOMaintenanceFrequency

Description

ISOMaintenanceFrequency

ISOMaintenanceFrequency

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO MaintenanceFrequency

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOMaintenanceFrequency

Methods**Public methods:**

- [ISOMaintenanceFrequency\\$new\(\)](#)
- [ISOMaintenanceFrequency\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOMaintenanceFrequency\\$new](#)(xml = NULL, value, description = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOMaintenanceFrequency\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_MaintenanceFrequencyCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mmi/1.0/mmi/#element_MD_MaintenanceFrequencyCode

Examples

```
#possible values
values <- ISOMaintenanceFrequency$values(labels = TRUE)

#daily frequency
daily <- ISOMaintenanceFrequency$new(value = "daily")
```

ISOMaintenanceInformation

ISOMaintenanceInformation

Description

ISOMaintenanceInformation

ISOMaintenanceInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO MaintenanceInformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMaintenanceInformation

Public fields

maintenanceAndUpdateFrequency maintenanceAndUpdateFrequency

Methods

Public methods:

- [ISOMaintenanceInformation\\$new\(\)](#)
- [ISOMaintenanceInformation\\$setMaintenanceFrequency\(\)](#)
- [ISOMaintenanceInformation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOMaintenanceInformation$new(xml = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setMaintenanceFrequency()`: Set maintenance frequency

Usage:

```
ISOMaintenanceInformation$setMaintenanceFrequency(frequency)
```

Arguments:

`frequency` frequency object of class [ISOMaintenanceFrequency](#) or any [character](#) among values returned by `ISOMaintenanceFrequency$values()`

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOMaintenanceInformation$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_MaintenanceInformation
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mmi/1.0/mmi/#element_MD_MaintenanceInformation

Examples

```
md <- ISOMaintenanceInformation$new()
md$setMaintenanceFrequency("daily")
xml <- md$encode()
```

ISOMDFeatureCatalogue *ISOMDFeatureCatalogue*

Description

ISOMDFeatureCatalogue

ISOMDFeatureCatalogue

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a ISO feature catalogue

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractContentInformation](#)
-> ISOMDFeatureCatalogue

Public fields

featureCatalogue featureCatalogue [1..*] : ISOAbstractFeatureCatalogue

Methods

Public methods:

- [ISOMDFeatureCatalogue\\$new\(\)](#)
- [ISOMDFeatureCatalogue\\$addFeatureCatalogue\(\)](#)
- [ISOMDFeatureCatalogue\\$delFeatureCatalogue\(\)](#)
- [ISOMDFeatureCatalogue\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOMDFeatureCatalogue\\$new](#)(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [addFeatureCatalogue\(\)](#): Adds feature catalogue

Usage:

[ISOMDFeatureCatalogue\\$addFeatureCatalogue](#)(featureCatalogue)

Arguments:

featureCatalogue object inheriting class [ISOAbstractFeatureCatalogue](#)

Returns: TRUE if added, FALSE otherwise

Method delFeatureCatalogue(): Adds feature catalogue

Usage:

ISOMDFeatureCatalogue\$delFeatureCatalogue(featureCatalogue)

Arguments:

featureCatalogue object inheriting class [ISOAbstractFeatureCatalogue](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOMDFeatureCatalogue\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_FeatureCatalogue

ISOMeasure

ISOMeasure

Description

ISOMeasure

ISOMeasure

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Measure

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMeasure

Public fields

value value

attrs attrs

Methods

Public methods:

- [ISOMeasure\\$new\(\)](#)
- [ISOMeasure\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOMeasure$new(xml = NULL, value, uom, useUomURI = FALSE)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

`value` value

`uom` uom symbol of unit of measure used

`useUomURI` use uom URI. Default is FALSE

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOMeasure$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Measure
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Measure

ISOMeasureReference *ISOMeasureReference*

Description

ISOMeasureReference

ISOMeasureReference

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO measure reference

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMeasureReference

Public fields

measureIdentification measureIdentification [0..1]: ISOMetaIdentifier

nameOfMeasure nameOfMeasure [0..*]: character

measureDescription measureDescription [0..1]: character

Methods**Public methods:**

- [ISOMeasureReference\\$new\(\)](#)
- [ISOMeasureReference\\$setMeasureIdentification\(\)](#)
- [ISOMeasureReference\\$addName\(\)](#)
- [ISOMeasureReference\\$delName\(\)](#)
- [ISOMeasureReference\\$setMeasureDescription\(\)](#)
- [ISOMeasureReference\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOMeasureReference\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [setMeasureIdentification\(\)](#): set MeasureIdentification

Usage:

[ISOMeasureReference\\$setMeasureIdentification\(measureIdentifier\)](#)

Arguments:

measureIdentifier object of class [ISOMetaIdentifier](#)

Method [addName\(\)](#): Adds name

Usage:

[ISOMeasureReference\\$addName\(name, locales = NULL\)](#)

Arguments:

name name

locales list of localized names. Default is NULL

Returns: TRUE if added, FALSE otherwise

Method [delName\(\)](#): Deletes name

Usage:

[ISOMeasureReference\\$delName\(name, locales = NULL\)](#)

Arguments:

name name
 locales list of localized names. Default is NULL
Returns: TRUE if deleted, FALSE otherwise

Method setMeasureDescription(): set measure description

Usage:
 ISOMeasureReference\$setMeasureDescription(measureDescription)
Arguments:
 measureDescription object of class [character](#)
 locales list of localized descriptions. Default is NULL

Method clone(): The objects of this class are cloneable with this method.

Usage:
 ISOMeasureReference\$clone(deep = FALSE)
Arguments:
 deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_MeasureReference

ISOMedium

ISOMedium

Description

ISOMedium
 ISOMedium

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Citation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMedium

Public fields

name name
density density
densityUnits density units
volumes volumes
mediumFormat medium format
mediumNote medium note

Methods**Public methods:**

- [ISOMedium\\$new\(\)](#)
- [ISOMedium\\$setName\(\)](#)
- [ISOMedium\\$addDensity\(\)](#)
- [ISOMedium\\$delDensity\(\)](#)
- [ISOMedium\\$setDensityUnits\(\)](#)
- [ISOMedium\\$setVolumes\(\)](#)
- [ISOMedium\\$addMediumFormat\(\)](#)
- [ISOMedium\\$delMediumFormat\(\)](#)
- [ISOMedium\\$setMediumNote\(\)](#)
- [ISOMedium\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOMedium$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setName()`: Set name

Usage:

`ISOMedium$setName(name)`

Arguments:

`name` name object of class [ISOMediumName](#) or [character](#) among values returned by `ISOMediumName$values()`

Method `addDensity()`: Adds density

Usage:

`ISOMedium$addDensity(density)`

Arguments:

`density` object of class [numeric](#)

Returns: TRUE if added, FALSE otherwise

Method `delDensity()`: Deletes density

Usage:

ISOMedium\$delDensity(density)

Arguments:

density object of class [numeric](#)

Returns: TRUE if deleted, FALSE otherwise

Method setDensityUnits(): Set density units

Usage:

ISOMedium\$setDensityUnits(densityUnits)

Arguments:

densityUnits densityUnits

Method setVolumes(): Set volumes

Usage:

ISOMedium\$setVolumes(volumes)

Arguments:

volumes object of class [integer](#)

Method addMediumFormat(): Adds medium format

Usage:

ISOMedium\$addMediumFormat(mediumFormat)

Arguments:

mediumFormat object of class [ISOMediumFormat](#) or [character](#) among values returned by ISOMediumFormat\$values()

Returns: TRUE if added, FALSE otherwise

Method delMediumFormat(): Deletes medium format

Usage:

ISOMedium\$delMediumFormat(mediumFormat)

Arguments:

mediumFormat object of class [ISOMediumFormat](#) or [character](#) among values returned by ISOMediumFormat\$values()

Returns: TRUE if deleted, FALSE otherwise

Method setMediumNote(): Set medium note

Usage:

ISOMedium\$setMediumNote(mediumNote, locales = NULL)

Arguments:

mediumNote medium note

locales list of localized notes. Default is NULL

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOMedium\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Medium
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrd/1.0/mrd/#element_MD_Medium

Examples

```
md <- ISOMedium$new()
md$setName("satellite")
md$addDensity(1.0)
md$setDensityUnits("string")
md$setVolumes(1L)
md$addMediumFormat("tar")
md$setMediumNote("some note")
xml <- md$encode()
```

ISOMediumFormat

ISOMediumFormat

Description

ISOMediumFormat

ISOMediumFormat

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOMediumFormat

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOMediumFormat

Methods

Public methods:

- [ISOMediumFormat\\$new\(\)](#)
- [ISOMediumFormat\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOMediumFormat$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOMediumFormat$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_MediumFormatCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrd/1.0/mrd/#element_MD_MediumFormatCode

Examples

```
#possible values
values <- ISOMediumFormat$values(labels = TRUE)

#MediumFormat
MediumFormat <- ISOMediumFormat$new(value = "tar")
```

ISOMediumName	<i>ISOMediumName</i>
---------------	----------------------

Description

ISOMediumName

ISOMediumName

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISOMediumName**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOMediumName**Methods****Public methods:**

- [ISOMediumName\\$new\(\)](#)
- [ISOMediumName\\$clone\(\)](#)

Method `new()`: Initializes object*Usage:*`ISOMediumName$new(xml = NULL, value, description = NULL)`*Arguments:*xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.*Usage:*`ISOMediumName$clone(deep = FALSE)`*Arguments:*

deep Whether to make a deep clone.

Author(s)Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
#possible values
values <- ISOMediumName$values(labels = TRUE)

#MediumName
MediumName <- ISOMediumName$new(value = "satellite")
```

ISOMemberName

ISOMemberName

Description

ISOMemberName

ISOMemberName

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOMemberName

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMemberName

Public fields

aName name

attributeType attribute type

Methods**Public methods:**

- [ISOMemberName\\$new\(\)](#)
- [ISOMemberName\\$setName\(\)](#)
- [ISOMemberName\\$setAttributeType\(\)](#)
- [ISOMemberName\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

ISOMemberName\$new(xml = NULL, aName = NULL, attributeType = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

aName a name

attributeType attribute type

Method setName(): Set name

Usage:

ISOMemberName\$setName(aName, locales = NULL)

Arguments:

aName name

locales list of localized texts. Default is NULL

Method setAttributeType(): Set attribute type

Usage:

ISOMemberName\$setAttributeType(attributeType, locales = NULL)

Arguments:

attributeType attribute type

locales list of localized texts. Default is NULL

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOMemberName\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_MemberName

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_MemberName

 ISOMetadata

ISOMetadata

Description

ISOMetadata

ISOMetadata

Format

R6Class object.

Value

Object of R6Class for modelling an ISO Metadata

Super classes
[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMetadata
Public fields

fileIdentifier fileIdentifier [0..1] : character (ISO 19139)

metadataIdentifier metadataIdentifier [0..1] : ISOMetaIdentifier (ISO 19115-3)

language language [0..1] : character (ISO 19139)

defaultLocale [0..1] : ISOLocale (ISO 19115-3)

characterSet characterSet [0..1] : ISOCharacterSet = "utf8"

parentIdentifier parentIdentifier [0..1] : character

parentMetadata parentMetadata [0..1] : ISOCitation (ISO 19115-3)

hierarchyLevel hierarchyLevel [0..*] : ISOScopeCode = "dataset"

hierarchyLevelName hierarchyLevelName [0..*] : character

metadataScope metadataScope [0..*] : ISOMetadataScope (ISO 19115-3)

contact contact [1..*] : ISOResponsibleParty

dateStamp dateStamp : POSIXct/POSIXt

dateInfo dateInfo [1..*] : ISODate

metadataStandardName metadataStandardName [0..1] : character (ISO 19139)

metadataStandardVersion metadataStandardVersion [0..1] : character (ISO 19139)

metadataStandard metadataStandard [0..*] : ISOCitation (ISO 19115-3)

metadataProfile metadataProfile [0..*] : ISOCitation (ISO 19115-3)

alternativeMetadataReference alternativeMetadataReference [0..*] : ISOCitation (ISO 19115-3)

otherLocale otherLocale [0..*] : ISOLocale (ISO 19115-3)

dataSetURI dataSetURI [0..1]: character (ISO 19139)
 metadataLinkage metadataLinkage [0..*]: ISOOnlineResource (ISO 19115-3)
 locale locale [0..*]: ISOLocale (ISO 19139)
 spatialRepresentationInfo spatialRepresentationInfo [0..*]: ISOSpatialRepresentation
 referenceSystemInfo referenceSystemInfo [0..*]: ISOReferenceSystem
 metadataExtensionInfo metadataExtensionInfo [0..*]: ISOMetadataExtensionInformation
 identificationInfo identificationInfo [1..*]: ISOIdentification
 contentInfo contentInfo [0..*]
 distributionInfo distributionInfo [0..1]: ISODistribution
 dataQualityInfo dataQualityInfo [0..*]: ISODataQuality
 resourceLineage resourceLineage [0..*]: ISOLineage (ISO 19115-3)
 metadataMaintenance metadataMaintenance [0..1]: ISOMaintenanceInformation
 portrayalCatalogueInfo portrayalCatalogueInfo [0..*]
 applicationSchemaInformation applicationSchemaInfo [0..*]

Methods

Public methods:

- [ISOMetadata\\$new\(\)](#)
- [ISOMetadata\\$setFileIdentifier\(\)](#)
- [ISOMetadata\\$setMetadataIdentifier\(\)](#)
- [ISOMetadata\\$setLanguage\(\)](#)
- [ISOMetadata\\$setDefaultLocale\(\)](#)
- [ISOMetadata\\$setCharacterSet\(\)](#)
- [ISOMetadata\\$setParentIdentifier\(\)](#)
- [ISOMetadata\\$setParentMetadata\(\)](#)
- [ISOMetadata\\$addHierarchyLevel\(\)](#)
- [ISOMetadata\\$delHierarchyLevel\(\)](#)
- [ISOMetadata\\$addHierarchyLevelName\(\)](#)
- [ISOMetadata\\$delHierarchyLevelName\(\)](#)
- [ISOMetadata\\$addMetadataScope\(\)](#)
- [ISOMetadata\\$delMetadataScope\(\)](#)
- [ISOMetadata\\$addContact\(\)](#)
- [ISOMetadata\\$delContact\(\)](#)
- [ISOMetadata\\$setDateStamp\(\)](#)
- [ISOMetadata\\$addDate\(\)](#)
- [ISOMetadata\\$delDate\(\)](#)
- [ISOMetadata\\$setMetadataStandardName\(\)](#)
- [ISOMetadata\\$setMetadataStandardVersion\(\)](#)
- [ISOMetadata\\$addMetadataStandard\(\)](#)
- [ISOMetadata\\$delMetadataStandard\(\)](#)

- ISOMetadata\$addMetadataProfile()
- ISOMetadata\$delMetadataProfile()
- ISOMetadata\$addAlternativeMetadataReference()
- ISOMetadata\$delAlternativeMetadataReference()
- ISOMetadata\$setDataSetURI()
- ISOMetadata\$addMetadataLinkage()
- ISOMetadata\$delMetadataLinkage()
- ISOMetadata\$addLocale()
- ISOMetadata\$delLocale()
- ISOMetadata\$addSpatialRepresentationInfo()
- ISOMetadata\$setSpatialRepresentationInfo()
- ISOMetadata\$delSpatialRepresentationInfo()
- ISOMetadata\$addReferenceSystemInfo()
- ISOMetadata\$setReferenceSystemInfo()
- ISOMetadata\$delReferenceSystemInfo()
- ISOMetadata\$addMetadataExtensionInfo()
- ISOMetadata\$delMetadataExtensionInfo()
- ISOMetadata\$addIdentificationInfo()
- ISOMetadata\$setIdentificationInfo()
- ISOMetadata\$delIdentificationInfo()
- ISOMetadata\$setDistributionInfo()
- ISOMetadata\$addDataQualityInfo()
- ISOMetadata\$setDataQualityInfo()
- ISOMetadata\$delDataQualityInfo()
- ISOMetadata\$addResourceLineage()
- ISOMetadata\$delResourceLineage()
- ISOMetadata\$setMetadataMaintenance()
- ISOMetadata\$addContentInfo()
- ISOMetadata\$delContentInfo()
- ISOMetadata\$clone()

Method new(): Initializes object

Usage:

ISOMetadata\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setFileIdentifier(): Set file identifier

Usage:

ISOMetadata\$setFileIdentifier(fileIdentifier)

Arguments:

fileIdentifier file identifier

Method setMetadataIdentifier(): set metadata identifier

Usage:

ISOMetadata\$setMetadataIdentifier(metadataIdentifier)

Arguments:

metadataIdentifier metadata identifier

Method setLanguage(): Set language

Usage:

ISOMetadata\$setLanguage(locale)

Arguments:

locale object of class [ISOLanguage](#) or any [character](#) from values returned by ISOLanguages\$values()

Method setDefaultLocale(): Set default locale

Usage:

ISOMetadata\$setDefaultLocale(locale)

Arguments:

locale object of class [ISOLocale](#)

Method setCharacterSet(): Set charset

Usage:

ISOMetadata\$setCharacterSet(charset)

Arguments:

charset object of class [ISOCharacterSet](#) or any [character](#) from values returned by ISOCharacterSet\$values()

Method setParentIdentifier(): Set parent identifier

Usage:

ISOMetadata\$setParentIdentifier(parentIdentifier)

Arguments:

parentIdentifier parent identifier

Method setParentMetadata(): Set parent metadata

Usage:

ISOMetadata\$setParentMetadata(parentMetadata)

Arguments:

parentMetadata parent metadata

Method addHierarchyLevel(): Adds hierarchy level

Usage:

ISOMetadata\$addHierarchyLevel(level)

Arguments:

level object of class [ISOScopeCode](#) or any [character](#) from values returned by ISOScopeCode\$values()

Returns: TRUE if added, FALSE otherwise

Method delHierarchyLevel(): Deletes hierarchy level

Usage:

ISOMetadata\$delHierarchyLevel(level)

Arguments:

level object of class [ISOScopeCode](#) or any [character](#) from values returned by ISOScopeCode\$values()

Returns: TRUE if deleted, FALSE otherwise

Method addHierarchyLevelName(): Adds hierarchy level name

Usage:

ISOMetadata\$addHierarchyLevelName(levelName)

Arguments:

levelName object of class [character](#)

Returns: TRUE if added, FALSE otherwise

Method delHierarchyLevelName(): Deletes hierarchy level name

Usage:

ISOMetadata\$delHierarchyLevelName(levelName)

Arguments:

levelName object of class [character](#)

Returns: TRUE if deleted, FALSE otherwise

Method addMetadataScope(): Adds metadata scope

Usage:

ISOMetadata\$addMetadataScope(metadataScope)

Arguments:

metadataScope object of class [ISOMetadataScope](#) or any [character](#) among values returned by ISOScopeCode\$values()

Returns: TRUE if added, FALSE otherwise

Method delMetadataScope(): Deletes metadata scope

Usage:

ISOMetadata\$delMetadataScope(metadataScope)

Arguments:

metadataScope object of class [ISOMetadataScope](#) or any [character](#) among values returned by ISOScopeCode\$values()

Returns: TRUE if deleted, FALSE otherwise

Method addContact(): Adds contact

Usage:

ISOMetadata\$addContact(contact)

Arguments:

contact object of class [ISOResponsibleParty](#) for ISO 19139 or inheriting class [ISOAbstractResponsibility](#) for ISO 19115-3

Returns: TRUE if added, FALSE otherwise

Method delContact(): Deletes contact

Usage:

ISOMetadata\$delContact(contact)

Arguments:

contact object of class [ISOResponsibleParty](#) for ISO 19139 or inheriting class [ISOAbstractResponsibility](#) for ISO 19115-3

Returns: TRUE if deleted, FALSE otherwise

Method setDateStamp(): Set date stamp

Usage:

ISOMetadata\$setDateStamp(date)

Arguments:

date date

Method addDate(): Adds date

Usage:

ISOMetadata\$addDate(date)

Arguments:

date object of class [ISODate](#)

Returns: TRUE if added, FALSE otherwise

Method delDate(): Deletes date

Usage:

ISOMetadata\$delDate(date)

Arguments:

date object of class [ISODate](#)

Returns: TRUE if deleted, FALSE otherwise

Method setMetadataStandardName(): Set metadata standard name

Usage:

ISOMetadata\$setMetadataStandardName(name)

Arguments:

name name

Method setMetadataStandardVersion(): Set metadata standard version

Usage:

ISOMetadata\$setMetadataStandardVersion(version)

Arguments:

version version

Method addMetadataStandard(): Adds metadata standard

Usage:

ISOMetadata\$addMetadataStandard(metadataStandard)

Arguments:

metadataStandard object of class [ISOCitation](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method delMetadataStandard(): Deletes metadata standard

Usage:

ISOMetadata\$delMetadataStandard(metadataStandard)

Arguments:

metadataStandard object of class [ISOCitation](#) or [character](#)

Returns: TRUE if deleted, FALSE otherwise

Method addMetadataProfile(): Adds metadata profile

Usage:

ISOMetadata\$addMetadataProfile(metadataProfile)

Arguments:

metadataProfile object of class [ISOCitation](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method delMetadataProfile(): Deletes metadata profile

Usage:

ISOMetadata\$delMetadataProfile(metadataProfile)

Arguments:

metadataProfile object of class [ISOCitation](#) or [character](#)

Returns: TRUE if deleted, FALSE otherwise

Method addAlternativeMetadataReference(): Adds alternative metadata reference

Usage:

ISOMetadata\$addAlternativeMetadataReference(alternativeMetadataReference)

Arguments:

alternativeMetadataReference object of class [ISOCitation](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method delAlternativeMetadataReference(): Deletes alternative metadata reference

Usage:

ISOMetadata\$delAlternativeMetadataReference(alternativeMetadataReference)

Arguments:

alternativeMetadataReference object of class [ISOCitation](#) or [character](#)

Returns: TRUE if deleted, FALSE otherwise

Method setDataSetURI(): Set dataset URI

Usage:

ISOMetadata\$setDataSetURI(dataSetURI)

Arguments:

dataSetURI dataset URI

Method addMetadataLinkage(): Adds metadata linkage

Usage:

ISOMetadata\$addMetadataLinkage(metadataLinkage)

Arguments:

metadataLinkage object of class [ISOOnlineResource](#)

Returns: TRUE if added, FALSE otherwise

Method delMetadataLinkage(): Deletes metadata linkage

Usage:

ISOMetadata\$delMetadataLinkage(metadataLinkage)

Arguments:

metadataLinkage object of class [ISOOnlineResource](#)

Returns: TRUE if deleted, FALSE otherwise

Method addLocale(): Adds locale

Usage:

ISOMetadata\$addLocale(locale)

Arguments:

locale object of class [ISOLocale](#)

Returns: TRUE if added, FALSE otherwise

Method delLocale(): Deletes locale

Usage:

ISOMetadata\$delLocale(locale)

Arguments:

locale object of class [ISOLocale](#)

Returns: TRUE if deleted, FALSE otherwise

Method addSpatialRepresentationInfo(): Adds spatial representation info

Usage:

ISOMetadata\$addSpatialRepresentationInfo(spatialRepresentationInfo)

Arguments:

spatialRepresentationInfo object of class [ISOSpatialRepresentation](#)

Returns: TRUE if added, FALSE otherwise

Method setSpatialRepresentationInfo(): Sets spatial representation info

Usage:

ISOMetadata\$setSpatialRepresentationInfo(spatialRepresentationInfo)

Arguments:

spatialRepresentationInfo object of class [ISOSpatialRepresentation](#)

Returns: TRUE if added, FALSE otherwise

Method delSpatialRepresentationInfo(): Deletes spatial representation info

Usage:

ISOMetadata\$delSpatialRepresentationInfo(spatialRepresentationInfo)

Arguments:

spatialRepresentationInfo object of class [ISOSpatialRepresentation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addReferenceSystemInfo(): Adds reference system info

Usage:

ISOMetadata\$addReferenceSystemInfo(referenceSystemInfo)

Arguments:

referenceSystemInfo object of class [ISOReferenceSystem](#)

Returns: TRUE if added, FALSE otherwise

Method setReferenceSystemInfo(): Sets reference system info

Usage:

ISOMetadata\$setReferenceSystemInfo(referenceSystemInfo)

Arguments:

referenceSystemInfo object of class [ISOReferenceSystem](#)

Returns: TRUE if added, FALSE otherwise

Method delReferenceSystemInfo(): Deletes reference system info

Usage:

ISOMetadata\$delReferenceSystemInfo(referenceSystemInfo)

Arguments:

referenceSystemInfo object of class [ISOReferenceSystem](#)

Returns: TRUE if deleted, FALSE otherwise

Method addMetadataExtensionInfo(): Adds metadata extension info

Usage:

ISOMetadata\$addMetadataExtensionInfo(metadataExtensionInfo)

Arguments:

metadataExtensionInfo object of class [ISOMetadataExtensionInformation](#)

Returns: TRUE if added, FALSE otherwise

Method delMetadataExtensionInfo(): Deletes metadata extension info

Usage:

ISOMetadata\$delMetadataExtensionInfo(metadataExtensionInfo)

Arguments:

metadataExtensionInfo object of class [ISOMetadataExtensionInformation](#)

Returns: TRUE if deleted, FALSE otherwise

Method addIdentificationInfo(): Adds metadata extension info

Usage:

ISOMetadata\$addIdentificationInfo(identificationInfo)

Arguments:

identificationInfo object of class inheriting [ISOIdentification](#)

Returns: TRUE if added, FALSE otherwise

Method setIdentificationInfo(): Sets metadata extension info

Usage:

ISOMetadata\$setIdentificationInfo(identificationInfo)

Arguments:

identificationInfo object of class inheriting [ISOIdentification](#)

Returns: TRUE if added, FALSE otherwise

Method delIdentificationInfo(): Deletes metadata extension info

Usage:

ISOMetadata\$delIdentificationInfo(identificationInfo)

Arguments:

identificationInfo object of class inheriting [ISOIdentification](#)

Returns: TRUE if deleted, FALSE otherwise

Method setDistributionInfo(): Sets metadata extension info

Usage:

ISOMetadata\$setDistributionInfo(distributionInfo)

Arguments:

distributionInfo object of class [ISODistribution](#)

Returns: TRUE if set, FALSE otherwise

Method addDataQualityInfo(): Adds data quality info

Usage:

ISOMetadata\$addDataQualityInfo(dataQualityInfo)

Arguments:

dataQualityInfo object of class [ISODataQuality](#)

Returns: TRUE if added, FALSE otherwise

Method setDataQualityInfo(): Sets data quality info

Usage:

ISOMetadata\$setDataQualityInfo(dataQualityInfo)

Arguments:

dataQualityInfo object of class [ISODataQuality](#)

Returns: TRUE if added, FALSE otherwise

Method delDataQualityInfo(): Deletes data quality info

Usage:

ISOMetadata\$delDataQualityInfo(dataQualityInfo)

Arguments:

dataQualityInfo object of class [ISODataQuality](#)

Returns: TRUE if deleted, FALSE otherwise

Method addResourceLineage(): Adds lineage info

Usage:

ISOMetadata\$addResourceLineage(lineageInfo)

Arguments:

lineageInfo object of class [ISOLineage](#)

Returns: TRUE if added, FALSE otherwise

Method delResourceLineage(): Deletes lineage info

Usage:

ISOMetadata\$delResourceLineage(lineageInfo)

Arguments:

lineageInfo object of class [ISOLineage](#)

Returns: TRUE if deleted, FALSE otherwise

Method setMetadataMaintenance(): Sets metadata maintenance

Usage:

ISOMetadata\$setMetadataMaintenance(metadataMaintenance)

Arguments:

metadataMaintenance object of class [ISOMaintenanceInformation](#)

Returns: TRUE if added, FALSE otherwise

Method addContentInfo(): Adds content information

Usage:

```
ISOMetadata$addContentInfo(contentInfo)
```

Arguments:

contentInfo object of class inheriting [ISOAbstractContentInformation](#)

Returns: TRUE if added, FALSE otherwise

Method delContentInfo(): Deletes content information

Usage:

```
ISOMetadata$delContentInfo(contentInfo)
```

Arguments:

contentInfo object of class inheriting [ISOAbstractContentInformation](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOMetadata$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Metadata
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mdb/2.0/mdb/#element_MD_Metadata

Examples

```
#example 1 - WRITE: Create an ISO metadata and encode it as XML
#####
md = ISOMetadata$new()
md$setFileIdentifier("my-metadata-identifier")
md$setParentIdentifier("my-parent-metadata-identifier")
md$setCharacterSet("utf8")
md$setLanguage("eng")
md$setDateStamp(ISOdate(2015, 1, 1, 1))
md$setMetadataStandardName("ISO 19115:2003/19139")
md$setMetadataStandardVersion("1.0")
md$setDataSetURI("my-dataset-identifier")

#add 3 contacts
for(i in 1:3){
  rp <- ISOResponsibleParty$new()
  rp$setIndividualName(paste0("someone", i))
  rp$setOrganisationName("somewhere")
}
```

```

rp$setPositionName(paste0("someposition",i))
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice(paste0("myphonenum",i))
phone$setFacsimile(paste0("myfacsimile",i))
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://somelink")
res$setName("someresourcenam")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
md$addContact(rp)
}

#VectorSpatialRepresentation
vsr <- ISOVectorSpatialRepresentation$new()
vsr$setTopologyLevel("geometryOnly")
geomObject <- ISOGeometricObjects$new()
geomObject$setGeometricObjectType("surface")
geomObject$setGeometricObjectCount(5L)
vsr$addGeometricObjects(geomObject)
md$addSpatialRepresentationInfo(vsr)

#ReferenceSystem
rs <- ISOReferenceSystem$new()
rsId <- ISOReferenceIdentifier$new(code = "4326", codeSpace = "EPSG")
rs$setReferenceSystemIdentifier(rsId)
md$addReferenceSystemInfo(rs)

#data identification
ident <- ISODataIdentification$new()
ident$setAbstract("abstract")
ident$setPurpose("purpose")
ident$addCredit("credit1")
ident$addCredit("credit2")
ident$addCredit("credit3")
ident$addStatus("completed")
ident$addLanguage("eng")
ident$addCharacterSet("utf8")
ident$addTopicCategory("biota")
ident$addTopicCategory("oceans")

#adding a point of contact
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")

```

```
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenummer")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://somelink")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
ident$addPointOfContact(rp)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(as.Date(ISOdate(2015, 1, 1, 1)))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp)
ident$setCitation(ct)

#graphic overview
go1 <- ISOBrowseGraphic$new(
  fileName = "http://www.somefile.org/png1",
  fileDescription = "Map Overview 1",
  fileType = "image/png"
)
go2 <- ISOBrowseGraphic$new(
  fileName = "http://www.somefile.org/png2",
  fileDescription = "Map Overview 2",
  fileType = "image/png"
)
ident$addGraphicOverview(go1)
ident$addGraphicOverview(go2)

#maintenance information
mi <- ISOMaintenanceInformation$new()
mi$setMaintenanceFrequency("daily")
```

```

ident$addResourceMaintenance(mi)

#adding legal constraints
lc <- ISOLegalConstraints$new()
lc$addUseLimitation("limitation1")
lc$addUseLimitation("limitation2")
lc$addUseLimitation("limitation3")
lc$addAccessConstraint("copyright")
lc$addAccessConstraint("license")
lc$addUseConstraint("copyright")
lc$addUseConstraint("license")
ident$addResourceConstraints(lc)

#adding security constraints
sc <- ISOSecurityConstraints$new()
sc$setClassification("secret")
sc$setUserNote("ultra secret")
sc$setClassificationSystem("no classification in particular")
sc$setHandlingDescription("description")
ident$addResourceConstraints(sc)

#adding extent
extent <- ISOExtent$new()
bbox <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
extent$addGeographicElement(bbox)
ident$addExtent(extent)

#add keywords
kwds <- ISOKeywords$new()
kwds$addKeyword("keyword1")
kwds$addKeyword("keyword2")
kwds$setKeywordType("theme")
th <- ISOCitation$new()
th$setTitle("General")
th$addDate(d)
kwds$setThesaurusName(th)
ident$addKeywords(kwds)

#add an INSPIRE spatial data theme?
inspire_kwd <- ISOKeywords$new()
anc1 <- ISOAnchor$new(
  name = "Environmental monitoring facilities",
  href = "http://inspire.ec.europa.eu/theme/ef"
)
inspire_kwd$addKeyword(anc1)
inspire_kwd$setKeywordType("theme")
th <- ISOCitation$new()
th$setTitle(
  ISOAnchor$new(
    name = "GEMET - INSPIRE themes, version 1.0",
    href="http://www.eionet.europa.eu/gemet/inspire_themes"
  )
)
)

```

```

inspire_date <- ISODate$new()
inspire_date$setDate(as.Date("2008-06-01"))
inspire_date$setDateType("publication")
th$addDate(inspire_date)
inspire_kwd$setThesaurusName(th)
ident$addKeywords(inspire_kwd)

#supplementalInformation
ident$setSupplementalInformation("some additional information")

#spatial representation type
ident$addSpatialRepresentationType("vector")

md$addIdentificationInfo(ident)

#Distribution
distrib <- ISODistribution$new()
dto <- ISODigitalTransferOptions$new()
for(i in 1:3){
  or <- ISOOnlineResource$new()
  or$setLinkage(paste0("http://somelink",i))
  or$setName(paste0("name",i))
  or$setDescription(paste0("description",i))
  or$setProtocol("WWW:LINK-1.0-http--link")
  dto$addOnlineResource(or)
}
distrib$setDigitalTransferOptions(dto)
md$setDistributionInfo(distrib)

#create dataQuality object with a 'dataset' scope
dq <- ISODataQuality$new()
scope <- ISODataQualityScope$new()
scope$setLevel("dataset")
dq$setScope(scope)

#add data quality reports...

#add a report the data quality
dc <- ISODomainConsistency$new()
result <- ISOConformanceResult$new()
spec <- ISOCitation$new()
spec$setTitle("Data Quality check")
spec$addAlternateTitle("This is is some data quality check report")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dc$addResult(result)
dq$addReport(dc)

```

```

#add INSPIRE reports?
#INSPIRE - interoperability of spatial data sets and services
dc_inspire1 <- ISODomainConsistency$new()
cr_inspire1 <- ISOConformanceResult$new()
cr_inspire_spec1 <- ISOCitation$new()
cr_title1 <- paste(
  "Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC",
  "of the European Parliament and of the Council as regards interoperability of spatial data",
  "sets and services"
)
cr_inspire_spec1$setTitle(cr_title1)
cr_inspire1$setExplanation("See the referenced specification")
cr_inspire_date1 <- ISODate$new()
cr_inspire_date1$setDate(ISOdate(2010,12,8))
cr_inspire_date1$setDateType("publication")
cr_inspire_spec1$addDate(cr_inspire_date1)
cr_inspire1$setSpecification(cr_inspire_spec1)
cr_inspire1$setPass(TRUE)
dc_inspire1$addResult(cr_inspire1)
dq$addReport(dc_inspire1)
#INSPIRE - metadata
dc_inspire2 <- ISODomainConsistency$new()
cr_inspire2 <- ISOConformanceResult$new()
cr_inspire_spec2 <- ISOCitation$new()
cr_title2 <- paste(
  "COMMISSION REGULATION (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC",
  "of the European Parliament and of the Council as regards metadata"
)
cr_inspire_spec2$setTitle(cr_title2)
cr_inspire2$setExplanation("See the referenced specification")
cr_inspire_date2 <- ISODate$new()
cr_inspire_date2$setDate(ISOdate(2008,12,4))
cr_inspire_date2$setDateType("publication")
cr_inspire_spec2$addDate(cr_inspire_date2)
cr_inspire2$setSpecification(cr_inspire_spec2)
cr_inspire2$setPass(TRUE)
dc_inspire2$addResult(cr_inspire2)
dq$addReport(dc_inspire2)

#add lineage
lineage <- ISOLineage$new()
lineage$setStatement("statement")
dq$setLineage(lineage)

md$addDataQualityInfo(dq)

#Content Information
#-----
#add a feature catalogue description
fcd <- ISOFeatureCatalogueDescription$new()
fcd$setComplianceCode(FALSE)
fcd$addLanguage("eng")
fcd$setIncludedWithDataset(FALSE)

```

```

cit = ISOCitation$new()
cit$title("sometitle")
d <- ISODate$new()
d$date(ISOdate(2015, 1, 1, 1))
d$dateType("publication")
cit$addDate(d)
cit$setEdition("1.0")
cit$setEditionDate(as.Date(ISOdate(2015, 1, 1, 1)))
contact = ISOContact$new()
fcLink <- ISOOnlineResource$new()
fcLink$linkage("http://somelink/featurecatalogue")
contact$setOnlineResource(fcLink)
rp = ISOResponsibleParty$new()
rp$setRole("publisher")
rp$setContactInfo(contact)
cit$addCitedResponsibleParty(rp)
fcd$addFeatureCatalogueCitation(cit)
md$addContentInfo(fcd)

#XML representation of the ISOMetadata
xml <- md$encode()

#example 2 - READ: Create an ISO metadata reading from XML
#####

require(XML)
xmlfile <- system.file("extdata/examples", "metadata.xml", package = "geometa")
xml <- xmlParse(xmlfile)
md <- ISOMetadata$new(xml = xml)

```

ISOMetadataExtensionInformation

ISOMetadataExtensionInformation

Description

ISOMetadataExtensionInformation

ISOMetadataExtensionInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO MetadataExtensionInformation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMetadataExtensionInformation

Public fields

extensionOnLineResource extensionOnLineResource [0..1]: ISOOnlineResource
 extendedElementInformation extendedElementInformation [0..*]: ISOExtendedElementInformation

Methods**Public methods:**

- [ISOMetadataExtensionInformation\\$new\(\)](#)
- [ISOMetadataExtensionInformation\\$setOnlineResource\(\)](#)
- [ISOMetadataExtensionInformation\\$addElement\(\)](#)
- [ISOMetadataExtensionInformation\\$delElement\(\)](#)
- [ISOMetadataExtensionInformation\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOMetadataExtensionInformation\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [setOnlineResource\(\)](#): Set online resource

Usage:

[ISOMetadataExtensionInformation\\$setOnlineResource\(onlineResource\)](#)

Arguments:

onlineResource object of class [ISOOnlineResource](#)

Method [addElement\(\)](#): Adds element

Usage:

[ISOMetadataExtensionInformation\\$addElement\(element\)](#)

Arguments:

element object of class inheriting [ISOExtendedElementInformation](#)

Returns: TRUE if added, FALSE otherwise

Method [delElement\(\)](#): Deletes element

Usage:

[ISOMetadataExtensionInformation\\$delElement\(element\)](#)

Arguments:

element object of class inheriting [ISOExtendedElementInformation](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOMetadataExtensionInformation$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
#create an extended element information
elem <- ISOExtendedElementInformation$new()
elem$setName("name")
elem$setShortName("shortName")
elem$setDomainCode(1L)
elem$setDefinition("some definition")
elem$setObligation("mandatory")
elem$setCondition("no condition")
elem$setDatatype("characterString")
elem$setMaximumOccurrence("string")
elem$setDomainValue("value")
elem$addParentEntity("none")
elem$setRule("rule")
elem$addRationale("rationale")
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenummer")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somenam")
contact$setOnlineResource(res)
```

```
rp$setContactInfo(contact)
elem$addSource(rp)

md <- ISOMetadataExtensionInformation$new()
md$addElement(elem)

xml <- md$encode()
```

ISOMetadataNamespace *ISOMetadataNamespace*

Description

ISOMetadataNamespace
ISOMetadataNamespace

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Metadata Namespace

Public fields

id id
uri uri
standard standard

Methods

Public methods:

- [ISOMetadataNamespace\\$new\(\)](#)
- [ISOMetadataNamespace\\$getDefinition\(\)](#)
- [ISOMetadataNamespace\\$getStandard\(\)](#)
- [ISOMetadataNamespace\\$clone\(\)](#)

Method `new()`: Initializes namespace object

Usage:

```
ISOMetadataNamespace$new(id, uri, standard = NA)
```

Arguments:

id id
uri uri

standard standard

Method `getDefinition()`: Get definition

Usage:

`ISOMetadataNamespace$getDefinition()`

Returns: an object of class [list](#)

Method `getStandard()`: Get standard

Usage:

`ISOMetadataNamespace$getStandard()`

Returns: object of class [data.frame](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOMetadataNamespace$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Note

ISO class used internally by geometa for specifying XML namespaces

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

ISOMetadataScope

ISOMetadataScope

Description

ISOMetadataScope

ISOMetadataScope

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO MetadataScope

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [ISOMetadataScope](#)

Public fields

resourceScope resource scope
name name

Methods**Public methods:**

- [ISOMetadataScope\\$new\(\)](#)
- [ISOMetadataScope\\$setResourceScope\(\)](#)
- [ISOMetadataScope\\$setName\(\)](#)
- [ISOMetadataScope\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOMetadataScope$new(xml = NULL, resourceScope = NULL, name = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

resourceScope resource scope

name name

Method `setResourceScope()`: Set resource scope

Usage:

```
ISOMetadataScope$setResourceScope(resourceScope)
```

Arguments:

resourceScope resource scope

Method `setName()`: Set name

Usage:

```
ISOMetadataScope$setName(name, locales = NULL)
```

Arguments:

name name

locales a list of localized names. Default is NULL

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOMetadataScope$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_MetadataScope
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mdb/2.0/mdb/#element_MD_MetadataScope

Examples

```
## Not run:
setMetadataStandard("19115-3")
md <- ISOMetadataScope$new(
  resourceScope = "service",
  name = "Internal service"
)
xml <- md$encode()
setMetadataStandard("19139")

## End(Not run)
```

ISOMetaIdentifier	<i>ISOMetaIdentifier</i>
-------------------	--------------------------

Description

ISOMetaIdentifier
ISOMetaIdentifier

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO MetaIdentifier

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMetaIdentifier

Public fields

authority authority [0..1]: ISOCitation
code code [1..1]: character
codeSpace codeSpace [0..1]: character (ISO 19115-3)
version version [0..1]: character (ISO 19115-3)
description description [0..1]: character (ISO 19115-3)

Methods**Public methods:**

- [ISOMetaIdentifier\\$new\(\)](#)
- [ISOMetaIdentifier\\$setAuthority\(\)](#)
- [ISOMetaIdentifier\\$setCode\(\)](#)
- [ISOMetaIdentifier\\$setCodeSpace\(\)](#)
- [ISOMetaIdentifier\\$setVersion\(\)](#)
- [ISOMetaIdentifier\\$setDescription\(\)](#)
- [ISOMetaIdentifier\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOMetaIdentifier$new(xml = NULL, code = NULL, codeSpace = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

code code

codeSpace code space

Method `setAuthority()`: Set authority

Usage:

```
ISOMetaIdentifier$setAuthority(authority)
```

Arguments:

authority object of class [ISOCitation](#)

Method `setCode()`: Set code

Usage:

```
ISOMetaIdentifier$setCode(code)
```

Arguments:

code code

Method `setCodeSpace()`: Set codeSpace

Usage:

```
ISOMetaIdentifier$setCodeSpace(codeSpace)
```

Arguments:

codeSpace codeSpace

Method `setVersion()`: Set version

Usage:

```
ISOMetaIdentifier$setVersion(version)
```

Arguments:

version version

Method setDescription(): Set description

Usage:

```
ISOMetaIdentifier$setDescription(description)
```

Arguments:

description description

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOMetaIdentifier$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Identifier
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_MD_Identifier

Examples

```
md <- ISOMetaIdentifier$new(code = "identifier")
xml <- md$encode()
```

ISOMimeType	<i>ISOMimeType</i>
-------------	--------------------

Description

ISOMimeType

ISOMimeType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO MimeType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMimeType

Methods

Public methods:

- [ISOMimeType\\$new\(\)](#)
- [ISOMimeType\\$setName\(\)](#)
- [ISOMimeType\\$setType\(\)](#)
- [ISOMimeType\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOMimeType$new(xml = NULL, type = NULL, name = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

type type

name name

Method `setName()`: Set name

Usage:

```
ISOMimeType$setName(name)
```

Arguments:

name name

Method `setType()`: Set type

Usage:

```
ISOMimeType$setType(type)
```

Arguments:

type type

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOMimeType$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmx/1.0/gmx/#element_MimeType

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gcx/1.0/gcx/#element_MimeType

Examples

```
md <- ISOMimeType$new(type = "somemimetype", name = "Mime type name")
xml <- md$encode()
```

ISOMLCodeDefinition *ISOMLCodeDefinition*

Description

ISOMLCodeDefinition

ISOMLCodeDefinition

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Metadata code definition

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCODEDefinition](#)
-> ISOMLCodeDefinition

Methods**Public methods:**

- [ISOMLCodeDefinition\\$new\(\)](#)
- [ISOMLCodeDefinition\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOMLCodeDefinition$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOMLCodeDefinition$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Note

Abstract ISO codelist class used internally by `geometa`

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19139:2007 Geographic information – XML

ISOMLCodeListDictionary

ISOMLCodeListDictionary

Description

ISOMLCodeListDictionary

ISOMLCodeListDictionary

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Metadata codelist dictionary

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistDictionary](#)
-> [ISOMLCodeListDictionary](#)

Methods**Public methods:**

- [ISOMLCodeListDictionary\\$new\(\)](#)
- [ISOMLCodeListDictionary\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOMLCodeListDictionary\\$new](#)(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOMLCodeListDictionary\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Abstract ISO codelist class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

ISO/TS 19139:2007 Geographic information – XML

ISOMultiplicity	<i>ISOMultiplicity</i>
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Description

ISOMultiplicity

ISOMultiplicity

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOMultiplicity

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMultiplicity

Public fields

range range

Methods**Public methods:**

- [ISOMultiplicity\\$new\(\)](#)
- [ISOMultiplicity\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOMultiplicity\\$new](#)(xml = NULL, lower, upper)

Arguments:

xml object of class [XMLInternalNode-class](#)

lower lower
upper upper

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOMultiplicity$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Multiplicity
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Multiplicity

Examples

```
md <- ISOMultiplicity$new(lower = 1, upper = Inf)
xml <- md$encode()
```

ISOMultiplicityRange *ISOMultiplicityRange*

Description

ISOMultiplicityRange
ISOMultiplicityRange

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO MultiplicityRange

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOMultiplicityRange

Public fields

lower lower
upper upper

Methods

Public methods:

- [ISOMultiplicityRange\\$new\(\)](#)
- [ISOMultiplicityRange\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOMultiplicityRange$new(xml = NULL, lower, upper)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

`lower` lower

`upper` upper

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOMultiplicityRange$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_MultiplicityRange
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_MultiplicityRange

Examples

```
md <- ISOMultiplicityRange$new(lower = 1, upper = Inf)
xml <- md$encode()
```

ISONonQuantitativeAttributeAccuracy

ISONonQuantitativeAttributeAccuracy

Description

ISONonQuantitativeAttributeAccuracy

ISONonQuantitativeAttributeAccuracy

Format

R6Class object.

Value

Object of R6Class for modelling an ISONonQuantitativeAttributeAccuracy

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractThematicAccuracy
-> ISONonQuantitativeAttributeAccuracy

```

Methods**Public methods:**

- `ISONonQuantitativeAttributeAccuracy$clone()`

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISONonQuantitativeAttributeAccuracy$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_NonQuantitativeAttributeAccuracy

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_NonQuantitativeAttributeAccuracy

Examples

```

#encoding
dq <- ISONonQuantitativeAttributeAccuracy$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))

```

```
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()
```

ISONonQuantitativeAttributeCorrectness

ISONonQuantitativeAttributeCorrectness

Description

ISONonQuantitativeAttributeCorrectness

ISONonQuantitativeAttributeCorrectness

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISONonQuantitativeAttributeCorrectness

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractTemporalAccuracy
-> ISONonQuantitativeAttributeCorrectness
```

Methods

Public methods:

- [ISONonQuantitativeAttributeCorrectness\\$clone\(\)](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISONonQuantitativeAttributeCorrectness$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

-ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_NonQuantitativeAttributeCo

ISOobligation

ISOobligation

Description

ISOobligation

ISOobligation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Obligation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOobligation

Methods**Public methods:**

- [ISOobligation\\$new\(\)](#)
- [ISOobligation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOobligation$new(xml = NULL, value, description = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

`value` value

`description` description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOobligation$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
#possible values
values <- ISOobligation$values(labels = TRUE)

#mandatory value
mandatory <- ISOobligation$new(value = "mandatory")
```

ISOOnLineFunction *ISOOnLineFunction*

Description

ISOOnLineFunction
ISOOnLineFunction

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO OnLineFunction

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOOnLineFunction

Methods**Public methods:**

- [ISOOnLineFunction\\$new\(\)](#)
- [ISOOnLineFunction\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOOnLineFunction$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
 value value
 description description

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOOnlineFunction$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_OnlineFunctionCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_OnlineFunctionCode

Examples

```
#possible values
values <- ISOOnlineFunction$values(labels = TRUE)

#example
download <- ISOOnlineFunction$new(value = "download")
```

ISOOnlineResource	<i>ISOOnlineResource</i>
-------------------	--------------------------

Description

ISOOnlineResource
 ISOOnlineResource

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Online Resource

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractOnlineResource  

-> ISOOnlineResource
```

Public fields

linkage linkage
protocol protocol
applicationProfile application profile
name name
description description
function function
protocolRequest protocol request in (ISO 19115-3)

Methods**Public methods:**

- [ISOOnlineResource\\$new\(\)](#)
- [ISOOnlineResource\\$setLinkage\(\)](#)
- [ISOOnlineResource\\$setName\(\)](#)
- [ISOOnlineResource\\$setProtocol\(\)](#)
- [ISOOnlineResource\\$setDescription\(\)](#)
- [ISOOnlineResource\\$setOnLineFunction\(\)](#)
- [ISOOnlineResource\\$clone\(\)](#)

Method new(): Initializes object

Usage:

`ISOOnlineResource$new(xml = NULL)`

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setLinkage(): Set linkage

Usage:

`ISOOnlineResource$setLinkage(linkage)`

Arguments:

linkage linkage object of class [ISOURL](#) or [character](#)

Method setName(): Set name

Usage:

`ISOOnlineResource$setName(name, locales = NULL)`

Arguments:

name name

locales list of localized texts. Default is NULL

Method setProtocol(): Set protocol

Usage:

`ISOOnlineResource$setProtocol(protocol, locales = NULL)`

Arguments:

protocol protocol
 locales list of localized texts. Default is NULL

Method setDescription(): Set description*Usage:*

```
ISOOnlineResource$setDescription(description, locales = NULL)
```

Arguments:

description description
 locales list of localized texts. Default is NULL

Method setOnLineFunction(): Set online function*Usage:*

```
ISOOnlineResource$setOnLineFunction(onLineFunction)
```

Arguments:

onLineFunction object of class [ISOOnLineFunction](#) or any [character](#) among values returned by ISOOnLineFunction\$values()

Method clone(): The objects of this class are cloneable with this method.*Usage:*

```
ISOOnlineResource$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_OnlineResource
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_OnlineResource

Examples

```
md <- ISOOnlineResource$new()
md$setLinkage("http://somalink")
md$setName("name")
md$setDescription("description")
md$setProtocol("protocol")
md$setOnLineFunction("download")
xml <- md$encode()
```

ISOOperationChainMetadata
ISOOperationChainMetadata

Description

ISOOperationChainMetadata
ISOOperationChainMetadata

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOOperationChainMetadata

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOOperationChainMetadata

Public fields

name name [1..1]: character
description description [1..1]: character
operation operation [1..*]: ISOOperationMetadata

Methods**Public methods:**

- [ISOOperationChainMetadata\\$new\(\)](#)
- [ISOOperationChainMetadata\\$setName\(\)](#)
- [ISOOperationChainMetadata\\$setDescription\(\)](#)
- [ISOOperationChainMetadata\\$addOperation\(\)](#)
- [ISOOperationChainMetadata\\$delOperation\(\)](#)
- [ISOOperationChainMetadata\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOOperationChainMetadata\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [setName\(\)](#): Set name

Usage:

```
ISOOperationChainMetadata$setName(name, locales = NULL)
```

Arguments:

name name

locales list of localized texts. Default is NULL

Method setDescription(): Set description*Usage:*

```
ISOOperationChainMetadata$setDescription(description, locales = NULL)
```

Arguments:

description description

locales list of localized texts. Default is NULL

Method addOperation(): Adds operation metadata*Usage:*

```
ISOOperationChainMetadata$addOperation(operation)
```

Arguments:

operation object of class [ISOOperationMetadata](#)

Returns: TRUE if added, FALSE otherwise

Method delOperation(): Deletes operation metadata*Usage:*

```
ISOOperationChainMetadata$delOperation(operation)
```

Arguments:

operation object of class [ISOOperationMetadata](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.*Usage:*

```
ISOOperationChainMetadata$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19119/-/srv/1.0/srv/#element_SV_OperationChainMetadata
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/srv/2.0/srv/#element_SV_OperationChainMetadata

Examples

```
md <- ISOOperationChainMetadata$new()
xml <- md$encode()
```

ISOOperationMetadata *ISOOperationMetadata*

Description

ISOOperationMetadata

ISOOperationMetadata

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOOperationMetadata

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOOperationMetadata

Public fields

operationName operationName [1..1]: character

DCP DCP [1..*]: ISODCPList

operationDescription operationDescription [0..1]: character

invocationName invocationName [0..1]: character

parameters parameters [0..*]: ISOSRVParameter

connectPoint connectPoint [1..*]: ISOOnlineResource

dependsOn dependsOn [0..*]: ISOOperationMetadata

Methods

Public methods:

- [ISOOperationMetadata\\$new\(\)](#)
- [ISOOperationMetadata\\$setOperationName\(\)](#)
- [ISOOperationMetadata\\$addDCP\(\)](#)
- [ISOOperationMetadata\\$delDCP\(\)](#)
- [ISOOperationMetadata\\$setOperationDescription\(\)](#)
- [ISOOperationMetadata\\$setInvocationName\(\)](#)
- [ISOOperationMetadata\\$addParameter\(\)](#)
- [ISOOperationMetadata\\$delParameter\(\)](#)
- [ISOOperationMetadata\\$addConnectPoint\(\)](#)
- [ISOOperationMetadata\\$delConnectPoint\(\)](#)

- [ISOOperationMetadata\\$addDependentOperationMetadata\(\)](#)
- [ISOOperationMetadata\\$delDependentOperationMetadata\(\)](#)
- [ISOOperationMetadata\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOOperationMetadata$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setOperationName(): Set operation name

Usage:

```
ISOOperationMetadata$setOperationName(operationName, locales = NULL)
```

Arguments:

operationName operation name

locales list of localized texts. Default is NULL

Method addDCP(): Adds DCP

Usage:

```
ISOOperationMetadata$addDCP(dcp)
```

Arguments:

dcp object of class [ISODCPList](#) or any [character](#) among values returned by [ISODCPList\\$values\(\)](#)

Returns: TRUE if added, FALSE otherwise

Method delDCP(): Deletes DCP

Usage:

```
ISOOperationMetadata$delDCP(dcp)
```

Arguments:

dcp object of class [ISODCPList](#) or any [character](#) among values returned by [ISODCPList\\$values\(\)](#)

Returns: TRUE if deleted, FALSE otherwise

Method setOperationDescription(): Set operation description

Usage:

```
ISOOperationMetadata$setOperationDescription(
  operationDescription,
  locales = NULL
)
```

Arguments:

operationDescription operation description

locales list of localized texts. Default is NULL

Method setInvocationName(): Set invocation name

Usage:

ISOOperationMetadata\$setInvocationName(invocationName, locales = NULL)

Arguments:

invocationName invocation name

locales list of localized texts. Default is NULL

Method addParameter(): Adds parameter

Usage:

ISOOperationMetadata\$addParameter(parameter)

Arguments:

parameter object of class [ISOSRVParameter](#)

Returns: TRUE if added, FALSE otherwise

Method delParameter(): Deletes parameter

Usage:

ISOOperationMetadata\$delParameter(parameter)

Arguments:

parameter object of class [ISOSRVParameter](#)

Returns: TRUE if deleted, FALSE otherwise

Method addConnectPoint(): Adds connection point

Usage:

ISOOperationMetadata\$addConnectPoint(connectPoint)

Arguments:

connectPoint object of class [ISOOnlineResource](#)

Returns: TRUE if added, FALSE otherwise

Method delConnectPoint(): Deletes connection point

Usage:

ISOOperationMetadata\$delConnectPoint(connectPoint)

Arguments:

connectPoint object of class [ISOOnlineResource](#)

Returns: TRUE if deleted, FALSE otherwise

Method addDependentOperationMetadata(): Adds operation metadata

Usage:

ISOOperationMetadata\$addDependentOperationMetadata(operationMetadata)

Arguments:

operationMetadata object of class [ISOOperationMetadata](#)

Returns: TRUE if added, FALSE otherwise

Method delDependentOperationMetadata(): Deletes operation metadata

Usage:

```
ISOOperationMetadata$delDependentOperationMetadata(operationMetadata)
```

Arguments:

```
operationMetadata object of class ISOOperationMetadata
```

Returns: TRUE if deleted, FALSE otherwise

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOOperationMetadata$clone(deep = FALSE)
```

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19119/-/srv/1.0/srv/#element_SV_OperationMetadata
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/srv/2.0/srv/#element_SV_OperationMetadata

Examples

```
md <- ISOOperationMetadata$new()
xml <- md$encode()
```

ISOorganisation

ISOOrganisation

Description

ISOOrganisation

ISOOrganisation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO organisation

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractParty
-> ISOorganisation
```

Public fields

individual individual

Methods**Public methods:**

- [ISOOrganisation\\$new\(\)](#)
- [ISOOrganisation\\$addIndividual\(\)](#)
- [ISOOrganisation\\$delIndividual\(\)](#)
- [ISOOrganisation\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOOrganisation$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `addIndividual()`: Adds individual

Usage:

`ISOOrganisation$addIndividual(individual)`

Arguments:

`individual` object of class [ISOIndividual](#)

Returns: TRUE if added, FALSE otherwise

Method `delIndividual()`: Deletes individual

Usage:

`ISOOrganisation$delIndividual(individual)`

Arguments:

`individual` object of class [ISOIndividual](#)

Returns: TRUE if deleted, FALSE otherwise

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOOrganisation$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Organisation

ISOOtherAggregate *ISOOtherAggregate*

Description

ISOOtherAggregate

ISOOtherAggregate

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOOtherAggregate

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractAggregate](#)
-> ISOOtherAggregate

Methods**Public methods:**

- [ISOOtherAggregate\\$new\(\)](#)
- [ISOOtherAggregate\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOOtherAggregate$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOOtherAggregate$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOParameterDirection *ISOParameterDirection*

Description

ISOParameterDirection
ISOParameterDirection

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOParameterDirection

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOParameterDirection

Methods**Public methods:**

- [ISOParameterDirection\\$new\(\)](#)
- [ISOParameterDirection\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOParameterDirection\\$new](#)(xml = NULL, value, description = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOParameterDirection\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LE_ParameterDirection

Examples

```
#possible values
values <- ISOParameterDirection$values(labels = TRUE)

#paramDir
paramDir <- ISOParameterDirection$new(value = "in")
```

ISOPeriodDuration	<i>ISOPeriodDuration</i>
-------------------	--------------------------

Description

ISOPeriodDuration

ISOPeriodDuration

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO PeriodDuration

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOPeriodDuration

Public fields

value value

Methods**Public methods:**

- [ISOPeriodDuration\\$new\(\)](#)
- [ISOPeriodDuration\\$setDuration\(\)](#)
- [ISOPeriodDuration\\$clone\(\)](#)

Method [new\(\)](#): Initializes a period duration

Usage:

```
ISOPeriodDuration$new(  
  xml = NULL,  
  value = NULL,  
  years = 0,  
  months = 0,  
  days = 0,  
  hours = 0,  
  mins = 0,  
  secs = 0,  
  start = NULL,  
  end = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
value value
years years
months months
days days
hours hours
mins mins
secs secs
start start position
end end position

Method setDuration(): Computes period duration

Usage:

```
ISOPeriodDuration$setDuration(  
  years = 0,  
  months = 0,  
  days = 0,  
  hours = 0,  
  mins = 0,  
  secs = 0,  
  start = NULL,  
  end = NULL  
)
```

Arguments:

years years
months months
days days
hours hours
mins mins
secs secs
start start position
end end position

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOPeriodDuration$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gts/1.0/gts/#element_TM_PeriodDuration

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_TM_PeriodDuration

ISOPixelOrientation *ISOPixelOrientation*

Description

ISOPixelOrientation

ISOPixelOrientation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOPixelOrientation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOPixelOrientation

Methods

Public methods:

- [ISOPixelOrientation\\$new\(\)](#)
- [ISOPixelOrientation\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOPixelOrientation$new(xml = NULL, value, description = NULL)
```


Arguments:

xml object of class [XMLInternalNode-class](#)
 value value
 description description

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOPixelOrientation$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_PixelOrientationCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_PixelOrientationCode

Examples

```
#possible values
values <- ISOPixelOrientation$values(labels = TRUE)

#PixelOrientation
PixelOrientation <- ISOPixelOrientation$new(value = "center")
```

 ISOPlatform

ISOPlatform

Description

ISOPlatform
 ISOPlatform

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOPlatform

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractAggregate](#)
-> [geometa::ISOSeries](#) -> [ISOPlatform](#)

Methods**Public methods:**

- [ISOPlatform\\$new\(\)](#)
- [ISOPlatform\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOPlatform\\$new](#)(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOPlatform\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOPortrayalCatalogueReference

ISOPortrayalCatalogueReference

Description

ISOPortrayalCatalogueReference

ISOPortrayalCatalogueReference

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOPortrayalCatalogueReference

Super classes

[geometa: :geometaLogger](#) -> [geometa: :ISOAbstractObject](#) -> ISOPortrayalCatalogueReference

Public fields

portrayalCatalogueCitation [portrayalCatalogueCitation](#) [1..*]

Methods**Public methods:**

- [ISOPortrayalCatalogueReference\\$new\(\)](#)
- [ISOPortrayalCatalogueReference\\$addCitation\(\)](#)
- [ISOPortrayalCatalogueReference\\$delCitation\(\)](#)
- [ISOPortrayalCatalogueReference\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOPortrayalCatalogueReference\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [addCitation\(\)](#): Adds citation

Usage:

[ISOPortrayalCatalogueReference\\$addCitation\(citation\)](#)

Arguments:

citation object of class [ISOCitation](#)

Returns: TRUE if added, FALSE otherwise

Method [delCitation\(\)](#): Deletes citation

Usage:

[ISOPortrayalCatalogueReference\\$delCitation\(citation\)](#)

Arguments:

citation object of class [ISOCitation](#)

Returns: TRUE if deleted, FALSE otherwise

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOPortrayalCatalogueReference\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_PortrayalCatalogueReference
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mpc/1.0/mpc/#element_MD_PortrayalCatalogueReferen

Examples

```
md <- ISOPortrayalCatalogueReference$new()
#citation
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://somelink")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(as.Date(ISOdate(2015, 1, 1, 1)))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp)
md$addCitation(ct)

xml <- md$encode()
```

ISOPresentationForm *ISOPresentationForm*

Description

ISOPresentationForm

ISOPresentationForm

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO PresentationForm

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodeListValue](#)
-> ISOPresentationForm

Methods**Public methods:**

- [ISOPresentationForm\\$new\(\)](#)
- [ISOPresentationForm\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOPresentationForm$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOPresentationForm$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_PresentationFormCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_PresentationFormCode

Examples

```
#possible values
values <- ISOPresentationForm$values(labels = TRUE)

#mapDigital type
map <- ISOPresentationForm$new(value = "mapDigital")
```

ISOProcessParameter *ISOProcessParameter*

Description

ISOProcessParameter
ISOProcessParameter

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO process parameter

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractParameter](#)
-> ISOProcessParameter

Methods**Public methods:**

- [ISOProcessParameter\\$new\(\)](#)
- [ISOProcessParameter\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOProcessParameter$new(xml = NULL)`

Arguments:

xml object of class [XMLInternalNode-class](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOProcessParameter\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LE_ProcessParameter

ISOProcessStep	<i>ISOProcessStep</i>
----------------	-----------------------

Description

ISOProcessStep

ISOProcessStep

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ProcessStep

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOProcessStep

Public fields

description description: character

rationale rationale [0..1]: character

dateTime dateTime [0..1]: POSIXct/POSIXt

processor processor [0..*]: ISOResponsibleParty

source source [0..*]: ISOSource

Methods**Public methods:**

- [ISOProcessStep\\$new\(\)](#)
- [ISOProcessStep\\$setDescription\(\)](#)
- [ISOProcessStep\\$setRationale\(\)](#)
- [ISOProcessStep\\$setDateTime\(\)](#)
- [ISOProcessStep\\$addProcessor\(\)](#)
- [ISOProcessStep\\$delProcessor\(\)](#)
- [ISOProcessStep\\$addSource\(\)](#)
- [ISOProcessStep\\$delSource\(\)](#)
- [ISOProcessStep\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOProcessStep$new(xml = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setDescription()`: Set description

Usage:

```
ISOProcessStep$setDescription(description, locales = NULL)
```

Arguments:

`description` description

`locales` list of localized texts. Default is NULL

Method `setRationale()`: Set rationale

Usage:

```
ISOProcessStep$setRationale(rationale, locales = NULL)
```

Arguments:

`rationale` rationale

`locales` list of localized texts. Default is NULL

Method `setDateTime()`: Set date time

Usage:

```
ISOProcessStep$setDateTime(dateTime)
```

Arguments:

`dateTime` object of class [POSIXct](#)

Method `addProcessor()`: Adds processor

Usage:

```
ISOProcessStep$addProcessor(processor)
```

Arguments:

processor object of class [ISOResponsibleParty](#)

Returns: TRUE if added, FALSE otherwise

Method delProcessor(): Deletes processor

Usage:

ISOProcessStep\$delProcessor(processor)

Arguments:

processor object of class [ISOResponsibleParty](#)

Returns: TRUE if deleted, FALSE otherwise

Method addSource(): Adds source

Usage:

ISOProcessStep\$addSource(source)

Arguments:

source object of class [ISOSource](#)

Returns: TRUE if added, FALSE otherwise

Method delSource(): Deletes source

Usage:

ISOProcessStep\$delSource(source)

Arguments:

source object of class [ISOSource](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOProcessStep\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_LI_ProcessStep

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LI_ProcessStep

Examples

```

ps <- ISOProcessStep$new()
ps$setDescription("description")
ps$setRationale("rationale")
ps$setDateTime( ISOdate(2015, 1, 1, 23, 59, 59))
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone") #and more responsible party properties..
ps$addProcessor(rp)
xml <- ps$encode()

```

ISOProductionSeries *ISOProductionSeries*

Description

ISOProductionSeries
ISOProductionSeries

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOProductionSeries

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractAggregate](#)
-> [geometa::ISOSeries](#) -> ISOProductionSeries

Methods**Public methods:**

- [ISOProductionSeries\\$new\(\)](#)
- [ISOProductionSeries\\$clone\(\)](#)

Method new(): Initializes object

Usage:

`ISOProductionSeries$new(xml = NULL)`

Arguments:

xml object of class [XMLInternalNode-class](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

`ISOProductionSeries$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOProgress

ISOProgress

Description

ISOProgress

ISOProgress

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO progress status

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOProgress

Methods**Public methods:**

- [ISOProgress\\$new\(\)](#)
- [ISOProgress\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOProgress\\$new](#)(xml = NULL, value, description = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOProgress\\$clone](#)(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata ISO/TS 19115-3:2016 - Geographic information — Metadata — Part 3: XML schema implementation for fundamental concepts

Examples

```
#possible values
values <- ISOProgress$values(labels = TRUE)

#pending status
pending <- ISOProgress$new(value = "pending")
```

ISOPropertyType	<i>ISOPropertyType</i>
-----------------	------------------------

Description

ISOPropertyType
ISOPropertyType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOPropertyType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractCarrierOfCharacteristics](#)
-> [geometa::ISOAbstractPropertyType](#) -> ISOPropertyType

Methods**Public methods:**

- [ISOPropertyType\\$new\(\)](#)
- [ISOPropertyType\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
ISOPropertyType$new(xml = NULL, defaults = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)
defaults default values

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOPropertyType\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

ISOQualityResultFile *ISOQualityResultFile*

Description

ISOQualityResultFile

ISOQualityResultFile

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO quality result file

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOQualityResultFile

Public fields

fileName fileName [1]: ISOFileName

fileType fileType [1]: ISOMimeFileType

fileDescription fileDescription [1]: character

fileFormat fileFormat [1]: ISOFormat

Methods**Public methods:**

- [ISOQualityResultFile\\$new\(\)](#)
- [ISOQualityResultFile\\$setFileName\(\)](#)
- [ISOQualityResultFile\\$setFileType\(\)](#)
- [ISOQualityResultFile\\$setDescription\(\)](#)
- [ISOQualityResultFile\\$setFileFormat\(\)](#)
- [ISOQualityResultFile\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOQualityResultFile$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setFileName()`: Set file name

Usage:

`ISOQualityResultFile$setFileName(fileName)`

Arguments:

`fileName` filename object of class [ISOFileName](#)

Method `setFileType()`: Set file type

Usage:

`ISOQualityResultFile$setFileType(fileType)`

Arguments:

`fileType` fileType object of class [ISOMimeType](#) or `character`

Method `setDescription()`: Set file description

Usage:

`ISOQualityResultFile$setDescription(fileDescription, locales = NULL)`

Arguments:

`fileDescription` fileDescription object of class `character`

`locales` list of localized file description. Default is `NULL`

Method `setFileFormat()`: Set file format

Usage:

`ISOQualityResultFile$setFileFormat(fileFormat)`

Arguments:

`fileFormat` fileFormat = object of class [ISOFormat](#) or `character`

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOQualityResultFile$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_QualityResultFile

ISOQuantitativeAttributeAccuracy

ISOQuantitativeAttributeAccuracy

Description

ISOQuantitativeAttributeAccuracy

ISOQuantitativeAttributeAccuracy

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOQuantitativeAttributeAccuracy

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement  
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractThematicAccuracy  
-> ISOQuantitativeAttributeAccuracy
```

Methods**Public methods:**

- [ISOQuantitativeAttributeAccuracy\\$clone\(\)](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOQuantitativeAttributeAccuracy$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_QuantitativeAttributeAccuracy
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_QuantitativeAttributeAccuracy

Examples

```
#encoding
dq <- ISOQuantitativeAttributeAccuracy$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()
```

ISOQuantitativeResult *ISOQuantitativeResult*

Description

ISOQuantitativeResult
 ISOQuantitativeResult

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO QuantitativeResult

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractResult
 -> ISOQuantitativeResult

Public fields

resultScope resultScope [0..1]: ISOScope (=> 19115-3)
 dateTime dateTime [0..1]: POSIX/date (=> 19115-3)
 valueType valueType [0..1]- ISORRecordType
 valueUnit valueUnit [1..1]- GMLUnitDefinition
 errorStatistic errorStatistic [0..1]
 value value [1..*]

Methods**Public methods:**

- ISOQuantitativeResult\$new()
- ISOQuantitativeResult\$setResultScope()
- ISOQuantitativeResult\$setDateTime()
- ISOQuantitativeResult\$setValueType()
- ISOQuantitativeResult\$setValueUnit()
- ISOQuantitativeResult\$setErrorStatistic()
- ISOQuantitativeResult\$addValue()
- ISOQuantitativeResult\$delValue()
- ISOQuantitativeResult\$clone()

Method new(): Initializes object

Usage:

ISOQuantitativeResult\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setResultScope(): Set result scope

Usage:

ISOQuantitativeResult\$setResultScope(scope)

Arguments:

scope object of class [ISOScope](#)

Method setDateTime(): Set date time

Usage:

ISOQuantitativeResult\$setDateTime(dateTime)

Arguments:

dateTime date time, object of class [POSIXct](#)

Method setValueType(): Set value type

Usage:

ISOQuantitativeResult\$setValueType(valueType)

Arguments:

valueType object of class [ISORecordType](#) or [character](#)

Method setValueUnit(): Set value unit

Usage:

ISOQuantitativeResult\$setValueUnit(valueUnit)

Arguments:

valueUnit object of class inheriting [GMLUnitDefinition](#)

Method setErrorStatistic(): Set error statistic

Usage:

ISOQuantitativeResult\$setErrorStatistic(errorStatistic)

Arguments:

errorStatistic error statistic

Method addValue(): Adds value

Usage:

ISOQuantitativeResult\$addValue(value)

Arguments:

value object of class [ISORecord](#) or [character](#)

Returns: TRUE if added, FALSE otherwise

Method delValue(): Deletes value

Usage:

ISOQuantitativeResult\$delValue(value)

Arguments:

value object of class [ISORecord](#) or [character](#)

Returns: TRUE if delete, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOQuantitativeResult\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_QuantitativeResult
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_QuantitativeResult

Examples

```
md <- ISOQuantitativeResult$new()
xml <- md$encode()
```

ISORangeDimension	<i>ISORangeDimension</i>
-------------------	--------------------------

Description

ISORangeDimension
ISORangeDimension

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISORangeDimension

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISORangeDimension

Public fields

sequenceIdentifier sequenceIdentifier
descriptor descriptor (=> ISO 19139)
description description (=> ISO 19115-3)
name name (=> ISO 19115-3)

Methods**Public methods:**

- [ISORangeDimension\\$new\(\)](#)
- [ISORangeDimension\\$setSequenceIdentifier\(\)](#)
- [ISORangeDimension\\$setDescriptor\(\)](#)
- [ISORangeDimension\\$setDescription\(\)](#)
- [ISORangeDimension\\$setName\(\)](#)

- [ISORangeDimension\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISORangeDimension$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setSequenceIdentifier(): Set sequence identifier

Usage:

```
ISORangeDimension$setSequenceIdentifier(memberName)
```

Arguments:

memberName object of class [ISOMemberName](#)

Method setDescriptor(): Set descriptor

Usage:

```
ISORangeDimension$setDescriptor(descriptor, locales = NULL)
```

Arguments:

descriptor descriptor

locales list of localized texts. Default is NULL

Method setDescription(): Set description

Usage:

```
ISORangeDimension$setDescription(description, locales = NULL)
```

Arguments:

description description

locales list of localized texts. Default is NULL

Method setName(): Set name

Usage:

```
ISORangeDimension$setName(name, locales = NULL)
```

Arguments:

name name

locales list of localized texts. Default is NULL

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISORangeDimension$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_RangeDimension
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_RangeDimension

Examples

```
#create dimension
md <- ISORangeDimension$new()
md$setSequenceIdentifier(ISOMemberName$new(aName = "name", attributeType = "type"))
md$setDescriptor("descriptor")
xml <- md$encode()
```

ISORecord

*ISORecord***Description**

ISORecord

ISORecord

Format

R6Class object.

Value

Object of R6Class for modelling an ISORecord

Super classes[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISORecord**Public fields**

value value

Methods**Public methods:**

- [ISORecord\\$new\(\)](#)
- [ISORecord\\$clone\(\)](#)

Method new(): Initializes object*Usage:*

ISORecord\$new(xml = NULL, value)

Arguments:

xml object of class [XMLInternalNode-class](#)
 value value

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISORecord\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19103:2005 Geographic information – Conceptual schema language

ISORecordType

ISORecordType

Description

ISORecordType

ISORecordType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISORecordType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISORecordType

Public fields

value value

Methods**Public methods:**

- [ISORecordType\\$new\(\)](#)
- [ISORecordType\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISORecordType$new(xml = NULL, value)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

`value` value

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISORecordType$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_RecordType
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_RecordType

ISOReferenceIdentifier

ISOReferenceIdentifier

Description

ISOReferenceIdentifier

ISOReferenceIdentifier

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ReferenceIdentifier

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [ISOReferenceIdentifier](#)

Public fields

authority authority [0..1]: [ISOCitation](#)

code code [1..1]: character

codeSpace codeSpace [0..1]: character

version version [0..1]: character

Methods**Public methods:**

- [ISOReferenceIdentifier\\$new\(\)](#)
- [ISOReferenceIdentifier\\$setAuthority\(\)](#)
- [ISOReferenceIdentifier\\$setCode\(\)](#)
- [ISOReferenceIdentifier\\$setCodeSpace\(\)](#)
- [ISOReferenceIdentifier\\$setVersion\(\)](#)
- [ISOReferenceIdentifier\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOReferenceIdentifier\\$new\(xml = NULL, code = NULL, codeSpace = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

code code

codeSpace code space

Method [setAuthority\(\)](#): Set authority

Usage:

[ISOReferenceIdentifier\\$setAuthority\(authority\)](#)

Arguments:

authority object of class [ISOCitation](#)

Method [setCode\(\)](#): Set code

Usage:

[ISOReferenceIdentifier\\$setCode\(code\)](#)

Arguments:

code code

Method [setCodeSpace\(\)](#): Set code space

Usage:

[ISOReferenceIdentifier\\$setCodeSpace\(codeSpace\)](#)

Arguments:`codeSpace` code space**Method** `setVersion()`: Set version*Usage:*`ISOReferenceIdentifier$setVersion(version)`*Arguments:*`version` version**Method** `clone()`: The objects of this class are cloneable with this method.*Usage:*`ISOReferenceIdentifier$clone(deep = FALSE)`*Arguments:*`deep` Whether to make a deep clone.**Author(s)**

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
md <- ISOReferenceIdentifier$new(code = "4326", codeSpace = "EPSG")
xml <- md$encode()
```

ISOReferenceSystem	<i>ISOReferenceSystem</i>
--------------------	---------------------------

Description

ISOReferenceSystem

ISOReferenceSystem

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO ReferenceSystem

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractReferenceSystem
 -> ISOReferenceSystem

Public fields

referenceSystemIdentifier referenceSystemIdentifier
 referenceSystemType referenceSystemType (=> ISO 19115-3)

Methods**Public methods:**

- ISOReferenceSystem\$new()
- ISOReferenceSystem\$setReferenceSystemIdentifier()
- ISOReferenceSystem\$setReferenceSystemType()
- ISOReferenceSystem\$clone()

Method new(): Initializes object

Usage:

ISOReferenceSystem\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setReferenceSystemIdentifier(): Set reference system identifier

Usage:

ISOReferenceSystem\$setReferenceSystemIdentifier(identifier)

Arguments:

identifier object of class [ISOReferenceIdentifier](#) (in 19139) or [ISOMetaIdentifier](#) (in 19115-3)

Method setReferenceSystemType(): Set reference system type

Usage:

ISOReferenceSystem\$setReferenceSystemType(referenceSystemType)

Arguments:

referenceSystemType object of class [ISOReferenceSystemType](#) or any [character](#) among values returned by [ISOReferenceSystemType\\$values\(\)](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOReferenceSystem\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_ReferenceSystem
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrs/1.0/mrs/#element_MD_ReferenceSystem

Examples

```
md <- ISOReferenceSystem$new()
rsId <- ISOReferenceIdentifier$new(code = "4326", codeSpace = "EPSG")
md$setReferenceSystemIdentifier(rsId)
xml <- md$encode()
```

ISOReferenceSystemType

ISOReferenceSystemType

Description

ISOReferenceSystemType

ISOReferenceSystemType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ReferenceSystemType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOReferenceSystemType

Methods**Public methods:**

- [ISOReferenceSystemType\\$new\(\)](#)
- [ISOReferenceSystemType\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOReferenceSystemType$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOReferenceSystemType$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrs/1.0/mrs/#element_MD_ReferenceSystemTypeCode

Examples

```
## Not run:
setMetadataStandard("19115-3")
#possible values
values <- ISOReferenceSystemType$values(labels = TRUE)

projected <- ISOReferenceSystemType$new(value = "projected")
setMetadataStandard("19139")

## End(Not run)
```

ISOReleasability

ISOReleasability

Description

ISOReleasability

ISOReleasability

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOReleasability

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOReleasability

Public fields

addressee addressee [0..*]: ISOAbstractResponsibility

statement statement [0..1]: character

disseminationConstraints disseminationConstraints [0..*]: ISORestriction

Methods**Public methods:**

- [ISOReleasability\\$new\(\)](#)
- [ISOReleasability\\$addAddressee\(\)](#)
- [ISOReleasability\\$delAddressee\(\)](#)
- [ISOReleasability\\$setStatement\(\)](#)
- [ISOReleasability\\$addConstraint\(\)](#)
- [ISOReleasability\\$delConstraint\(\)](#)
- [ISOReleasability\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOReleasability\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [addAddressee\(\)](#): Adds addressee

Usage:

[ISOReleasability\\$addAddressee\(addressee\)](#)

Arguments:

addressee addressee of class [ISOAbstractResponsibility](#)

Returns: TRUE if added, FALSE otherwise

Method [delAddressee\(\)](#): Deletes addressee

Usage:

[ISOReleasability\\$delAddressee\(addressee\)](#)

Arguments:

addressee addressee of class [ISOAbstractResponsibility](#)

Returns: TRUE if deleted, FALSE otherwise

Method `setStatement()`: Set statement

Usage:

```
ISOReleasability$setStatement(statement, locales = NULL)
```

Arguments:

`statement` statement

`locales` list of localized texts. Default is NULL

Method `addConstraint()`: Adds constraint

Usage:

```
ISOReleasability$addConstraint(constraint)
```

Arguments:

`constraint` constraint of class [ISORestriction](#)

Returns: TRUE if added, FALSE otherwise

Method `delConstraint()`: Deletes constraint

Usage:

```
ISOReleasability$delConstraint(constraint)
```

Arguments:

`constraint` constraint of class [ISORestriction](#)

Returns: TRUE if deleted, FALSE otherwise

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOReleasability$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mco/1.0/mco/#element_MD_Releasability

ISORepresentativeFraction
ISORepresentativeFraction

Description

ISORepresentativeFraction
ISORepresentativeFraction

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO RepresentativeFraction

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISORepresentativeFraction

Public fields

denominator denominator

Methods

Public methods:

- [ISORepresentativeFraction\\$new\(\)](#)
- [ISORepresentativeFraction\\$setDenominator\(\)](#)
- [ISORepresentativeFraction\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISORepresentativeFraction\\$new](#)(xml = NULL, denominator)

Arguments:

xml object of class [XMLInternalNode-class](#)

denominator denominator

Method [setDenominator\(\)](#): Set denominator

Usage:

[ISORepresentativeFraction\\$setDenominator](#)(denominator)

Arguments:

denominator object of class [integer](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISORepresentativeFraction$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_RepresentativeFraction
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_RepresentativeFraction

Examples

```
fr <- ISORepresentativeFraction$new(denominator = 1L)
xml1 <- fr$encode()
fr$setDenominator(2L)
xml2 <- fr$encode()
```

ISORepresentativity *ISORepresentativity*

Description

ISORepresentativity

ISORepresentativity

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO representativity

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractMetaquality -> ISORepresentativity
```


Methods

Public methods:

- [ISORepresentativity\\$new\(\)](#)
- [ISORepresentativity\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISORepresentativity$new(xml = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISORepresentativity$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_Representativity

ISOResolution

ISOResolution

Description

ISOResolution

ISOResolution

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Resolution

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOResolution

Public fields

equivalentScale equivalentScale
distance distance

Methods**Public methods:**

- [ISOResolution\\$new\(\)](#)
- [ISOResolution\\$setEquivalentScale\(\)](#)
- [ISOResolution\\$setDistance\(\)](#)
- [ISOResolution\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOResolution\$new(xml = NULL, defaults = list())

Arguments:

xml object of class [XMLInternalNode-class](#)

defaults list of defaults

Method setEquivalentScale(): Set equivalent scale

Usage:

ISOResolution\$setEquivalentScale(equivalentScale)

Arguments:

equivalentScale object of class [ISORepresentativeFraction](#) or [numeric](#)

Method setDistance(): Set distance

Usage:

ISOResolution\$setDistance(distance)

Arguments:

distance object of class [ISODistance](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOResolution\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Resolution

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_Resolution

Examples

```
md <- ISOResolution$new()
md$setDistance(ISODistance$new(value = 1, uom = "m", useUomURI = TRUE))
xml <- md$encode()
```

ISOResponsibility *ISOResponsibility*

Description

ISOResponsibility

ISOResponsibility

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO responsibility

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractResponsibility](#)
-> ISOResponsibility

Public fields

role role

extent extent

party party

Methods**Public methods:**

- [ISOResponsibility\\$new\(\)](#)
- [ISOResponsibility\\$setRole\(\)](#)
- [ISOResponsibility\\$addExtent\(\)](#)
- [ISOResponsibility\\$delExtent\(\)](#)
- [ISOResponsibility\\$addParty\(\)](#)
- [ISOResponsibility\\$delParty\(\)](#)
- [ISOResponsibility\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

ISOResponsibility\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setRole(): Set role*Usage:*

ISOResponsibility\$setRole(role)

Arguments:

role role object of class [ISORole](#) or any [character](#) among values returned by [ISORole\\$values\(\)](#)

Method addExtent(): Adds extent*Usage:*

ISOResponsibility\$addExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delExtent(): Deletes extent*Usage:*

ISOResponsibility\$delExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addParty(): Adds party*Usage:*

ISOResponsibility\$addParty(party)

Arguments:

party party

Returns: TRUE if added, FALSE otherwise

Method delParty(): Deletes party*Usage:*

ISOResponsibility\$delParty(party)

Arguments:

party party

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.*Usage:*

ISOResponsibility\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Responsibility

ISOResponsibleParty *ISOResponsibleParty*

Description

ISOResponsibleParty

ISOResponsibleParty

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ResponsibleParty

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOResponsibleParty

Public fields

individualName individualName

organisationName organisationName

positionName positionName

contactInfo contactInfo

role role

Methods**Public methods:**

- [ISOResponsibleParty\\$new\(\)](#)
- [ISOResponsibleParty\\$setIndividualName\(\)](#)
- [ISOResponsibleParty\\$setOrganisationName\(\)](#)
- [ISOResponsibleParty\\$setPositionName\(\)](#)
- [ISOResponsibleParty\\$setContactInfo\(\)](#)
- [ISOResponsibleParty\\$setRole\(\)](#)
- [ISOResponsibleParty\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOResponsibleParty$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setIndividualName(): Set individual name

Usage:

```
ISOResponsibleParty$setIndividualName(individualName, locales = NULL)
```

Arguments:

individualName individual name

locales list of localized texts. Default is NULL

Method setOrganisationName(): Set organisation name

Usage:

```
ISOResponsibleParty$setOrganisationName(organisationName, locales = NULL)
```

Arguments:

organisationName organisation name

locales list of localized texts. Default is NULL

Method setPositionName(): Set position name

Usage:

```
ISOResponsibleParty$setPositionName(positionName, locales = NULL)
```

Arguments:

positionName position name

locales list of localized texts. Default is NULL

Method setContactInfo(): Set contact info

Usage:

```
ISOResponsibleParty$setContactInfo(contactInfo)
```

Arguments:

contactInfo object of class [ISOContact](#)

Method setRole(): Set role

Usage:

```
ISOResponsibleParty$setRole(role)
```

Arguments:

role role object of class [ISORole](#) or any [character](#) among values returned by [ISORole\\$values\(\)](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOResponsibleParty$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
#create a responsible party element
md <- ISOResponsibleParty$new()
md$setIndividualName("someone")
md$setOrganisationName("somewhere")
md$setPositionName("someposition")
md$setRole("pointOfContact")

#add contact
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact$setOnlineResource(res)
md$setContactInfo(contact)

xml <- md$encode()
```

ISORestriction

ISOHierarchyLevel

Description

ISOHierarchyLevel

ISOHierarchyLevel

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Restriction

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue  
-> ISORestriction
```

Methods**Public methods:**

- [ISORestriction\\$new\(\)](#)
- [ISORestriction\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISORestriction$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISORestriction$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_RestrictionCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mco/1.0/mco/#element_MD_RestrictionCode

Examples

```
#possible values  
values <- ISORestriction$values(labels = TRUE)  
  
#copyright restriction  
cr <- ISORestriction$new(value = "copyright")
```

ISORole

ISORole

Description

ISORole

ISORole

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Role

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISORole

Methods

Public methods:

- [ISORole\\$new\(\)](#)
- [ISORole\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISORole$new(xml = NULL, value = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISORole$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_RoleCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_RoleCode

Examples

```
#possible values
values <- ISORole$values(labels = TRUE)

#publisher restriction
role <- ISORole$new(value = "publisher")
```

 ISORoleType

ISORoleType

Description

ISORoleType
ISORoleType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO RoleType

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodelistValue
-> ISORoleType
```

Methods**Public methods:**

- [ISORoleType\\$new\(\)](#)
- [ISORoleType\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISORoleType$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISORoleType$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19110:2005 Methodology for Feature cataloguing

Examples

```
#possible values
values <- ISORoleType$values(labels = TRUE)

#some charset
ordinaryType <- ISORoleType$new(value = "ordinary")
```

ISOSampleBasedInspection

ISOSampleBasedInspection

Description

ISOSampleBasedInspection

ISOSampleBasedInspection

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO sample based inspection

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOEvaluationMethod
-> ISOSampleBasedInspection
```

Methods**Public methods:**

- [ISOSampleBasedInspection\\$new\(\)](#)
- [ISOSampleBasedInspection\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOSampleBasedInspection$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOSampleBasedInspection$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_SampleBasedInspection

ISOSampleDimension *ISOSampleDimension*

Description

ISOSampleDimension

ISOSampleDimension

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOSampleDimension

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISORangeDimension](#)
-> ISOSampleDimension

Public fields

maxValue maxValue [0..1] : numeric
minValue minValue [0..1] : numeric
units units [0..1] : GMLUnitDefinition
scaleFactor scaleFactor [0..1] : numeric
offset offset [0..1] : numeric
meanValue meanValue [0..1] : numeric (=> ISO 19115-3)
numberOfValues numberOfValues [0..1] : integer (=> ISO 19115-3)
standardDeviation standardDeviation [0..1] : numeric (=> ISO 19115-3)
otherPropertyType otherPropertyType [0..1] : ISORecordType (=> ISO 19115-3)
otherProperty otherProperty [0..1] : ISORecord (=> ISO 19115-3)
bitsPerValue bitsPerValue [0..1] : integer (=> ISO 19115-3)

Methods**Public methods:**

- [ISOSampleDimension\\$new\(\)](#)
- [ISOSampleDimension\\$setMaxValue\(\)](#)
- [ISOSampleDimension\\$setMinValue\(\)](#)
- [ISOSampleDimension\\$setUnits\(\)](#)
- [ISOSampleDimension\\$setScaleFactor\(\)](#)
- [ISOSampleDimension\\$setOffset\(\)](#)
- [ISOSampleDimension\\$setMeanValue\(\)](#)
- [ISOSampleDimension\\$setNumberOfValues\(\)](#)
- [ISOSampleDimension\\$setStandardDeviation\(\)](#)
- [ISOSampleDimension\\$setOtherPropertyType\(\)](#)
- [ISOSampleDimension\\$setOtherProperty\(\)](#)
- [ISOSampleDimension\\$setBitsPerValue\(\)](#)
- [ISOSampleDimension\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOSampleDimension\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setMaxValue(): Set max value

Usage:

ISOSampleDimension\$setMaxValue(maxValue)

Arguments:

maxValue max value, object of class [numeric](#)

Method setMinValue(): Set min value

Usage:

ISOSampleDimension\$setMinValue(minValue)

Arguments:

minValue min value, object of class [numeric](#)

Method setUnits(): Set unit definition

Usage:

ISOSampleDimension\$setUnits(uom)

Arguments:

uom object of class [GMLUnitDefinition](#)

Method setScaleFactor(): Set scale factor

Usage:

ISOSampleDimension\$setScaleFactor(scaleFactor)

Arguments:

scaleFactor object of class [numeric](#)

Method setOffset(): Set offset

Usage:

ISOSampleDimension\$setOffset(offset)

Arguments:

offset object of class [numeric](#)

Method setMeanValue(): Set mean value

Usage:

ISOSampleDimension\$setMeanValue(meanValue)

Arguments:

meanValue meanValue object of class [numeric](#)

Method setNumberOfValues(): Set number of values

Usage:

ISOSampleDimension\$setNumberOfValues(numberOfValues)

Arguments:

numberOfValues numberOfValues object of class [integer](#)

Method setStandardDeviation(): Set standard deviation

Usage:

ISOSampleDimension\$setStandardDeviation(standardDeviation)

Arguments:

standardDeviation standardDeviation object of class [numeric](#)

Method setOtherPropertyType(): setOtherPropertyType

Usage:

```
ISOSampleDimension$setOtherPropertyType(otherPropertyType)
```

Arguments:

otherPropertyType otherPropertyType object of class [ISORecordType](#)

Method setOtherProperty(): setOtherProperty

Usage:

```
ISOSampleDimension$setOtherProperty(otherProperty)
```

Arguments:

otherProperty otherProperty object of class [ISORecord](#)

Method setBitsPerValue(): Set bits per value

Usage:

```
ISOSampleDimension$setBitsPerValue(bitsPerValue)
```

Arguments:

bitsPerValue bitsPerValue object of class [integer](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOSampleDimension$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrc/1.0/mrc/#element_MD_SampleDimension

Examples

```
## Not run:
setMetadataStandard("19115-3")
#create band range dimension
md <- ISOSampleDimension$new()
md$setSequenceIdentifier(ISOMemberName$new(aName = "name", attributeType = "type"))
md$setDescriptor("descriptor")
md$setMaxValue(10)
md$setMinValue(1)
gml <- GMLBaseUnit$new(id = "ID")
gml$setDescriptionReference("someref")
gml$setIdentifier("identifier", "codespace")
gml$addName("name1", "codespace")
gml$addName("name2", "codespace")
```

```

gml$setQuantityTypeReference("someref")
gml$setCatalogSymbol("symbol")
gml$setUnitsSystem("somelink")
md$setUnits(gml)
md$setScaleFactor(1)
md$setOffset(4)
xml <- md$encode()
setMetadataStandard("19139")

## End(Not run)

```

ISOScale

ISOScale

Description

ISOScale

ISOScale

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOScale measure

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOMeasure](#) -> ISOScale

Methods

Public methods:

- [ISOScale\\$new\(\)](#)
- [ISOScale\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOScale$new(xml = NULL, value, uom, useUomURI = FALSE)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

uom uom symbol of unit of measure used

useUomURI use uom URI. Default is FALSE

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOScope\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_Scale
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_Scale

ISOScope

ISOScope

Description

ISOScope

ISOScope

Format

R6Class object.

Value

Object of R6Class for modelling a scope

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOScope

Public fields

level level [0..1]: ISOScope

extent extent [0..*]: ISOAbstractExtent

levelDescription levelDescription [0..*]: ISOScopeDescription

Methods

Public methods:

- [ISOScope\\$new\(\)](#)
- [ISOScope\\$setLevel\(\)](#)
- [ISOScope\\$addExtent\(\)](#)
- [ISOScope\\$delExtent\(\)](#)
- [ISOScope\\$addLevelDescription\(\)](#)
- [ISOScope\\$delLevelDescription\(\)](#)
- [ISOScope\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOScope$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setLevel()`: Set level

Usage:

`ISOScope$setLevel(level)`

Arguments:

`level` scope code, object of class [ISOScopeCode](#) or `character` among values listed by `ISOScopeCode$values()`

Method `addExtent()`: Adds extent

Usage:

`ISOScope$addExtent(extent)`

Arguments:

`extent` extent of class [ISOAbstractExtent](#)

Returns: TRUE if added, FALSE otherwise

Method `delExtent()`: Deletes extent

Usage:

`ISOScope$delExtent(extent)`

Arguments:

`extent` extent of class [ISOAbstractExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method `addLevelDescription()`: Adds level description

Usage:

`ISOScope$addLevelDescription(levelDescription)`

Arguments:

`levelDescription` levelDescription of class [ISOScopeDescription](#)

Returns: TRUE if added, FALSE otherwise

Method delLevelDescription(): Deletes level description

Usage:

ISOScope\$delLevelDescription(levelDescription)

Arguments:

levelDescription levelDescription of class [ISOScopeDescription](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOScope\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mco/1.0/mco/#element_MD_Scope

ISOScopeCode

ISOScopeCode

Description

ISOScopeCode

ISOScopeCode

Format

[R6Class](#) object

Value

Object of [R6Class](#) for modelling an ISO Scope code

Object of [R6Class](#) for modelling an ISO Scope

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOScopeCode

Methods

Public methods:

- [ISOScopeCode\\$new\(\)](#)
- [ISOScopeCode\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOScopeCode$new(xml = NULL, value, description = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

`value` value

`description` description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOScopeCode$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_ScopeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_MD_ScopeCode

Examples

```
#possible values
values <- ISOScopeCode$values(labels = TRUE)

#dataset scope
ds <- ISOScopeCode$new(value = "dataset")
```

ISOScopeDescription *ISOScopeDescription*

Description

ISOScopeDescription

ISOScopeDescription

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ScopeDescription

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOScopeDescription

Public fields

attributes attributes [1..*]

features features [1..*]

featureInstances featureInstances [1..*]

attributeInstances attributeInstances [1..*]

dataset dataset

other other

Methods

Public methods:

- [ISOScopeDescription\\$new\(\)](#)
- [ISOScopeDescription\\$addAttribute\(\)](#)
- [ISOScopeDescription\\$delAttribute\(\)](#)
- [ISOScopeDescription\\$addAttributeInstance\(\)](#)
- [ISOScopeDescription\\$delAttributeInstance\(\)](#)
- [ISOScopeDescription\\$addFeatureInstance\(\)](#)
- [ISOScopeDescription\\$delFeatureInstance\(\)](#)
- [ISOScopeDescription\\$setDataset\(\)](#)
- [ISOScopeDescription\\$setOther\(\)](#)
- [ISOScopeDescription\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

ISOScopeDescription\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method addAttribute(): Adds attribute*Usage:*

ISOScopeDescription\$addAttribute(attribute)

Arguments:

attribute attribute

Returns: TRUE if added, FALSE otherwise

Method delAttribute(): Deletes attribute*Usage:*

ISOScopeDescription\$delAttribute(attribute)

Arguments:

attribute attribute

Returns: TRUE if deleted, FALSE otherwise

Method addAttributeInstance(): Adds attribute instance*Usage:*

ISOScopeDescription\$addAttributeInstance(attributeInstance)

Arguments:

attributeInstance attribute instance

Returns: TRUE if added, FALSE otherwise

Method delAttributeInstance(): Deletes attribute instance*Usage:*

ISOScopeDescription\$delAttributeInstance(attributeInstance)

Arguments:

attributeInstance attribute instance

Returns: TRUE if deleted, FALSE otherwise

Method addFeatureInstance(): Adds feature instance*Usage:*

ISOScopeDescription\$addFeatureInstance(featureInstance)

Arguments:

featureInstance feature instance

Returns: TRUE if added, FALSE otherwise

Method delFeatureInstance(): Deletes feature instance

Usage:

```
ISOScopeDescription$delFeatureInstance(featureInstance)
```

Arguments:

```
featureInstance feature instance
```

Returns: TRUE if deleted, FALSE otherwise

Method setDataset(): Set dataset*Usage:*

```
ISOScopeDescription$setDataset(dataset)
```

Arguments:

```
dataset dataset
```

Method setOther(): Set other*Usage:*

```
ISOScopeDescription$setOther(other)
```

Arguments:

```
other other
```

Method clone(): The objects of this class are cloneable with this method.*Usage:*

```
ISOScopeDescription$clone(deep = FALSE)
```

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_ScopeDescription
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_MD_ScopeDescription

Examples

```
md <- ISOScopeDescription$new()  
xml <- md$encode()
```

ISOScopedName	<i>ISOScopedName</i>
---------------	----------------------

Description

ISOScopedName

ISOScopedName

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO ScopedName**Super classes**

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::GMLCodeType](#) -> [geometa::ISOAbstractGen](#)
 -> ISOScopedName

Public fields

value value

Methods**Public methods:**

- [ISOScopedName\\$new\(\)](#)
- [ISOScopedName\\$clone\(\)](#)

Method `new()`: Initializes object*Usage:*

ISOScopedName\$new(xml = NULL, value)

*Arguments:*xml object of class [XMLInternalNode-class](#)

value value

Method `clone()`: The objects of this class are cloneable with this method.*Usage:*

ISOScopedName\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_ScopedName
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_ScopedName

ISOSecurityConstraints

ISOSecurityConstraints

Description

ISOSecurityConstraints

ISOSecurityConstraints

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO SecurityConstraints

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOConstraints](#) ->
ISOSecurityConstraints

Public fields

classification classification: ISOClassification

userNote userNote [0..1]: character

classificationSystem classificationSystem [0..1]: character

handlingDescription handlingDescription [0..1]: character

Methods**Public methods:**

- [ISOSecurityConstraints\\$new\(\)](#)
- [ISOSecurityConstraints\\$setClassification\(\)](#)
- [ISOSecurityConstraints\\$setUserNote\(\)](#)
- [ISOSecurityConstraints\\$setClassificationSystem\(\)](#)
- [ISOSecurityConstraints\\$setHandlingDescription\(\)](#)

- [ISOSecurityConstraints\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOSecurityConstraints$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setClassification(): Set classification

Usage:

```
ISOSecurityConstraints$setClassification(classification)
```

Arguments:

classification object of class [ISOClassification](#) or any [character](#) among values returned by [ISOClassification\\$values\(\)](#)

Method setUserNote(): Set user note

Usage:

```
ISOSecurityConstraints$setUserNote(userNote, locales = NULL)
```

Arguments:

userNote user note

locales list of localized texts. Default is NULL

Method setClassificationSystem(): Set classification system

Usage:

```
ISOSecurityConstraints$setClassificationSystem(  
  classificationSystem,  
  locales = NULL  
)
```

Arguments:

classificationSystem classification system

locales list of localized texts. Default is NULL

Method setHandlingDescription(): Set handling description

Usage:

```
ISOSecurityConstraints$setHandlingDescription(  
  handlingDescription,  
  locales = NULL  
)
```

Arguments:

handlingDescription handling description

locales list of localized texts. Default is NULL

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOSecurityConstraints$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_SecurityConstraints
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mco/1.0/mco/#element_MD_SecurityConstraints

Examples

```
#create object
md <- ISOSecurityConstraints$new()
md$setClassification("secret")
md$setUserNote("ultra secret")
md$setClassificationSystem("no classification in particular")
md$setHandlingDescription("description")

xml <- md$encode()
```

ISOSensor

ISOSensor

Description

ISOSensor

ISOSensor

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOSensor

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractAggregate](#)
-> [geometa::ISOSeries](#) -> ISOSensor

Methods**Public methods:**

- [ISOSensor\\$new\(\)](#)
- [ISOSensor\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOSensor$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOSensor$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOSeries

ISOSeries

Description

ISOSeries

ISOSeries

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOSeries

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractAggregate](#)
-> ISOSeries

Public fields

name name [0..1]: character
issueIdentification issueIdentification [0..1]: character
page page [0..1]: character

Methods**Public methods:**

- [ISOSeries\\$new\(\)](#)
- [ISOSeries\\$setName\(\)](#)
- [ISOSeries\\$setIssueIdentification\(\)](#)
- [ISOSeries\\$setPage\(\)](#)
- [ISOSeries\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOSeries\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setName(): Set name

Usage:

ISOSeries\$setName(name, locales = NULL)

Arguments:

name name

locales list of localized titles. Default is NULL

Method setIssueIdentification(): Set issue identification

Usage:

ISOSeries\$setIssueIdentification(issueIdentification, locales = NULL)

Arguments:

issueIdentification issue identification

locales list of localized titles. Default is NULL

Method setPage(): Set page

Usage:

ISOSeries\$setPage(page, locales = NULL)

Arguments:

page page

locales list of localized titles. Default is NULL

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOSeries\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_Series
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Series

ISOServiceIdentification

ISOServiceIdentification

Description

ISOServiceIdentification

ISOServiceIdentification

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ServiceIdentification

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
-> ISOServiceIdentification

Methods**Public methods:**

- [ISOServiceIdentification\\$new\(\)](#)
- [ISOServiceIdentification\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOServiceIdentification\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [clone\(\)](#): The objects of this class are cloneable with this method.

Usage:

[ISOServiceIdentification\\$clone\(deep = FALSE\)](#)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

Examples

```
#encoding
md <- ISOServiceIdentification$new()
md$setAbstract("abstract")
md$setPurpose("purpose")

#adding a point of contact
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenummer")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somenam")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
md$addPointOfContact(rp)

#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp)
md$setCitation(ct)
```

```

#graphic overview
go <- ISOBrowseGraphic$new(
  fileName = "http://www.somefile.org/png",
  fileDescription = "Map Overview",
  fileType = "image/png"
)
md$addGraphicOverview(go)

#maintenance information
mi <- ISOMaintenanceInformation$new()
mi$setMaintenanceFrequency("daily")
md$addResourceMaintenance(mi)

#adding legal constraints
lc <- ISOLegalConstraints$new()
lc$addUseLimitation("limitation1")
lc$addUseLimitation("limitation2")
lc$addUseLimitation("limitation3")
lc$addAccessConstraint("copyright")
lc$addAccessConstraint("license")
lc$addUseConstraint("copyright")
lc$addUseConstraint("license")
md$addResourceConstraints(lc)

xml <- md$encode()

```

ISOServiceIdentification19115_3

ISOServiceIdentification19115_3

Description

ISOServiceIdentification19115_3

ISOServiceIdentification19115_3

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ServiceIdentification in ISO 19115-3

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
-> [geometa::ISOIdentification19115_3](#) -> ISOServiceIdentification19115_3

Methods

Public methods:

- [ISOServiceIdentification19115_3\\$new\(\)](#)
- [ISOServiceIdentification19115_3\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOServiceIdentification19115_3$new(xml = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOServiceIdentification19115_3$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

ISOServiceIdentification19139

ISOServiceIdentification19139

Description

ISOServiceIdentification19139

ISOServiceIdentification19139

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ServiceIdentification in ISO 19139

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOIdentification  
-> geometa::ISOIdentification19139 -> ISOServiceIdentification19139
```

Methods**Public methods:**

- [ISOServiceIdentification19139\\$new\(\)](#)
- [ISOServiceIdentification19139\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOServiceIdentification19139\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOServiceIdentification19139\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

ISOSource

ISOSource

Description

ISOSource

ISOSource

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Source

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOSource

Public fields

description description [0..1]: character

scaleDenominator scaleDenominator [0..1]: ISORepresentativeFraction

sourceReferenceSystem sourceReferenceSystem [0..1]: ISOReferenceSystem

sourceCitation sourceCitation [0..1]: ISOCitation

sourceExtent sourceExtent [0..*]: ISOExtent

sourceStep sourceStep [0..*]: ISOProcessStep

Methods**Public methods:**

- [ISOSource\\$new\(\)](#)
- [ISOSource\\$setDescription\(\)](#)
- [ISOSource\\$setScaleDenominator\(\)](#)
- [ISOSource\\$setReferenceSystem\(\)](#)
- [ISOSource\\$setCitation\(\)](#)
- [ISOSource\\$addExtent\(\)](#)
- [ISOSource\\$delExtent\(\)](#)
- [ISOSource\\$addProcessStep\(\)](#)
- [ISOSource\\$delProcessStep\(\)](#)
- [ISOSource\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOSource$new(xml = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setDescription()`: Set description

Usage:

```
ISOSource$setDescription(description, locales = NULL)
```

Arguments:

`description` description

`locales` list of localized texts. Default is NULL

Method `setScaleDenominator()`: Set scale denominator

Usage:

```
ISOSource$setScaleDenominator(denominator)
```

Arguments:

`denominator` object of class [ISORrepresentativeFraction](#)

Method `setReferenceSystem()`: Set reference system

Usage:

```
ISOSource$setReferenceSystem(referenceSystem)
```

Arguments:

`referenceSystem` object of class [ISORreferenceSystem](#)

Method `setCitation()`: Set citation

Usage:

```
ISOSource$setCitation(citation)
```

Arguments:

citation object of class [ISOCitation](#)

Method addExtent(): Adds extent

Usage:

ISOSource\$addExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delExtent(): Deletes extent

Usage:

ISOSource\$delExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addProcessStep(): Adds process step

Usage:

ISOSource\$addProcessStep(processStep)

Arguments:

processStep object of class [ISOProcessStep](#)

Returns: TRUE if added, FALSE otherwise

Method delProcessStep(): Deletes process step

Usage:

ISOSource\$delProcessStep(processStep)

Arguments:

processStep object of class [ISOProcessStep](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOSource\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_LI_Source
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mr1/2.0/mr1/#element_LI_Source

Examples

```

src <- ISOSource$new()
src$setDescription("description")
src$setScaleDenominator(1L)

rs <- ISOReferenceSystem$new()
rsId <- ISOReferenceIdentifier$new(code = "4326", codeSpace = "EPSG")
rs$setReferenceSystemIdentifier(rsId)
src$setReferenceSystem(rs)

cit <- ISOCitation$new()
cit$setTitle("sometitle") #and more citation properties...
src$setCitation(cit)

extent <- ISOExtent$new()
bbox <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
extent$setGeographicElement(bbox)
src$addExtent(extent)
xml <- src$encode()

```

ISOSpatialRepresentation

ISOSpatialRepresentation

Description

ISOSpatialRepresentation

ISOSpatialRepresentation

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO abstract SpatialRepresentation**Super classes**

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractSpatialRepresentation
-> ISOSpatialRepresentation

```

Methods**Public methods:**

- [ISOSpatialRepresentation\\$new\(\)](#)
- [ISOSpatialRepresentation\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOSpatialRepresentation$new(xml = NULL, defaults = list())
```

Arguments:

xml object of class [XMLInternalNode-class](#)

defaults list of defaults

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOSpatialRepresentation$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Note

abstract class

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_AbstractMD_SpatialRepresentation

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_AbstractMD_SpatialRepresentation

ISOSpatialRepresentationType

ISOSpatialRepresentationType

Description

ISOSpatialRepresentationType

ISOSpatialRepresentationType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO SpatialRepresentationType

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue  
-> ISOSpatialRepresentationType
```

Methods**Public methods:**

- [ISOSpatialRepresentationType\\$new\(\)](#)
- [ISOSpatialRepresentationType\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOSpatialRepresentationType$new(xml = NULL, value = NULL, description = NULL)
```

Arguments:

```
xml  object of class XMLInternalNode-class  
value value  
description description
```

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOSpatialRepresentationType$clone(deep = FALSE)
```

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_SpatialRepresentationTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_MD_SpatialRepresentationTypeCode

Examples

```
#possible values  
values <- ISOSpatialRepresentationType$values(labels = TRUE)  
  
#vector example  
vectorRep <- ISOSpatialRepresentationType$new(value = "vector")
```

ISOSpatialTemporalExtent
ISOSpatialTemporalExtent

Description

ISOSpatialTemporalExtent
ISOSpatialTemporalExtent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO SpatialTemporalExtent

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOTemporalExtent](#)
-> ISOSpatialTemporalExtent

Public fields

spatialExtent spatialExtent [1..*]: ISOGeographicExtent

Methods**Public methods:**

- [ISOSpatialTemporalExtent\\$new\(\)](#)
- [ISOSpatialTemporalExtent\\$addSpatialExtent\(\)](#)
- [ISOSpatialTemporalExtent\\$delSpatialExtent\(\)](#)
- [ISOSpatialTemporalExtent\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOSpatialTemporalExtent\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [addSpatialExtent\(\)](#): Adds spatial extent

Usage:

[ISOSpatialTemporalExtent\\$addSpatialExtent\(spatialExtent\)](#)

Arguments:

spatialExtent object of class [ISOGeographicExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delSpatialExtent(): Deletes spatial extent

Usage:

```
ISOSpatialTemporalExtent$delSpatialExtent(spatialExtent)
```

Arguments:

spatialExtent object of class [ISOGeographicExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOSpatialTemporalExtent$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_EX_SpatialTemporalExtent
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gex/1.0/gex/#element_EX_SpatialTemporalExtent

Examples

```
#create object
md <- ISOSpatialTemporalExtent$new()
start <- ISOdate(2000, 1, 12, 12, 59, 45)
end <- ISOdate(2010, 8, 22, 13, 12, 43)
tp <- GMLTimePeriod$new(beginPosition = start, endPosition = end)
md$setTimePeriod(tp)
spatialExtent <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
md$addSpatialExtent(spatialExtent)

xml <- md$encode()
```

ISOSRVParameter	<i>ISOSRVParameter</i>
-----------------	------------------------

Description

ISOSRVParameter

ISOSRVParameter

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISOSRVParameter**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOSRVParameter**Public fields**

name name [1..1]: character

direction direction [0..1]: ISOParameterDirection or character

description description [0..1]: character

optionality optionality [1..1]: character

repeatability repeatability [1..1]: logical

valueType valueType [1..1]: ISOTypeName (=> ISO 19139)

Methods**Public methods:**

- [ISOSRVParameter\\$new\(\)](#)
- [ISOSRVParameter\\$setName\(\)](#)
- [ISOSRVParameter\\$setDirection\(\)](#)
- [ISOSRVParameter\\$setDescription\(\)](#)
- [ISOSRVParameter\\$setOptionality\(\)](#)
- [ISOSRVParameter\\$setRepeatability\(\)](#)
- [ISOSRVParameter\\$setValueType\(\)](#)
- [ISOSRVParameter\\$clone\(\)](#)

Method [new\(\)](#): Initializes object*Usage:*[ISOSRVParameter\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setName(): Set name*Usage:*

```
ISOSRVParameter$setName(name, attributeType, locales = NULL)
```

Arguments:

name name

attributeType attribute type

locales list of localized texts. Default is NULL

Method setDirection(): Set direction*Usage:*

```
ISOSRVParameter$setDirection(direction)
```

Arguments:

direction object of class [ISOSRVParameterDirection](#) or [character](#) among values returned by [ISOSRVParameterDirection\\$values\(\)](#)

Method setDescription(): Set description*Usage:*

```
ISOSRVParameter$setDescription(description, locales = NULL)
```

Arguments:

description description

locales list of localized texts. Default is NULL

Method setOptionality(): Set optionality*Usage:*

```
ISOSRVParameter$setOptionality(optional)
```

Arguments:

optional object of class [logical](#)

Method setRepeatability(): Set repeatability*Usage:*

```
ISOSRVParameter$setRepeatability(repeatable)
```

Arguments:

repeatable object of class [logical](#)

Method setValueType(): Set value type*Usage:*

```
ISOSRVParameter$setValueType(valueType, locales = NULL)
```

Arguments:

valueType object of class [ISOTypeName](#) or [character](#)

locales list of localized texts. Default is NULL

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOSRVParameter$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19119 https://schemas.isotc211.org/19119/srv/srv/#element_SV_Parameter - ISO 19115-3 https://schemas.isotc211.org/19115/-3/srv/2.0/srv/#element_SV_Parameter

Examples

```
md <- ISOSRVParameter$new()
md$setName("name", "attType")
md$setDirection("in")
md$setDescription("description")
md$setOptionality(FALSE)
md$setRepeatability(FALSE)
md$setValueType("CharacterString")
xml <- md$encode()
```

ISOSRVParameterDirection

ISOSRVParameterDirection

Description

ISOSRVParameterDirection

ISOSRVParameterDirection

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOSRVParameterDirection

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodelistValue  
-> ISOSRVParameterDirection
```

Methods**Public methods:**

- `ISOSRVParameterDirection$new()`
- `ISOSRVParameterDirection$clone()`

Method `new()`: Initializes object

Usage:

```
ISOSRVParameterDirection$new(xml = NULL, value, description = NULL)
```

Arguments:

```
xml  object of class XMLInternalNode-class  
value value  
description description
```

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOSRVParameterDirection$clone(deep = FALSE)
```

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19119 https://schemas.isotc211.org/19119/srv/srv/#element_SV_ParameterDirection
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/srv/2.0/srv/#element_SV_ParameterDirection

Examples

```
#possible values  
values <- ISOSRVParameterDirection$values(labels = TRUE)  
  
#paramDir  
paramDir <- ISOSRVParameterDirection$new(value = "in")
```

ISOSRVServiceIdentification
ISOSRVServiceIdentification

Description

ISOSRVServiceIdentification
 ISOSRVServiceIdentification

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO ServiceIdentification

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
 -> [geometa::ISOServiceIdentification](#) -> ISOSRVServiceIdentification

Public fields

serviceType serviceType [1..1]: ISOGenericName
 serviceTypeVersion serviceTypeVersion [0..*]: character
 accessProperties accessProperties [0..1]: ISOStandardOrderProcess
 restrictions restrictions [0..1]: ISOConstraints
 keywords keywords [0..*]: ISOKeywords
 extent extent [0..*]: ISOExtent
 coupledResource coupledResource [0..*]: ISOCoupledResource
 couplingType couplingType [1..1]: ISOCouplingType
 containsOperations containsOperations [1..*]: ISOOperationMetadata
 operatesOn operatesOn [0..*]: ISODataIdentification

Methods

Public methods:

- [ISOSRVServiceIdentification\\$new\(\)](#)
- [ISOSRVServiceIdentification\\$setServiceType\(\)](#)
- [ISOSRVServiceIdentification\\$addServiceTypeVersion\(\)](#)
- [ISOSRVServiceIdentification\\$delServiceTypeVersion\(\)](#)
- [ISOSRVServiceIdentification\\$setAccessProperties\(\)](#)

- `ISOSRVServiceIdentification$setRestrictions()`
- `ISOSRVServiceIdentification$addKeywords()`
- `ISOSRVServiceIdentification$delKeywords()`
- `ISOSRVServiceIdentification$addExtent()`
- `ISOSRVServiceIdentification$delExtent()`
- `ISOSRVServiceIdentification$addCoupledResource()`
- `ISOSRVServiceIdentification$delCoupledResource()`
- `ISOSRVServiceIdentification$setCouplingType()`
- `ISOSRVServiceIdentification$addOperationMetadata()`
- `ISOSRVServiceIdentification$delOperationMetadata()`
- `ISOSRVServiceIdentification$addOperatesOn()`
- `ISOSRVServiceIdentification$delOperatesOn()`
- `ISOSRVServiceIdentification$clone()`

Method `new()`: Initializes object

Usage:

`ISOSRVServiceIdentification$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setServiceType()`: Set service type

Usage:

`ISOSRVServiceIdentification$setServiceType(serviceType)`

Arguments:

`serviceType` object of class [ISOLocalName](#), [ISOScopedName](#) or `character`

Method `addServiceTypeVersion()`: Adds service type version

Usage:

`ISOSRVServiceIdentification$addServiceTypeVersion(version)`

Arguments:

`version` `version`

Returns: TRUE if added, FALSE otherwise

Method `delServiceTypeVersion()`: Deletes service type version

Usage:

`ISOSRVServiceIdentification$delServiceTypeVersion(version)`

Arguments:

`version` `version`

Returns: TRUE if deleted, FALSE otherwise

Method `setAccessProperties()`: Set access properties

Usage:

ISOSRVServiceIdentification\$setAccessProperties(accessProperties)

Arguments:

accessProperties object of class [ISOStandardOrderProcess](#)

Method setRestrictions(): Set restrictions

Usage:

ISOSRVServiceIdentification\$setRestrictions(restrictions)

Arguments:

restrictions object of class [ISOConstraints](#)

Method addKeywords(): Adds keywords

Usage:

ISOSRVServiceIdentification\$addKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if added, FALSE otherwise

Method delKeywords(): Deletes keywords

Usage:

ISOSRVServiceIdentification\$delKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if deleted, FALSE otherwise

Method addExtent(): Adds extent

Usage:

ISOSRVServiceIdentification\$addExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delExtent(): Deletes extent

Usage:

ISOSRVServiceIdentification\$delExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addCoupledResource(): Adds coupled resource

Usage:

ISOSRVServiceIdentification\$addCoupledResource(resource)

Arguments:

resource object of class [ISOCoupledResource](#)

Returns: TRUE if added, FALSE otherwise

Method delCoupledResource(): Deletes coupled resource

Usage:

ISOSRVServiceIdentification\$delCoupledResource(resource)

Arguments:

resource object of class [ISOCoupledResource](#)

Returns: TRUE if deleted, FALSE otherwise

Method setCouplingType(): Set coupling type

Usage:

ISOSRVServiceIdentification\$setCouplingType(couplingType)

Arguments:

couplingType object of class [ISOCouplingType](#) or any [character](#) among values returned by [ISOCouplingType\\$values\(\)](#)

Method addOperationMetadata(): Adds operation metadata

Usage:

ISOSRVServiceIdentification\$addOperationMetadata(operationMetadata)

Arguments:

operationMetadata object of class [ISOOperationMetadata](#)

Returns: TRUE if added, FALSE otherwise

Method delOperationMetadata(): Deletes operation metadata

Usage:

ISOSRVServiceIdentification\$delOperationMetadata(operationMetadata)

Arguments:

operationMetadata object of class [ISOOperationMetadata](#)

Returns: TRUE if deleted, FALSE otherwise

Method addOperatesOn(): Adds operates on

Usage:

ISOSRVServiceIdentification\$addOperatesOn(dataIdentification)

Arguments:

dataIdentification object of class [ISODataIdentification](#)

Returns: TRUE if added, FALSE otherwise

Method delOperatesOn(): Deletes operates on

Usage:

ISOSRVServiceIdentification\$delOperatesOn(dataIdentification)

Arguments:

dataIdentification object of class [ISODataIdentification](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOSRVServiceIdentification$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19119 https://schemas.isotc211.org/19119/srv/srv/#element_SV_ServiceIdentification
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/srv/2.0/srv/#element_SV_ServiceIdentification

Examples

```
#encoding
md <- ISOSRVServiceIdentification$new()
md$setAbstract("abstract")
md$setPurpose("purpose")

#adding a point of contact
rp <- ISOResponsibleParty$new()
rp$setIndividualName("someone")
rp$setOrganisationName("somewhere")
rp$setPositionName("someposition")
rp$setRole("pointOfContact")
contact <- ISOContact$new()
phone <- ISOTelephone$new()
phone$setVoice("myphonenumber")
phone$setFacsimile("myfacsimile")
contact$setPhone(phone)
address <- ISOAddress$new()
address$setDeliveryPoint("theaddress")
address$setCity("thecity")
address$setPostalCode("111")
address$setCountry("France")
address$setEmail("someone@theorg.org")
contact$setAddress(address)
res <- ISOOnlineResource$new()
res$setLinkage("http://www.somewhereovertheweb.org")
res$setName("somename")
contact$setOnlineResource(res)
rp$setContactInfo(contact)
md$addPointOfContact(rp)
```

```
#citation
ct <- ISOCitation$new()
ct$setTitle("sometitle")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
ct$addDate(d)
ct$setEdition("1.0")
ct$setEditionDate(ISOdate(2015,1,1))
ct$addIdentifier(ISOMetaIdentifier$new(code = "identifier"))
ct$addPresentationForm("mapDigital")
ct$addCitedResponsibleParty(rp)
md$setCitation(ct)

#graphic overview
go <- ISOBrowseGraphic$new(
  fileName = "http://www.somefile.org/png",
  fileDescription = "Map Overview",
  fileType = "image/png"
)
md$addGraphicOverview(go)

#maintenance information
mi <- ISOMaintenanceInformation$new()
mi$setMaintenanceFrequency("daily")
md$addResourceMaintenance(mi)

#adding legal constraints
lc <- ISOLegalConstraints$new()
lc$addUseLimitation("limitation1")
lc$addUseLimitation("limitation2")
lc$addUseLimitation("limitation3")
lc$addAccessConstraint("copyright")
lc$addAccessConstraint("license")
lc$addUseConstraint("copyright")
lc$addUseConstraint("license")
md$addResourceConstraints(lc)

#specific elements to service identification
md$setServiceType("Fishery data harmonization process")
md$addServiceTypeVersion("1.0")
orderProcess <- ISOStandardOrderProcess$new()
orderProcess$setFees("fees")
orderProcess$setPlannedAvailableDateTime(ISOdate(2017,7,5,12,0,0))
orderProcess$setOrderingInstructions("instructions")
orderProcess$setTurnaround("turnaround")
md$setAccessProperties(orderProcess)
md$setRestrictions(lc)

kwds <- ISOKeywords$new()
kwds$addKeyword("keyword1")
kwds$addKeyword("keyword2")
```

```

kwds$setKeywordType("theme")
th <- ISOCitation$new()
th$setTitle("General")
th$addDate(d)
kwds$setThesaurusName(th)
md$addKeywords(kwds)

#adding extent
extent <- ISOExtent$new()
bbox <- ISOGeographicBoundingBox$new(minx = -180, miny = -90, maxx = 180, maxy = 90)
extent$addGeographicElement(bbox)
md$addExtent(extent)

#coupling type
#(here "tight" associated with a particular dataset "my-dataset-identifier")
#see ISOCouplingType$values(labels = T) for other values
md$setCouplingType("tight")
coupledDataset1 <- ISOCoupledResource$new()
coupledDataset1$setOperationName("Rscript")
coupledDataset1$setIdentifier("my-dataset-identifier")
coupledDataset2 <- ISOCoupledResource$new()
coupledDataset2$setOperationName("WPS:Execute")
coupledDataset2$setIdentifier("my-dataset-identifier")
md$addCoupledResource(coupledDataset1)
md$addCoupledResource(coupledDataset2)

#add operation metadata 1 (Rscript)
scriptOp <- ISOOperationMetadata$new()
scriptOp$setOperationName("Rscript")
scriptOp$addDCP("WebServices")
scriptOp$setOperationDescription("WPS Execute")
scriptOp$setInvocationName("identifier")
for(i in 1:3){
  param <- ISOSRVParameter$new()
  param$setName(sprintf("name%s",i), "xs:string")
  param$setDirection("in")
  param$setDescription(sprintf("description%s",i))
  param$setOptionality(FALSE)
  param$setRepeatability(FALSE)
  param$setValueType("xs:string")
  scriptOp$addParameter(param)
}
outParam <- ISOSRVParameter$new()
outParam$setName("outputname", "xs:string")
outParam$setDirection("out")
outParam$setDescription("outputdescription")
outParam$setOptionality(FALSE)
outParam$setRepeatability(FALSE)
outParam$setValueType("xs:string")
scriptOp$addParameter(outParam)
or <- ISOOnlineResource$new()
or$setLinkage("http://somelink/myrscript.R")
or$setName("R script name")

```

```

or$setDescription("R script description")
or$setProtocol("protocol")
scriptOp$addConnectPoint(or)
md$addOperationMetadata(scriptOp)
#add operation metadata 1 (WPS)
wpsOp <- ISOOperationMetadata$new()
wpsOp$setOperationName("WPS:Execute")
wpsOp$addDCP("WebServices")
wpsOp$setOperationDescription("WPS Execute")
invocationName <- "mywpsidentifier"
wpsOp$setInvocationName(invocationName)
for(i in 1:3){
  param <- ISOSRVParameter$new()
  param$setName(sprintf("name%s",i), "xs:string")
  param$setDirection("in")
  param$setDescription(sprintf("description%s",i))
  param$setOptionality(FALSE)
  param$setRepeatability(FALSE)
  param$setValueType("xs:string")
  wpsOp$addParameter(param)
}
outParam <- ISOSRVParameter$new()
outParam$setName("outputname", "xs:string")
outParam$setDirection("out")
outParam$setDescription("outputdescription")
outParam$setOptionality(FALSE)
outParam$setRepeatability(FALSE)
outParam$setValueType("xs:string")
wpsOp$addParameter(outParam)
or1 <- ISOOnlineResource$new()
or1$setLinkage(
  sprintf("http://somelink/wps?request=Execute&version=1.0.0&Identifier=%s",
    invocationName)
)
or1$setName("WPS process name")
or1$setDescription("WPS process description")
or1$setProtocol("protocol")
wpsOp$addConnectPoint(or1)
or2 <- ISOOnlineResource$new()
or2$setLinkage("http://somelink/myrscript.R")
or2$setName("Source R script name")
or2$setDescription("Source R script description")
or2$setProtocol("protocol")
wpsOp$addConnectPoint(or2)
md$addOperationMetadata(wpsOp)
xml <- md$encode()

```

Description

ISOSRVServiceIdentification19115_3
 ISOSRVServiceIdentification19115_3

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO SRV ServiceIdentification in ISO 19115-3

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOIdentification
-> geometa::ISOIdentification19115_3 -> geometa::ISOServiceIdentification19115_3 -
> ISOSRVServiceIdentification19115_3

```

Public fields

serviceType serviceType [1..1]: ISOGenericName
 serviceTypeVersion serviceTypeVersion [0..*]: character
 accessProperties accessProperties [0..1]: ISOStandardOrderProcess
 restrictions restrictions [0..1]: ISOConstraints
 keywords keywords [0..*]: ISOKeywords
 extent extent [0..*]: ISOExtent
 coupledResource coupledResource [0..*]: ISOCoupledResource
 couplingType couplingType [1..1]: ISOCouplingType
 containsOperations containsOperations [1..*]: ISOOperationMetadata
 operatesOn operatesOn [0..*]: ISODataIdentification

Methods**Public methods:**

- [ISOSRVServiceIdentification19115_3\\$new\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$setServiceType\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$addServiceTypeVersion\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$delServiceTypeVersion\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$setAccessProperties\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$setRestrictions\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$addKeywords\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$delKeywords\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$addExtent\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$delExtent\(\)](#)

- [ISOSRVServiceIdentification19115_3\\$addCoupledResource\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$delCoupledResource\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$setCouplingType\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$addOperationMetadata\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$delOperationMetadata\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$addOperatesOn\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$delOperatesOn\(\)](#)
- [ISOSRVServiceIdentification19115_3\\$clone\(\)](#)

Method new(): Initializes object

Usage:

`ISOSRVServiceIdentification19115_3$new(xml = NULL)`

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setServiceType(): Set service type

Usage:

`ISOSRVServiceIdentification19115_3$setServiceType(serviceType)`

Arguments:

serviceType object of class [ISOLocalName](#), [ISOScopedName](#) or [character](#)

Method addServiceTypeVersion(): Adds service type version

Usage:

`ISOSRVServiceIdentification19115_3$addServiceTypeVersion(version)`

Arguments:

version version

Returns: TRUE if added, FALSE otherwise

Method delServiceTypeVersion(): Deletes service type version

Usage:

`ISOSRVServiceIdentification19115_3$delServiceTypeVersion(version)`

Arguments:

version version

Returns: TRUE if deleted, FALSE otherwise

Method setAccessProperties(): Set access properties

Usage:

`ISOSRVServiceIdentification19115_3$setAccessProperties(accessProperties)`

Arguments:

accessProperties object of class [ISOStandardOrderProcess](#)

Method setRestrictions(): Set restrictions

Usage:

ISOSRVServiceIdentification19115_3\$setRestrictions(restrictions)

Arguments:

restrictions object of class [ISOConstraints](#)

Method addKeywords(): Adds keywords*Usage:*

ISOSRVServiceIdentification19115_3\$addKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if added, FALSE otherwise

Method delKeywords(): Deletes keywords*Usage:*

ISOSRVServiceIdentification19115_3\$delKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if deleted, FALSE otherwise

Method addExtent(): Adds extent*Usage:*

ISOSRVServiceIdentification19115_3\$addExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delExtent(): Deletes extent*Usage:*

ISOSRVServiceIdentification19115_3\$delExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addCoupledResource(): Adds coupled resource*Usage:*

ISOSRVServiceIdentification19115_3\$addCoupledResource(resource)

Arguments:

resource object of class [ISOCoupledResource](#)

Returns: TRUE if added, FALSE otherwise

Method delCoupledResource(): Deletes coupled resource

Usage:

ISOSRVServiceIdentification19115_3\$delCoupledResource(resource)

Arguments:

resource object of class [ISOCoupledResource](#)

Returns: TRUE if deleted, FALSE otherwise

Method setCouplingType(): Set coupling type

Usage:

ISOSRVServiceIdentification19115_3\$setCouplingType(couplingType)

Arguments:

couplingType object of class [ISOCouplingType](#) or any [character](#) among values returned by [ISOCouplingType\\$values\(\)](#)

Method addOperationMetadata(): Adds operation metadata

Usage:

ISOSRVServiceIdentification19115_3\$addOperationMetadata(operationMetadata)

Arguments:

operationMetadata object of class [ISOOperationMetadata](#)

Returns: TRUE if added, FALSE otherwise

Method delOperationMetadata(): Deletes operation metadata

Usage:

ISOSRVServiceIdentification19115_3\$delOperationMetadata(operationMetadata)

Arguments:

operationMetadata object of class [ISOOperationMetadata](#)

Returns: TRUE if deleted, FALSE otherwise

Method addOperatesOn(): Adds operates on

Usage:

ISOSRVServiceIdentification19115_3\$addOperatesOn(dataIdentification)

Arguments:

dataIdentification object of class [ISODataIdentification](#)

Returns: TRUE if added, FALSE otherwise

Method delOperatesOn(): Deletes operates on

Usage:

ISOSRVServiceIdentification19115_3\$delOperatesOn(dataIdentification)

Arguments:

dataIdentification object of class [ISODataIdentification](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOSRVServiceIdentification19115_3\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

 ISOSRVServiceIdentification19139

ISOSRVServiceIdentification19139

Description

ISOSRVServiceIdentification19139

ISOSRVServiceIdentification19139

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO SRV ServiceIdentification in ISO 19139

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOIdentification](#)
 -> [geometa::ISOIdentification19139](#) -> [geometa::ISOSRVServiceIdentification19139](#) -> ISOSRVServiceIdentification19139

Public fields

serviceType serviceType [1..1]: ISOGenericName
 serviceTypeVersion serviceTypeVersion [0..*]: character
 accessProperties accessProperties [0..1]: ISOStandardOrderProcess
 restrictions restrictions [0..1]: ISOConstraints
 keywords keywords [0..*]: ISOKeywords
 extent extent [0..*]: ISOExtent
 coupledResource coupledResource [0..*]: ISOCoupledResource
 couplingType couplingType [1..1]: ISOCouplingType
 containsOperations containsOperations [1..*]: ISOOperationMetadata
 operatesOn operatesOn [0..*]: ISODataIdentification

Methods

Public methods:

- [ISOSRVServiceIdentification19139\\$new\(\)](#)
- [ISOSRVServiceIdentification19139\\$setServiceType\(\)](#)
- [ISOSRVServiceIdentification19139\\$addServiceTypeVersion\(\)](#)
- [ISOSRVServiceIdentification19139\\$delServiceTypeVersion\(\)](#)
- [ISOSRVServiceIdentification19139\\$setAccessProperties\(\)](#)

- `ISOSRVServiceIdentification19139$setRestrictions()`
- `ISOSRVServiceIdentification19139$addKeywords()`
- `ISOSRVServiceIdentification19139$delKeywords()`
- `ISOSRVServiceIdentification19139$addExtent()`
- `ISOSRVServiceIdentification19139$delExtent()`
- `ISOSRVServiceIdentification19139$addCoupledResource()`
- `ISOSRVServiceIdentification19139$delCoupledResource()`
- `ISOSRVServiceIdentification19139$setCouplingType()`
- `ISOSRVServiceIdentification19139$addOperationMetadata()`
- `ISOSRVServiceIdentification19139$delOperationMetadata()`
- `ISOSRVServiceIdentification19139$addOperatesOn()`
- `ISOSRVServiceIdentification19139$delOperatesOn()`
- `ISOSRVServiceIdentification19139$clone()`

Method `new()`: Initializes object

Usage:

`ISOSRVServiceIdentification19139$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setServiceType()`: Set service type

Usage:

`ISOSRVServiceIdentification19139$setServiceType(serviceType)`

Arguments:

`serviceType` object of class [ISOLocalName](#), [ISOScopedName](#) or `character`

Method `addServiceTypeVersion()`: Adds service type version

Usage:

`ISOSRVServiceIdentification19139$addServiceTypeVersion(version)`

Arguments:

`version` `version`

Returns: TRUE if added, FALSE otherwise

Method `delServiceTypeVersion()`: Deletes service type version

Usage:

`ISOSRVServiceIdentification19139$delServiceTypeVersion(version)`

Arguments:

`version` `version`

Returns: TRUE if deleted, FALSE otherwise

Method `setAccessProperties()`: Set access properties

Usage:

ISOSRVServiceIdentification19139\$setAccessProperties(accessProperties)

Arguments:

accessProperties object of class [ISOStandardOrderProcess](#)

Method setRestrictions(): Set restrictions

Usage:

ISOSRVServiceIdentification19139\$setRestrictions(restrictions)

Arguments:

restrictions object of class [ISOConstraints](#)

Method addKeywords(): Adds keywords

Usage:

ISOSRVServiceIdentification19139\$addKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if added, FALSE otherwise

Method delKeywords(): Deletes keywords

Usage:

ISOSRVServiceIdentification19139\$delKeywords(keywords)

Arguments:

keywords object of class [ISOKeywords](#)

Returns: TRUE if deleted, FALSE otherwise

Method addExtent(): Adds extent

Usage:

ISOSRVServiceIdentification19139\$addExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if added, FALSE otherwise

Method delExtent(): Deletes extent

Usage:

ISOSRVServiceIdentification19139\$delExtent(extent)

Arguments:

extent object of class [ISOExtent](#)

Returns: TRUE if deleted, FALSE otherwise

Method addCoupledResource(): Adds coupled resource

Usage:

ISOSRVServiceIdentification19139\$addCoupledResource(resource)

Arguments:

resource object of class [ISOCoupledResource](#)

Returns: TRUE if added, FALSE otherwise

Method delCoupledResource(): Deletes coupled resource

Usage:

ISOSRVServiceIdentification19139\$delCoupledResource(resource)

Arguments:

resource object of class [ISOCoupledResource](#)

Returns: TRUE if deleted, FALSE otherwise

Method setCouplingType(): Set coupling type

Usage:

ISOSRVServiceIdentification19139\$setCouplingType(couplingType)

Arguments:

couplingType object of class [ISOCouplingType](#) or any [character](#) among values returned by [ISOCouplingType\\$values\(\)](#)

Method addOperationMetadata(): Adds operation metadata

Usage:

ISOSRVServiceIdentification19139\$addOperationMetadata(operationMetadata)

Arguments:

operationMetadata object of class [ISOOperationMetadata](#)

Returns: TRUE if added, FALSE otherwise

Method delOperationMetadata(): Deletes operation metadata

Usage:

ISOSRVServiceIdentification19139\$delOperationMetadata(operationMetadata)

Arguments:

operationMetadata object of class [ISOOperationMetadata](#)

Returns: TRUE if deleted, FALSE otherwise

Method addOperatesOn(): Adds operates on

Usage:

ISOSRVServiceIdentification19139\$addOperatesOn(dataIdentification)

Arguments:

dataIdentification object of class [ISODataIdentification](#)

Returns: TRUE if added, FALSE otherwise

Method delOperatesOn(): Deletes operates on

Usage:

ISOSRVServiceIdentification19139\$delOperatesOn(dataIdentification)

Arguments:

dataIdentification object of class [ISODataIdentification](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOSRVServiceIdentification19139$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

ISOStandaloneQualityReportInformation

ISOStandaloneQualityReportInformation

Description

ISOStandaloneQualityReportInformation

ISOStandaloneQualityReportInformation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO standalone quality report information

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOStandaloneQualityReportInformation

Public fields

reportReference reportReference [1]: ISOCitation

abstract abstract [1]: character

elementReport elementReport [0..*]: ISODataQualityAbstractElement

Methods**Public methods:**

- [ISOStandaloneQualityReportInformation\\$new\(\)](#)
- [ISOStandaloneQualityReportInformation\\$setReportReference\(\)](#)
- [ISOStandaloneQualityReportInformation\\$setAbstract\(\)](#)
- [ISOStandaloneQualityReportInformation\\$addElementReport\(\)](#)

- [ISOStandaloneQualityReportInformation\\$delElementReport\(\)](#)
- [ISOStandaloneQualityReportInformation\\$clone\(\)](#)

Method new(): Initializes object

Usage:

ISOStandaloneQualityReportInformation\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method setReportReference(): set Report reference

Usage:

ISOStandaloneQualityReportInformation\$setReportReference(reportReference)

Arguments:

reportReference object of class [ISOCitation](#)

Method setAbstract(): Set abstract

Usage:

ISOStandaloneQualityReportInformation\$setAbstract(abstract, locales = NULL)

Arguments:

abstract abstract

locales list of localized abstract Default is NULL

Method addElementReport(): Adds element report

Usage:

ISOStandaloneQualityReportInformation\$addElementReport(elementReport)

Arguments:

elementReport object of class [ISODataQualityAbstractElement](#) ' @return TRUE if added, FALSE otherwise

Method delElementReport(): Deletes element report

Usage:

ISOStandaloneQualityReportInformation\$delElementReport(elementReport)

Arguments:

elementReport object of class [ISODataQualityAbstractElement](#) ' @return TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOStandaloneQualityReportInformation\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_StandaloneQualityReportInf

ISOStandardOrderProcess

ISOStandardOrderProcess

Description

ISOStandardOrderProcess

ISOStandardOrderProcess

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO StandardOrderProcess

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOStandardOrderProcess

Public fields

fees fees [0..1]: character

plannedAvailableDateTime plannedAvailableDateTime [0..1]: 'POSIXct/POSIXlt'

orderingInstructions orderingInstructions [0..1]: character

turnaround turnaround [0..1]: character

orderOptionsType orderOptionsType [0..1]: ISORecordType (=> ISO 19115-3)

orderOptions orderOptions [0..1]: ISORecord (=> ISO 19115-3)

Methods**Public methods:**

- [ISOStandardOrderProcess\\$new\(\)](#)
- [ISOStandardOrderProcess\\$setFees\(\)](#)
- [ISOStandardOrderProcess\\$setPlannedAvailableDateTime\(\)](#)
- [ISOStandardOrderProcess\\$setOrderingInstructions\(\)](#)
- [ISOStandardOrderProcess\\$setTurnaround\(\)](#)

- [ISOStandardOrderProcess\\$setOrderOptionsType\(\)](#)
- [ISOStandardOrderProcess\\$setOrderOptions\(\)](#)
- [ISOStandardOrderProcess\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOStandardOrderProcess$new(xml = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `setFees()`: Set fees

Usage:

```
ISOStandardOrderProcess$setFees(fees, locales = NULL)
```

Arguments:

`fees` fees

`locales` list of localized texts. Default is NULL

Method `setPlannedAvailableDateTime()`: Set planned available date time

Usage:

```
ISOStandardOrderProcess$setPlannedAvailableDateTime(dateTime)
```

Arguments:

`dateTime` object of class [POSIXct](#)

Method `setOrderingInstructions()`: Set ordering instructions

Usage:

```
ISOStandardOrderProcess$setOrderingInstructions(instructions, locales = NULL)
```

Arguments:

`instructions` instructions

`locales` list of localized texts. Default is NULL

Method `setTurnaround()`: Set turnaround

Usage:

```
ISOStandardOrderProcess$setTurnaround(turnaround, locales = NULL)
```

Arguments:

`turnaround` turnaround

`locales` list of localized texts. Default is NULL

Method `setOrderOptionsType()`: Set order options type

Usage:

```
ISOStandardOrderProcess$setOrderOptionsType(orderOptionsType)
```

Arguments:

`orderOptionsType` `orderOptionsType` object of class [ISORecordType](#) or [character](#)

Method setOrderOptions(): Set order options

Usage:

```
ISOStandardOrderProcess$setOrderOptions(orderOptions)
```

Arguments:

orderOptions orderOptions object of class [ISORecord](#) or [character](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOStandardOrderProcess$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_StandardOrderProcess
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mrd/1.0/mrd/#element_MD_StandardOrderProcess

Examples

```
md <- ISOStandardOrderProcess$new()
md$setFees("fees")
md$setPlannedAvailableDateTime(ISOdate(2017,7,5,12,0,0))
md$setOrderingInstructions("instructions")
md$setTurnaround("turnaround")
xml <- md$encode()
```

ISOStatus

ISOStatus

Description

ISOStatus

ISOStatus

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO progress status

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue  
-> geometa::ISOProgress -> ISOStatus
```

Methods**Public methods:**

- [ISOStatus\\$new\(\)](#)
- [ISOStatus\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOStatus$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOStatus$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Note

deprecated - use [ISOProgress](#) instead

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_ProgressCode

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_MD_ProgressCode

Examples

```
#possible values  
values <- ISOStatus$values(labels = TRUE)  
  
#pending status  
pending <- ISOStatus$new(value = "pending")
```

ISOStereoMate

ISOStereoMate

Description

ISOStereoMate

ISOStereoMate

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISOStereoMate**Super classes**[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractAggregate](#)
-> ISOStereoMate**Methods****Public methods:**

- [ISOStereoMate\\$new\(\)](#)
- [ISOStereoMate\\$clone\(\)](#)

Method `new()`: Initialize object*Usage:*`ISOStereoMate$new(xml = NULL)`*Arguments:*`xml` object of class [XMLInternalNode-class](#)**Method** `clone()`: The objects of this class are cloneable with this method.*Usage:*`ISOStereoMate$clone(deep = FALSE)`*Arguments:*`deep` Whether to make a deep clone.**Author(s)**Emmanuel Blondel <emmanuel.blondel1@gmail.com>**References**

ISO 19115:2003 - Geographic information – Metadata

ISOTelephone

ISOTelephone

Description

ISOTelephone

ISOTelephone

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Telephone

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOTelephone

Public fields

voice voice

facsimile facsimile

number number

numberType numberType

Methods

Public methods:

- [ISOTelephone\\$new\(\)](#)
- [ISOTelephone\\$setVoice\(\)](#)
- [ISOTelephone\\$setFacsimile\(\)](#)
- [ISOTelephone\\$setNumber\(\)](#)
- [ISOTelephone\\$setNumberType\(\)](#)
- [ISOTelephone\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOTelephone\\$new](#)(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [setVoice\(\)](#): Set voice

Usage:

```
ISOTelephone$setVoice(voice, locales = NULL)
```

Arguments:

voice voice

locales list of localized voices. Default is NULL

Method setFacsimile(): Set facsimile*Usage:*

```
ISOTelephone$setFacsimile(facsimile, locales = NULL)
```

Arguments:

facsimile facsimile

locales list of localized facsimiles. Default is NULL

Method setNumber(): Set number*Usage:*

```
ISOTelephone$setNumber(number, locales = NULL)
```

Arguments:

number number

locales list of localized numbers Default is NULL

Method setNumberType(): Set numberType*Usage:*

```
ISOTelephone$setNumberType(numberType)
```

Arguments:

numberType numberType object of class [ISOTelephoneType](#) or any [character](#) among values returned by [ISOTelephoneType\\$values\(\)](#)

Method clone(): The objects of this class are cloneable with this method.*Usage:*

```
ISOTelephone$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_Telephone

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_Telephone

Examples

```
md <- ISOTelephone$new()
md$setVoice("myphonenumber")
md$setFacsimile("myfacsimile")
xml <- md$encode()
```

ISOTelephoneType	<i>ISOTelephoneType</i>
------------------	-------------------------

Description

ISOTelephoneType
ISOTelephoneType

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO TelephoneType

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOTelephoneType

Methods**Public methods:**

- [ISOTelephoneType\\$new\(\)](#)
- [ISOTelephoneType\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOTelephoneType$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOTelephoneType$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_CI_TelephoneTypeCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/cit/2.0/cit/#element_CI_TelephoneTypeCode

Examples

```
## Not run:
setMetadataStandard("19115-3")
#possible values
values <- ISOTelephoneType$values(labels = TRUE)

voice <- ISOTelephoneType$new(value = "voice")
setMetadataStandard("19139")

## End(Not run)
```

ISOTemporalConsistency

ISOTemporalConsistency

Description

ISOTemporalConsistency

ISOTemporalConsistency

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOTemporalConsistency

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractTemporalAccuracy
-> ISOTemporalConsistency
```


Methods**Public methods:**

- [ISOTemporalConsistency\\$clone\(\)](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOTemporalConsistency$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_TemporalConsistency
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_TemporalConsistency

Examples

```
#encoding
dq <- ISOTemporalConsistency$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()
```

ISOTemporalExtent *ISOTemporalExtent*

Description

ISOTemporalExtent

ISOTemporalExtent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO TemporalExtent

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOTemporalExtent

Public fields

extent extent

Methods**Public methods:**

- [ISOTemporalExtent\\$new\(\)](#)
- [ISOTemporalExtent\\$setTimeInstant\(\)](#)
- [ISOTemporalExtent\\$setTimePeriod\(\)](#)
- [ISOTemporalExtent\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOTemporalExtent\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [setTimeInstant\(\)](#): Set time instant

Usage:

[ISOTemporalExtent\\$setTimeInstant\(timeInstant\)](#)

Arguments:

timeInstant object of class [GMLTimeInstant](#)

Method [setTimePeriod\(\)](#): Set time period

Usage:

```
ISOTemporalExtent$setTimePeriod(timePeriod)
```

Arguments:

timePeriod object of class [GMLTimePeriod](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOTemporalExtent$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_EX_TemporalExtent
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gex/1.0/gex/#element_EX_TemporalExtent

Examples

```
te <- ISOTemporalExtent$new()
start <- ISOdate(2000, 1, 12, 12, 59, 45)
end <- ISOdate(2010, 8, 22, 13, 12, 43)
tp <- GMLTimePeriod$new(beginPosition = start, endPosition = end)
te$setTimePeriod(tp)
```

ISOTemporalValidity *ISOTemporalValidity*

Description

ISOTemporalValidity

ISOTemporalValidity

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOTemporalValidity

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractTemporalAccuracy
-> ISOTemporalValidity

```

Methods**Public methods:**

- `ISOTemporalValidity$clone()`

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOTemporalValidity$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_TemporalValidity
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_TemporalValidity

Examples

```

#encoding
dq <- ISOTemporalValidity$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)

```

```
xml <- dq$encode()
```

```
ISOThematicClassificationCorrectness
  ISOThematicClassificationCorrectness
```

Description

ISOThematicClassificationCorrectness
 ISOThematicClassificationCorrectness

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOThematicClassificationCorrectness

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractTemporalAccuracy
-> ISOThematicClassificationCorrectness
```

Methods

Public methods:

- [ISOThematicClassificationCorrectness\\$clone\(\)](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOThematicClassificationCorrectness$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_ThematicClassificationCorrec
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_ThematicClassificationCorre

Examples

```

#encoding
dq <- ISOThematicClassificationCorrectness$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()

```

ISOTopicCategory

ISOTopicCategory

Description

ISOTopicCategory

ISOTopicCategory

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO TopicCategory

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOCodelistValue](#)
-> ISOTopicCategory

Methods

Public methods:

- [ISOTopicCategory\\$new\(\)](#)
- [ISOTopicCategory\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOTopicCategory$new(xml = NULL, value, description = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#)

`value` value

`description` description

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOTopicCategory$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_TopicCategoryCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_TopicCategoryCode

Examples

```
#possible values
values <- ISOTopicCategory$values(labels = TRUE)

#biota topic
biota <- ISOTopicCategory$new(value = "biota")
```

ISOTopologicalConsistency
ISOTopologicalConsistency

Description

ISOTopologicalConsistency

ISOTopologicalConsistency

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOTopologicalConsistency

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement  
-> geometa::ISODataQualityAbstractElement -> geometa::ISOAbstractLogicalConsistency  
-> ISOTopologicalConsistency
```

Methods

Public methods:

- [ISOTopologicalConsistency\\$clone\(\)](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOTopologicalConsistency$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_TopologicalConsistency
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_TopologicalConsistency

Examples

```

#encoding
dq <- ISOTopologicalConsistency$new()
dq$addNameOfMeasure("measure")
metaId <- ISOMetaIdentifier$new(code = "measure-id")
dq$setMeasureIdentification(metaId)
dq$setMeasureDescription("description")
dq$setEvaluationMethodDescription("method description")
dq$setEvaluationMethodType("indirect")
dq$setDateTime(ISOdate(2015,1,1,12,10,49))
spec <- ISOCitation$new()
spec$setTitle("specification title")
spec$addAlternateTitle("specification alternate title")
d <- ISODate$new()
d$setDate(ISOdate(2015, 1, 1, 1))
d$setDateType("publication")
spec$addDate(d)
dq$setEvaluationProcedure(spec)
result <- ISOConformanceResult$new()
result$setSpecification(spec)
result$setExplanation("some explanation about the conformance")
result$setPass(TRUE)
dq$addResult(result)
xml <- dq$encode()

```

ISOTopologyLevel

*ISOTopologyLevel***Description**

ISOTopologyLevel

ISOTopologyLevel

Format[R6Class](#) object.**Value**Object of [R6Class](#) for modelling an ISO TopologyLevel**Super classes**

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOCodeListValue
-> ISOTopologyLevel

```

Methods

Public methods:

- [ISOTopologyLevel\\$new\(\)](#)
- [ISOTopologyLevel\\$clone\(\)](#)

Method new(): Initializes object

Usage:

```
ISOTopologyLevel$new(xml = NULL, value, description = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

description description

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOTopologyLevel$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_TopologyLevelCode
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_TopologyLevelCode

Examples

```
#possible values
values <- ISOTopologyLevel$values(labels = TRUE)

#geomOnly
geomOnly <- ISOTopologyLevel$new(value = "geometryOnly")
```

ISOTypeName

ISOTypeName

Description

ISOTypeName

ISOTypeName

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOTypeName

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOTypeName

Public fields

aName aName: character

Methods

Public methods:

- [ISOTypeName\\$new\(\)](#)
- [ISOTypeName\\$setName\(\)](#)
- [ISOTypeName\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

```
ISOTypeName$new(xml = NULL, aName = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

aName name

Method [setName\(\)](#): Set name

Usage:

```
ISOTypeName$setName(aName, locales = NULL)
```

Arguments:

aName name

locales list of localized names. Default is NULL

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOTypeName$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_TypeName
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_TypeName

Examples

```
typeName <- ISOTypeName$new(aName = "name")
xml <- typeName$encode()
```

ISOUnlimitedInteger *ISOUnlimitedInteger*

Description

ISOUnlimitedInteger

ISOUnlimitedInteger

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO UnlimitedInteger

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOUnlimitedInteger

Public fields

value value

attrs attrs

Methods**Public methods:**

- [ISOUnlimitedInteger\\$new\(\)](#)
- [ISOUnlimitedInteger\\$clone\(\)](#)

Method `new()`: Initialize object

Usage:

```
ISOUnlimitedInteger$new(xml = NULL, value)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
ISOUnlimitedInteger$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gco/1.0/gco/#element_UnlimitedInteger

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_UnlimitedInteger

ISOUomIdentifier

ISOUomIdentifier

Description

ISOUomIdentifier

ISOUomIdentifier

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Uom Identifier

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOUomIdentifier

Public fields

value value

Methods**Public methods:**

- [ISOUomIdentifier\\$new\(\)](#)
- [ISOUomIdentifier\\$clone\(\)](#)

Method `new()`: Initializes a Uom identifier

Usage:

`ISOUomIdentifier$new(xml = NULL, value)`

Arguments:

xml object of class [XMLInternalNode-class](#)

value value

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOUomIdentifier$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gco/1.0/gco/#element_UomIdentifier

ISOURI

ISOURI

Description

ISOURI

ISOURI

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO URI

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOURI

Methods

Public methods:

- [ISOURI\\$new\(\)](#)
- [ISOURI\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

`ISOURI$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#)

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`ISOURI$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mcc/1.0/mcc/#element_URI

 ISOURL

 ISOURL

Description

ISOURL

ISOURL

Format

R6Class object.

Value

Object of R6Class for modelling an ISOURL

Super classes

geometa::geometaLogger -> geometa::ISOAbstractObject -> ISOURL

Public fields

value value

Methods**Public methods:**

- ISOURL\$new()
- ISOURL\$setUrl()
- ISOURL\$clone()

Method new(): Initializes object*Usage:*

ISOURL\$new(xml = NULL, value = NULL)

Arguments:

xml object of class XMLInternalNode-class

value value

Method setUrl(): Set URL*Usage:*

ISOURL\$setUrl(url)

Arguments:

url url

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOURL$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO 19115:2003 - Geographic information – Metadata

ISOUsabilityElement *ISOUsabilityElement*

Description

ISOUsabilityElement

ISOUsabilityElement

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISOUsabilityElement

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::ISOAbstractQualityElement  
-> geometa::ISODataQualityAbstractElement -> ISOUsabilityElement
```

Methods**Public methods:**

- [ISOUsabilityElement\\$new\(\)](#)
- [ISOUsabilityElement\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

ISOUsabilityElement\$new(xml = NULL)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOUsabilityElement\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_DQ_UsabilityElement
- ISO 19115-3 https://schemas.isotc211.org/19157/-/mdq/1.2/mdq/#element_DQ_UsabilityElement

ISOUsage

ISOUsage

Description

ISOUsage

ISOUsage

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO Usage

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOUsage

Public fields

specificUsage specificUsage

usageDateTime usageDateTime

userDeterminedLimitations userDeterminedLimitations

userContactInfo userContactInfo

Methods**Public methods:**

- [ISOUsage\\$new\(\)](#)
- [ISOUsage\\$setSpecificUsage\(\)](#)
- [ISOUsage\\$setUsageDateTime\(\)](#)
- [ISOUsage\\$setUserDeterminedLimitations\(\)](#)
- [ISOUsage\\$addUserContact\(\)](#)
- [ISOUsage\\$delUserContact\(\)](#)
- [ISOUsage\\$clone\(\)](#)

Method `new()`: Initializes object

Usage:

```
ISOUsage$new(xml = NULL)
```

Arguments:

xml object of class [XMLInternalNode-class](#)

Method `setSpecificUsage()`: Set specificUsage

Usage:

```
ISOUsage$setSpecificUsage(specificUsage, locales = NULL)
```

Arguments:

specificUsage specific usage

locales list of localized texts. Default is NULL

Method `setUsageDateTime()`: Set usage date time

Usage:

```
ISOUsage$setUsageDateTime(usageDateTime)
```

Arguments:

usageDateTime object of class [POSIXct](#)

Method `setUserDeterminedLimitations()`: Set user determined limitations

Usage:

```
ISOUsage$setUserDeterminedLimitations(  
  userDeterminedLimitations,  
  locales = NULL  
)
```

Arguments:

userDeterminedLimitations user determined limitations

locales list of localized texts. Default is NULL

Method `addUserContact()`: Adds user contact

Usage:

```
ISOUsage$addUserContact(contact)
```

Arguments:

contact object of class [ISOResponsibleParty](#) (in ISO 19139) or [ISOAbstractResponsibility](#) (in ISO 19115-3)

Returns: TRUE if added, FALSE otherwise

Method delUserContact(): Deletes user contact

Usage:

ISOUsage\$delUserContact(contact)

Arguments:

contact object of class [ISOResponsibleParty](#) (in ISO 19139) or [ISOAbstractResponsibility](#) (in ISO 19115-3)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

ISOUsage\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_Usage
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/mri/1.0/mri/#element_MD_Usage

ISOVectorSpatialRepresentation

ISOVectorSpatialRepresentation

Description

ISOVectorSpatialRepresentation

ISOVectorSpatialRepresentation

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO VectorSpatialRepresentation

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::ISOAbstractSpatialRepresentation](#)
 -> [geometa::ISOSpatialRepresentation](#) -> [ISOVectorSpatialRepresentation](#)

Public fields

topologyLevel topologyLevel [0..1]: [ISOTopologyLevel](#)
 geometricObjects geometricObjects [0..*]: [ISOGeometricObjects](#)

Methods**Public methods:**

- [ISOVectorSpatialRepresentation\\$new\(\)](#)
- [ISOVectorSpatialRepresentation\\$setTopologyLevel\(\)](#)
- [ISOVectorSpatialRepresentation\\$addGeometricObjects\(\)](#)
- [ISOVectorSpatialRepresentation\\$setGeometricObjects\(\)](#)
- [ISOVectorSpatialRepresentation\\$delGeometricObjects\(\)](#)
- [ISOVectorSpatialRepresentation\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOVectorSpatialRepresentation\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [setTopologyLevel\(\)](#): Set topology level

Usage:

[ISOVectorSpatialRepresentation\\$setTopologyLevel\(topologyLevel\)](#)

Arguments:

topologyLevel object of class [ISOTopologyLevel](#) or **character** among values returned by [ISOTopologyLevel\\$values\(\)](#)

Method [addGeometricObjects\(\)](#): Adds geometric objects

Usage:

[ISOVectorSpatialRepresentation\\$addGeometricObjects\(geometricObjects\)](#)

Arguments:

geometricObjects geometric objects, object of [ISOGeometricObjects](#)

Returns: TRUE if added, FALSE otherwise

Method [setGeometricObjects\(\)](#): Set geometric objects

Usage:

[ISOVectorSpatialRepresentation\\$setGeometricObjects\(geometricObjects\)](#)

Arguments:

geometricObjects geometric objects, object of [ISOGeometricObjects](#)

Returns: TRUE if set, FALSE otherwise

Method delGeometricObjects(): Deletes geometric objects

Usage:

```
ISOVectorSpatialRepresentation$delGeometricObjects(geometricObjects)
```

Arguments:

geometricObjects geometric objects, object of [ISOGeometricObjects](#)

Returns: TRUE if deleted, FALSE otherwise

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOVectorSpatialRepresentation$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_MD_VectorSpatialRepresentation
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/msr/1.0/msr/#element_MD_VectorSpatialRepresentation

Examples

```
md <- ISOVectorSpatialRepresentation$new()
md$setTopologyLevel("geometryOnly")
geomObject1 <- ISOGeometricObjects$new()
geomObject1$setGeometricObjectType("surface")
geomObject1$setGeometricObjectCount(5L)
md$addGeometricObjects(geomObject1)
xml <- md$encode()
```

ISOVerticalExtent

ISOVerticalExtent

Description

ISOVerticalExtent

ISOVerticalExtent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ISO VerticalExtent

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> ISOVerticalExtent

Public fields

minimumValue minimumValue [1..1]: numeric
maximumValue maximumValue [1..1]: numeric
unitOfMeasure unitOfMeasure [1..1]: character
verticalCRS verticalCRS [1..1]: GMLVerticalCRS

Methods**Public methods:**

- [ISOVerticalExtent\\$new\(\)](#)
- [ISOVerticalExtent\\$setMinimumValue\(\)](#)
- [ISOVerticalExtent\\$setMaximumValue\(\)](#)
- [ISOVerticalExtent\\$setUnitOfMeasure\(\)](#)
- [ISOVerticalExtent\\$setVerticalCRS\(\)](#)
- [ISOVerticalExtent\\$clone\(\)](#)

Method [new\(\)](#): Initializes object

Usage:

[ISOVerticalExtent\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#)

Method [setMinimumValue\(\)](#): Set minimum value

Usage:

[ISOVerticalExtent\\$setMinimumValue\(minimumValue\)](#)

Arguments:

minimumValue minimum value

Method [setMaximumValue\(\)](#): Set maximum value

Usage:

[ISOVerticalExtent\\$setMaximumValue\(maximumValue\)](#)

Arguments:

maximumValue maximum value

Method [setUnitOfMeasure\(\)](#): Set unit of measure

Usage:

```
ISOVerticalExtent$setUnitOfMeasure(uom)
```

Arguments:

```
uom uom
```

Method setVerticalCRS(): Set vertical CRS

Usage:

```
ISOVerticalExtent$setVerticalCRS(verticalCRS)
```

Arguments:

```
verticalCRS verticalCRS
```

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
ISOVerticalExtent$clone(deep = FALSE)
```

Arguments:

```
deep Whether to make a deep clone.
```

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

- ISO 19139 https://schemas.isotc211.org/19139/-/gmd/1.0/gmd/#element_EX_VerticalExtent
- ISO 19115-3 https://schemas.isotc211.org/19115/-3/gex/1.0/gex/#element_EX_VerticalExtent

Examples

```
ve <- ISOVerticalExtent$new()
ve$setMinimumValue(0)
ve$setMaximumValue(19)
xml <- ve$encode()
```

pivot_converter

pivot_converter

Description

pivot_converter

pivot_converter

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a mapping format converter

Public fields

from from

to to

Methods**Public methods:**

- [pivot_converter\\$new\(\)](#)
- [pivot_converter\\$clone\(\)](#)

Method new(): Initializes pivot converter

Usage:

```
pivot_converter$new(from, to)
```

Arguments:

from from

to to

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
pivot_converter$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

pivot_format

pivot_format

Description

pivot_format

pivot_format

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a mapping format

Public fields

id id

pkg pkg

reader reader

checker checker

constructor constructor

Methods**Public methods:**

- [pivot_format\\$new\(\)](#)
- [pivot_format\\$clone\(\)](#)

Method new(): Initializes pivot format. Method is used to instantiate a pivot_format, given a unique id, the name of package used (for information only). A format is then defined by string expressions (using `sprintf` formatting) to read metadata properties (reader), one for checking existence of properties (checker), and an expression to create metadata objects (constructor). In case the constructor is `NULL`, then no conversion to this metadata format will be possible.

Usage:

```
pivot_format$new(id, pkg, reader = NULL, checker = NULL, constructor = NULL)
```

Arguments:

id id

pkg pkg

reader reader

checker checker

constructor constructor

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
pivot_format$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

Examples

```
#example on how geometa format is defined as pivot format
pivot_format$new(
  id = "geometa", pkg = "geometa",
  reader = "%s[[%s]]", checker = "!is.null(%s[[%s]])",
  constructor = "ISOMetadata$new"
)
```

readISO

readISO

Description

readISO is a function to read a ISO metadata from a file or url into an object in the **geometa** model.

Usage

```
readISO(file, url, raw)
```

Arguments

file	a valid file path, as object of class character
url	a valid URL, as object of class character
raw	indicates if the function should return the raw XML. By default this is set to FALSE and the function will try to map the xml data to the geometa data model.

Value

a **geometa** object inheriting ISOAbstractObject

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

```
mdfile <- system.file("extdata/examples", "metadata.xml", package = "geometa")
md <- readISO(mdfile)
```

readISO19139	<i>readISO19139</i>
--------------	---------------------

Description

readISO19139 is a function to read a ISO 19139 from a file or url into an object in the **geometa** model.

Usage

```
readISO19139(file, url, raw)
```

Arguments

file	a valid file path, as object of class character
url	a valid URL, as object of class character
raw	indicates if the function should return the raw XML. By default this is set to FALSE and the function will try to map the xml data to the geometa data model.

Value

a **geometa** object inheriting ISOAbstractObject

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

```
mdfile <- system.file("extdata/examples", "metadata.xml", package = "geometa")
md <- readISO19139(mdfile)
```

registerISOCodelist	<i>registerISOCodelist</i>
---------------------	----------------------------

Description

registerISOCodelist allows to register a new codelist registered in **geometa**

Usage

```
registerISOCodelist(refFile, id, version, force)
```

Arguments

refFile	ISO XML file handling the ISO codelist
id	identifier of the ISO codelist
version	the version of the metadata standard
force	logical parameter indicating if registration has be to be forced in case the identified codelist is already registered

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

```
registerISOCodelist(  
  refFile = "http://www.isotc211.org/2005/resources/Codelist/ML_gmxCodelists.xml",  
  id = "LanguageCode",  
  version = "19139",  
  force = TRUE  
)
```

registerISOMetadataNamespace
registerISOMetadataNamespace

Description

registerISOMetadataNamespace allows to register a new namespace in **geometa**

Usage

```
registerISOMetadataNamespace(id, uri, force)
```

Arguments

id	prefix of the namespace
uri	URI of the namespace
force	logical parameter indicating if registration has be to be forced in case the identified namespace is already registered

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

```
registerISOMetadataNamespace(id = "myprefix", uri = "http://someuri")
```

registerISOMetadataSchema
registerISOMetadataSchema

Description

registerISOMetadataSchema allows to register a new schema in **geometa**

Usage

```
registerISOMetadataSchema(version, xsdFile)
```

Arguments

version	the schema version
xsdFile	the schema XSD file

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

```
registerISOMetadataSchema(version = "19139", xsdFile = "http://www.isotc211.org/2005/gmd/gmd.xsd")
```

registerMappingFormat *registerMappingFormat*

Description

registerMappingFormat allows to register a new mapping format in **geometa**

Usage

```
registerMappingFormat(mapping_format)
```

Arguments

mapping_format object of class pivot_format

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

registerMappings	<i>registerMappings</i>
------------------	-------------------------

Description

MappingFile allows to register in **geometa** a data.frame containing mappings rules to convert from/to other metadata formats (currently EML/emld objects and NetCDF-CF/ncdf4 objects)

Usage

```
registerMappings(x)
```

Arguments

x a data.frame containing the metadata mapping rules

setGeometaOption	<i>setGeometaOption</i>
------------------	-------------------------

Description

setGeometaOption allows to set an option from **geometa**

Usage

```
setGeometaOption(option, value)
```

Arguments

option the name of the option
value the value to set for the option

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

```
setGeometaOption("schemaBaseUrl", "http://somealternativeurl")
```

setIANAMimeTypes	<i>setIANAMimeTypes</i>
------------------	-------------------------

Description

setIANAMimeTypes

Usage

setIANAMimeTypes()

setISOCodelists	<i>setISOCodelists</i>
-----------------	------------------------

Description

setISOCodelists allows to set the list of ISO codelists registered in **geometa**

Usage

setISOCodelists(version)

Arguments

version	the version of the metadata standard
---------	--------------------------------------

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

```
setISOCodelists(version = "19139")
```

setISOMetadataNamespaces
setISOMetadataNamespaces

Description

setISOMetadataNamespaces sets the default list of namespaces

Usage

setISOMetadataNamespaces(version)

Arguments

version the standard version

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

getISOMetadataNamespaces()

setISOMetadataSchemas *setISOMetadataSchemas*

Description

setISOMetadataSchemas register the schemas in **geometa**

Usage

setISOMetadataSchemas(version)

Arguments

version the schema version

Examples

setISOMetadataSchemas(version = "19139")

setMappingFormats	<i>setMappingFormats</i>
-------------------	--------------------------

Description

setMappingFormats

Usage

setMappingFormats()

setMetadataStandard	<i>setMetadataStandard</i>
---------------------	----------------------------

Description

setMetadataStandard allows to set the standard to use for encoding/decoding in **geometa**. By default the standard "19139" will be used. Possible alternative value "19115-3"

Usage

setMetadataStandard(version)

Arguments

version	the standard version
---------	----------------------

Author(s)

Emmanuel Blondel, <emmanuel.blondel1@gmail.com>

Examples

```
setMetadataStandard(version = "19139")
```

SWEAbstractDataComponent
SWEAbstractDataComponent

Description

SWEAbstractDataComponent
SWEAbstractDataComponent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE Abstract data component

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
-> [geometa::SWEAbstractSWE](#) -> [geometa::SWEAbstractSWEIdentifiable](#) -> SWEAbstractDataComponent

Public fields

name name

Methods

Public methods:

- [SWEAbstractDataComponent\\$new\(\)](#)
- [SWEAbstractDataComponent\\$addName\(\)](#)
- [SWEAbstractDataComponent\\$delName\(\)](#)
- [SWEAbstractDataComponent\\$clone\(\)](#)

Method [new\(\)](#): Initializes an object of class [SWEAbstractDataComponent](#)

Usage:

```
SWEAbstractDataComponent$new(  
  xml = NULL,  
  element = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)

element element
updatable updatable
optional optional
definition definition

Method addName(): Adds name

Usage:

SWEAbstractDataComponent\$addName(name, codeSpace = NULL)

Arguments:

name name
codeSpace codespace

Method delName(): Deletes name

Usage:

SWEAbstractDataComponent\$delName(name, codeSpace = NULL)

Arguments:

name name
codeSpace codespace

Method clone(): The objects of this class are cloneable with this method.

Usage:

SWEAbstractDataComponent\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWEAbstractEncoding *SWEAbstractEncoding*

Description

SWEAbstractEncoding

SWEAbstractEncoding

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE abstract encoding object

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
-> [geometa::SWEAbstractSWE](#) -> SWEAbstractEncoding

Methods**Public methods:**

- [SWEAbstractEncoding\\$new\(\)](#)
- [SWEAbstractEncoding\\$clone\(\)](#)

Method `new()`: Initializes a SWE Nil Values object

Usage:

`SWEAbstractEncoding$new(xml = NULL)`

Arguments:

`xml` object of class [XMLInternalNode-class](#) from **XML**

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

`SWEAbstractEncoding$clone(deep = FALSE)`

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWEAbstractObject *SWEAbstractObject*

Description

SWEAbstractObject

SWEAbstractObject

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE abstract object

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> SWEAbstractObject

Methods

Public methods:

- [SWEAbstractObject\\$new\(\)](#)
- [SWEAbstractObject\\$clone\(\)](#)

Method `new()`: Initializes an object of class [SWEAbstractObject](#)

Usage:

```
SWEAbstractObject$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  wrap = TRUE,
  value_as_field = FALSE
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)
 element element
 attrs attrs
 defaults defaults
 wrap wrap
 value_as_field whether value should be set as field

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
SWEAbstractObject$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

```
SWEAbstractSimpleComponent  
  SWEAbstractSimpleComponent
```

Description

SWEAbstractSimpleComponent

SWEAbstractSimpleComponent

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE Abstract simple component

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::SWEAbstractObject  
-> geometa::SWEAbstractSWE -> geometa::SWEAbstractSWEIdentifiable -> geometa::SWEAbstractDataComponent  
-> SWEAbstractSimpleComponent
```

Public fields

nilValues nil values

Methods**Public methods:**

- [SWEAbstractSimpleComponent\\$new\(\)](#)
- [SWEAbstractSimpleComponent\\$setNilValues\(\)](#)
- [SWEAbstractSimpleComponent\\$clone\(\)](#)

Method `new()`: Initializes an object of class [SWEAbstractSimpleComponent](#)

Usage:

```
SWEAbstractSimpleComponent$new(  
  xml = NULL,  
  element = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**
element element
updatable updatable
optional optional
definition definition

Method `setNilValues()`: Set nil value and its reason (optional)

Usage:

```
SWEAbstractSimpleComponent$setNilValues(nilValue)
```

Arguments:

nilValue value to set as nil Value. object of class numeric

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
SWEAbstractSimpleComponent$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWEAbstractSWE	<i>SWEAbstractSWE</i>
----------------	-----------------------

Description

SWEAbstractSWE

SWEAbstractSWE

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE abstract SWE object

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
-> SWEAbstractSWE

Methods

Public methods:

- [SWEAbstractSWE\\$new\(\)](#)
- [SWEAbstractSWE\\$clone\(\)](#)

Method [new\(\)](#): Initializes an object of class [SWEAbstractSWE](#)

Usage:

```
SWEAbstractSWE$new(  
  xml = NULL,  
  element = NULL,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE,  
  value_as_field = FALSE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**
element element
attrs attrs
defaults defaults
wrap wrap
value_as_field whether value should be set as field

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
SWEAbstractSWE$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

SWEAbstractSWEIdentifiable

SWEAbstractSWEIdentifiable

Description

SWEAbstractSWEIdentifiable

SWEAbstractSWEIdentifiable

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE abstract identifiable

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::SWEAbstractObject  
-> geometa::SWEAbstractSWE -> SWEAbstractSWEIdentifiable
```

Public fields

identifier identifier

label label

description description

Methods**Public methods:**

- [SWEAbstractSWEIdentifiable\\$new\(\)](#)
- [SWEAbstractSWEIdentifiable\\$setIdentifier\(\)](#)
- [SWEAbstractSWEIdentifiable\\$setLabel\(\)](#)
- [SWEAbstractSWEIdentifiable\\$setDescription\(\)](#)
- [SWEAbstractSWEIdentifiable\\$clone\(\)](#)

Method `new()`: Initializes a SWE Nil Values object

Usage:

```
SWEAbstractSWEIdentifiable$new(  
  xml,  
  element = element,  
  attrs = list(),  
  defaults = list(),  
  wrap = TRUE,  
  value_as_field = TRUE  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**
element element
attrs attrs
defaults defaults
wrap wrap
value_as_field value as field?

Method `setIdentifier()`: Set identifier

Usage:

```
SWEAbstractSWEIdentifiable$setIdentifier(identifier)
```

Arguments:

identifier identifier

Method `setLabel()`: Set label

Usage:

```
SWEAbstractSWEIdentifiable$setLabel(label)
```

Arguments:

label label

Method `setDescription()`: Set description

Usage:

```
SWEAbstractSWEIdentifiable$setDescription(description)
```

Arguments:

description description

Method clone(): The objects of this class are cloneable with this method.

Usage:

SWEAbstractSWEIdentifiable.clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWECategory

SWECategory

Description

SWECategory

SWECategory

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE Category

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
 -> [geometa::SWEAbstractSWE](#) -> [geometa::SWEAbstractSWEIdentifiable](#) -> [geometa::SWEAbstractDataComponent](#)
 -> [geometa::SWEAbstractSimpleComponent](#) -> SWECategory

Public fields

codeSpace codeSpace

constraint constraint

value value

Methods**Public methods:**

- [SWECategory\\$new\(\)](#)
- [SWECategory\\$setCodeSpace\(\)](#)
- [SWECategory\\$setConstraint\(\)](#)
- [SWECategory\\$setValue\(\)](#)
- [SWECategory\\$clone\(\)](#)

Method `new()`: Initializes an object of class [SWECategory](#)

Usage:

```
SWECategory$new(  
  xml = NULL,  
  codeSpace = NULL,  
  constraint = NULL,  
  value = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**
codeSpace codeSpace
constraint constraint
value value
updatable updatable
optional optional
definition definition

Method `setCodeSpace()`: `setCodeSpace`

Usage:

```
SWECategory$setCodeSpace(codeSpace)
```

Arguments:

codeSpace codeSpace

Method `setConstraint()`: `setConstraint`

Usage:

```
SWECategory$setConstraint(constraint)
```

Arguments:

constraint constraint

Method `setValue()`: `setValue`

Usage:

```
SWECategory$setValue(value)
```

Arguments:

value value

Method clone(): The objects of this class are cloneable with this method.

Usage:

SWECategory\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWECategoryRange

SWECategoryRange

Description

SWECategoryRange

SWECategoryRange

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE CategoryRange

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
 -> [geometa::SWEAbstractSWE](#) -> [geometa::SWEAbstractSWEIdentifiable](#) -> [geometa::SWEAbstractDataComponent](#)
 -> [geometa::SWEAbstractSimpleComponent](#) -> SWECategoryRange

Public fields

codeSpace codeSpace

constraint constraint

value value

Methods**Public methods:**

- [SWECategoryRange\\$new\(\)](#)
- [SWECategoryRange\\$setCodeSpace\(\)](#)
- [SWECategoryRange\\$setConstraint\(\)](#)
- [SWECategoryRange\\$setValue\(\)](#)
- [SWECategoryRange\\$clone\(\)](#)

Method `new()`: Initializes an object of class [SWECategoryRange](#)

Usage:

```
SWECategoryRange$new(  
  xml = NULL,  
  codeSpace = NULL,  
  constraint = NULL,  
  value = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**
codeSpace codeSpace
constraint constraint
value value
updatable updatable
optional optional
definition definition

Method `setCodeSpace()`: `setCodeSpace`

Usage:

```
SWECategoryRange$setCodeSpace(codeSpace)
```

Arguments:

codeSpace codeSpace

Method `setConstraint()`: `setConstraint`

Usage:

```
SWECategoryRange$setConstraint(constraint)
```

Arguments:

constraint constraint

Method `setValue()`: `setValue`

Usage:

```
SWECategoryRange$setValue(value)
```

Arguments:

value value

Method clone(): The objects of this class are cloneable with this method.

Usage:

SWECategoryRange\$.clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWECOUNT

SWECOUNT

Description

SWECOUNT

SWECOUNT

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE Count

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
 -> [geometa::SWEAbstractSWE](#) -> [geometa::SWEAbstractSWEIdentifiable](#) -> [geometa::SWEAbstractDataComponent](#)
 -> [geometa::SWEAbstractSimpleComponent](#) -> SWECOUNT

Public fields

constraint constraint

value value

Methods**Public methods:**

- [SWEDCount\\$new\(\)](#)
- [SWEDCount\\$setConstraint\(\)](#)
- [SWEDCount\\$setValue\(\)](#)
- [SWEDCount\\$clone\(\)](#)

Method `new()`: Initializes an object of class [SWEDCount](#)

Usage:

```
SWEDCount$new(  
  xml = NULL,  
  constraint = NULL,  
  value = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)
constraint constraint
value value
updatable updatable
optional optional
definition definition

Method `setConstraint()`: `setConstraint`

Usage:

```
SWEDCount$setConstraint(constraint)
```

Arguments:

constraint constraint

Method `setValue()`: `setValue`

Usage:

```
SWEDCount$setValue(value)
```

Arguments:

value value

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
SWEDCount$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWECountRange

SWECountRange

Description

SWECountRange

SWECountRange

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE CountRange

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::SWEAbstractObject
-> geometa::SWEAbstractSWE -> geometa::SWEAbstractSWEIdentifiable -> geometa::SWEAbstractDataComponent
-> geometa::SWEAbstractSimpleComponent -> SWECountRange
```

Public fields

constraint constraint

value value

Methods**Public methods:**

- `SWECountRange$new()`
- `SWECountRange$setConstraint()`
- `SWECountRange$setValue()`
- `SWECountRange$clone()`

Method `new()`: Initializes an object of class [SWECountRange](#)

Usage:

```
SWECountRange$new(  
  xml = NULL,  
  constraint = NULL,  
  value = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**
constraint constraint
value value
updatable updatable
optional optional
definition definition

Method setConstraint(): setConstraint

Usage:

```
SWECountRange$setConstraint(constraint)
```

Arguments:

constraint constraint

Method setValue(): setValue

Usage:

```
SWECountRange$setValue(value)
```

Arguments:

value value

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
SWECountRange$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWEDataRecord	<i>SWEDataRecord</i>
---------------	----------------------

Description

SWEDataRecord

SWEDataRecord

Format

R6Class object.

ValueObject of [R6Class](#) for modelling an SWE data record**Super classes**

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::SWEAbstractObject
-> geometa::SWEAbstractSWE -> geometa::SWEAbstractSWEIdentifiable -> geometa::SWEAbstractDataComponent
-> SWEDataRecord

```

Public fields

field field

Methods**Public methods:**

- [SWEDataRecord\\$new\(\)](#)
- [SWEDataRecord\\$addField\(\)](#)
- [SWEDataRecord\\$delField\(\)](#)
- [SWEDataRecord\\$clone\(\)](#)

Method new(): Initializes an object of class [SWEDataRecord](#)*Usage:*

```

SWEDataRecord$new(
  xml = NULL,
  element = NULL,
  updatable = NULL,
  optional = FALSE,
  definition = NULL
)

```

Arguments:

```

xml object of class XMLInternalNode-class from XML
element element

```

updatable updatable
 optional optional
 definition definition

Method addField(): Adds field

Usage:

SWEDataRecord\$addField(field)

Arguments:

field field

Method delField(): Deletes field

Usage:

SWEDataRecord\$delField(field)

Arguments:

field field

Method clone(): The objects of this class are cloneable with this method.

Usage:

SWEDataRecord\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Class used internally by geometa

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWEElement

SWEElement

Description

SWEElement

SWEElement

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an GML element

Methods

`new(xml, element, attrs, defaults)` This method is used to instantiate a GML element

Super classes

`geometa::geometaLogger` -> `geometa::ISOAbstractObject` -> `geometa::SWEAbstractObject`
-> SWEElement

Methods**Public methods:**

- `SWEElement$new()`
- `SWEElement$decode()`
- `SWEElement$clone()`

Method `new()`: Initializes a generic abstract SWE element

Usage:

```
SWEElement$new(
  xml = NULL,
  element = NULL,
  attrs = list(),
  defaults = list(),
  xmlNamespacePrefix = "SWE"
)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#) from **XML**
`element` element
`attrs` attrs
`defaults` defaults
`xmlNamespacePrefix` XML namespace prefix. Default is "SWE"

Method `decode()`: Decodes object from XML

Usage:

```
SWEElement$decode(xml)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#) from **XML**

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
SWEElement$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Note

Class used by geometa internal XML decoder/encoder

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

ISO/TS 19103:2005 Geographic information – Conceptual schema language

SWENilValues

SWENilValues

Description

SWENilValues

SWENilValues

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE nil values object

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
-> [geometa::SWEAbstractSWE](#) -> SWENilValues

Public fields

nilValue nil value

Methods**Public methods:**

- [SWENilValues\\$new\(\)](#)
- [SWENilValues\\$addNilValue\(\)](#)
- [SWENilValues\\$clone\(\)](#)

Method [new\(\)](#): Initializes a SWE Nil Values object

Usage:

[SWENilValues\\$new\(xml = NULL\)](#)

Arguments:

xml object of class [XMLInternalNode-class](#) from **XML**

Method addNilValue(): Adds a nil value with a reason

Usage:

SWENilValues\$addNilValue(value, reason)

Arguments:

value value

reason reason

Method clone(): The objects of this class are cloneable with this method.

Usage:

SWENilValues\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWEQuantity

SWEQuantity

Description

SWEQuantity

SWEQuantity

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE Quantity

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
 -> [geometa::SWEAbstractSWE](#) -> [geometa::SWEAbstractSWEIdentifiable](#) -> [geometa::SWEAbstractDataComponent](#)
 -> [geometa::SWEAbstractSimpleComponent](#) -> SWEQuantity

Public fields

uom uom
constraint constraint
value value

Methods**Public methods:**

- [SWEQuantity\\$new\(\)](#)
- [SWEQuantity\\$setUom\(\)](#)
- [SWEQuantity\\$setConstraint\(\)](#)
- [SWEQuantity\\$setValue\(\)](#)
- [SWEQuantity\\$clone\(\)](#)

Method [new\(\)](#): Initializes an object of class [SWEQuantity](#)

Usage:

```
SWEQuantity$new(  
  xml = NULL,  
  uom = NULL,  
  constraint = NULL,  
  value = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)
uom uom
constraint constraint
value value
updatable updatable
optional optional
definition definition

Method [setUom\(\)](#): setUom

Usage:

```
SWEQuantity$setUom(uom)
```

Arguments:

uom uom

Method [setConstraint\(\)](#): setConstraint

Usage:

```
SWEQuantity$setConstraint(constraint)
```

Arguments:

constraint constraint

Method setValue(): setValue*Usage:*

SWEQuantity\$setValue(value)

Arguments:

value value

Method clone(): The objects of this class are cloneable with this method.*Usage:*

SWEQuantity\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

ReferencesSWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

`SWEQuantityRange`*SWEQuantityRange*

Description

SWEQuantityRange

SWEQuantityRange

Format`R6Class` object.**Value**Object of `R6Class` for modelling an SWE QuantityRange**Super classes**

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::SWEAbstractObject
-> geometa::SWEAbstractSWE -> geometa::SWEAbstractSWEIdentifiable -> geometa::SWEAbstractDataComponent
-> geometa::SWEAbstractSimpleComponent -> SWEQuantityRange

```

Public fields

uom uom
constraint constraint
value value

Methods**Public methods:**

- [SWEQuantityRange\\$new\(\)](#)
- [SWEQuantityRange\\$setUom\(\)](#)
- [SWEQuantityRange\\$setConstraint\(\)](#)
- [SWEQuantityRange\\$setValue\(\)](#)
- [SWEQuantityRange\\$clone\(\)](#)

Method [new\(\)](#): Initializes an object of class [SWEQuantityRange](#)

Usage:

```
SWEQuantityRange$new(  
  xml = NULL,  
  uom = NULL,  
  constraint = NULL,  
  value = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)
uom uom
constraint constraint
value value
updatable updatable
optional optional
definition definition

Method [setUom\(\)](#): [setUom](#)

Usage:

```
SWEQuantityRange$setUom(uom)
```

Arguments:

uom uom

Method [setConstraint\(\)](#): [setConstraint](#)

Usage:

```
SWEQuantityRange$setConstraint(constraint)
```

Arguments:

constraint constraint

Method setValue(): setValue*Usage:*

SWEQuantityRange\$setValue(value)

Arguments:

value value

Method clone(): The objects of this class are cloneable with this method.*Usage:*

SWEQuantityRange\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

ReferencesSWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

 SWEText

SWEText

Description

SWEText

SWEText

Format

R6Class object.

Value

Object of R6Class for modelling an SWE Text

Super classes

```

geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::SWEAbstractObject
-> geometa::SWEAbstractSWE -> geometa::SWEAbstractSWEIdentifiable -> geometa::SWEAbstractDataComponent
-> geometa::SWEAbstractSimpleComponent -> SWEText

```

Public fields

constraint constraint
value value

Methods**Public methods:**

- [SWEText\\$new\(\)](#)
- [SWEText\\$setConstraint\(\)](#)
- [SWEText\\$setValue\(\)](#)
- [SWEText\\$clone\(\)](#)

Method new(): Initializes an object of class [SWEText](#)

Usage:

```
SWEText$new(  
  xml = NULL,  
  constraint = NULL,  
  value = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)
constraint constraint
value value
updatable updatable
optional optional
definition definition

Method setConstraint(): setConstraint

Usage:

```
SWEText$setConstraint(constraint)
```

Arguments:

constraint constraint

Method setValue(): setValue

Usage:

```
SWEText$setValue(value)
```

Arguments:

value value

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
SWEText$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWETextEncoding	<i>SWETextEncoding</i>
-----------------	------------------------

Description

SWETextEncoding

SWETextEncoding

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE text encoding object

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
-> [geometa::SWEAbstractSWE](#) -> [geometa::SWEAbstractEncoding](#) -> SWETextEncoding

Methods**Public methods:**

- [SWETextEncoding\\$new\(\)](#)
- [SWETextEncoding\\$clone\(\)](#)

Method new(): Initializes a SWE Text Encoding element

Usage:

```
SWETextEncoding$new(
  xml = NULL,
  collapseWhiteSpaces = TRUE,
  decimalSeparator = ".",
  tokenSeparator = NULL,
  blockSeparator = NULL
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)

`collapseWhiteSpaces` Indicates whether white spaces (i.e. space, tab, CR, LF) should be collapsed with separators when parsing the data stream. Default is TRUE

`decimalSeparator` Character used as the decimal separator. Default is TRUE

`tokenSeparator` Character sequence used as the token separator (i.e. between two successive values). Required

`blockSeparator` Character sequence used as the block separator (i.e. between two successive blocks in the data set. The end of a block is reached once all values from the data tree have been encoded once). Required

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
SWETextEncoding$.clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondell@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWETime

SWETime

Description

SWETime

SWETime

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE Time

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::SWEAbstractObject
-> geometa::SWEAbstractSWE -> geometa::SWEAbstractSWEIdentifiable -> geometa::SWEAbstractDataComponent
-> geometa::SWEAbstractSimpleComponent -> SWETime
```

Public fields

uom uom
constraint constraint
value value

Methods**Public methods:**

- [SWETime\\$new\(\)](#)
- [SWETime\\$setUom\(\)](#)
- [SWETime\\$setConstraint\(\)](#)
- [SWETime\\$setValue\(\)](#)
- [SWETime\\$clone\(\)](#)

Method [new\(\)](#): Initializes an object of class [SWETime](#)

Usage:

```
SWETime$new(  
  xml = NULL,  
  uom = NULL,  
  constraint = NULL,  
  value = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)
uom uom
constraint constraint
value value
updatable updatable
optional optional
definition definition

Method [setUom\(\)](#): setUom

Usage:

```
SWETime$setUom(uom)
```

Arguments:

uom uom

Method [setConstraint\(\)](#): setConstraint

Usage:

```
SWETime$setConstraint(constraint)
```


Arguments:

constraint constraint

Method setValue(): setValue*Usage:*

SWETime\$setValue(value)

Arguments:

value value

Method clone(): The objects of this class are cloneable with this method.*Usage:*

SWETime\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWETimeRange

SWETimeRange

Description

SWETimeRange

SWETimeRange

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE Time Range

Super classes

```
geometa::geometaLogger -> geometa::ISOAbstractObject -> geometa::SWEAbstractObject  
-> geometa::SWEAbstractSWE -> geometa::SWEAbstractSWEIdentifiable -> geometa::SWEAbstractDataComponent  
-> geometa::SWEAbstractSimpleComponent -> SWETimeRange
```

Public fields

uom uom
constraint constraint
value value

Methods**Public methods:**

- [SWETimeRange\\$new\(\)](#)
- [SWETimeRange\\$setUom\(\)](#)
- [SWETimeRange\\$setConstraint\(\)](#)
- [SWETimeRange\\$setValue\(\)](#)
- [SWETimeRange\\$clone\(\)](#)

Method [new\(\)](#): Initializes an object of class [SWETimeRange](#)

Usage:

```
SWETimeRange$new(  
  xml = NULL,  
  uom = NULL,  
  constraint = NULL,  
  start = NULL,  
  end = NULL,  
  updatable = NULL,  
  optional = FALSE,  
  definition = NULL  
)
```

Arguments:

xml object of class [XMLInternalNode-class](#) from [XML](#)
uom uom
constraint constraint
start start time
end end time
updatable updatable
optional optional
definition definition

Method [setUom\(\)](#): setUom

Usage:

```
SWETimeRange$setUom(uom)
```

Arguments:

uom uom

Method [setConstraint\(\)](#): setConstraint

Usage:

```
SWETimeRange$setConstraint(constraint)
```

Arguments:

constraint constraint

Method setValue(): setValue

Usage:

```
SWETimeRange$setValue(start, end)
```

Arguments:

start start time

end end time

Method clone(): The objects of this class are cloneable with this method.

Usage:

```
SWETimeRange$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

SWEXMLEncoding

SWEXMLEncoding

Description

SWEXMLEncoding

SWEXMLEncoding

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an SWE XML encoding object

Super classes

[geometa::geometaLogger](#) -> [geometa::ISOAbstractObject](#) -> [geometa::SWEAbstractObject](#)
-> [geometa::SWEAbstractSWE](#) -> [geometa::SWEAbstractEncoding](#) -> SWEXMLEncoding

Methods**Public methods:**

- [SWEXMLEncoding\\$new\(\)](#)
- [SWEXMLEncoding\\$clone\(\)](#)

Method `new()`: Initializes a SWE XML Encoding element

Usage:

```
SWEXMLEncoding$new(xml = NULL)
```

Arguments:

`xml` object of class [XMLInternalNode-class](#) from **XML**

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
SWEXMLEncoding$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

References

SWE Common Data Model Encoding Standard. <https://www.ogc.org/standards/swecommon>

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