EDIT

Common Data Model

BGBM 2008

Package

eu.etaxonomy.cdm.model.agent

eu.etaxonomy.cdm.model.agent
Class Address

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.agent.Address
```
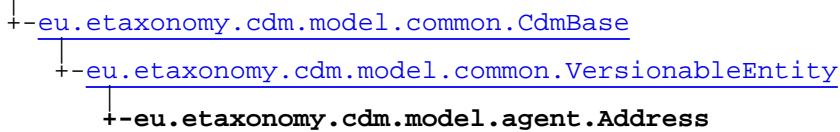
All Implemented Interfaces:
    java.io.Serializable

public class **Address**
extends VersionableEntity

taken from TDWG & VCard http://rs.tdwg. org/ontology/voc/ContactDetails#Address

Constructor Summary

public	Address()

Method Summary

Contact	getContact()
WaterbodyOrCountry	getCountry()
java.lang.String	getLocality()
Point	getLocation()
java.lang.String	getPobox()
java.lang.String	getPostcode()
java.lang.String	getRegion()
java.lang.String	getStreet()
void	setContact(Contact newContact)
void	setCountry(WaterbodyOrCountry country)
void	setLocality(java.lang.String locality)
void	setLocation(Point location)

void	setPobox(java.lang.String pobox)	
void	setPostcode(java.lang.String postcode)	
void	setRegion(java.lang.String region)	
void	setStreet(java.lang.String street)	

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

Address

public **Address**()

Methods

getContact

public Contact **getContact**()

setContact

protected void **setContact**(Contact newContact)

getCountry

public WaterbodyOrCountry **getCountry**()

setCountry

public void **setCountry**(WaterbodyOrCountry country)

Parameters:
country - country

getLocation

public Point **getLocation**()

setLocation

public void **setLocation**(Point location)

Parameters:
location - location

getPobox

public java.lang.String **getPobox**()

setPobox

public void **setPobox**(java.lang.String pobox)

Parameters:
pobox - pobox

getStreet

public java.lang.String **getStreet**()

setStreet

public void **setStreet**(java.lang.String street)

Parameters:
street - street

getPostcode

public java.lang.String **getPostcode**()

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setPostcode

public void **setPostcode**(java.lang.String postcode)

      Parameters:
          postcode - postcode

getLocality

public java.lang.String **getLocality**()

setLocality

public void **setLocality**(java.lang.String locality)

      Parameters:
          locality - locality

getRegion

public java.lang.String **getRegion**()
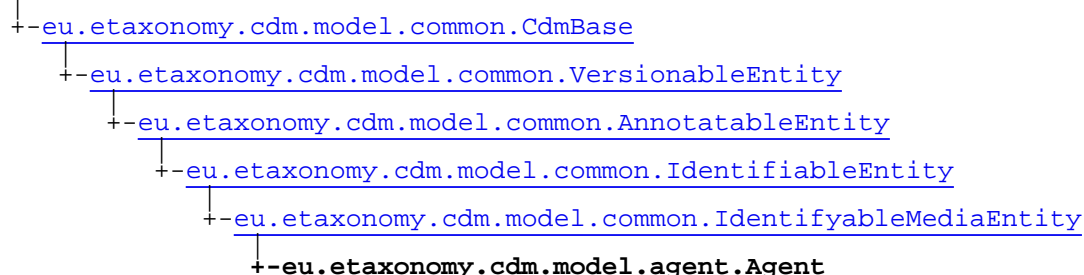
setRegion

public void **setRegion**(java.lang.String region)

      Parameters:
          region - region

eu.etaxonomy.cdm.model.agent
Class Agent

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                │
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    │
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        │
                        +-eu.etaxonomy.cdm.model.agent.Agent
```

All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IMediaDocumented

Direct Known Subclasses:
Institution, Person, Team

---

public abstract class **Agent**
extends IdentifyableMediaEntity

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	Agent()

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity`

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifiableEntity`

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

---

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IOriginalSource`

addSource, getSources, removeSource

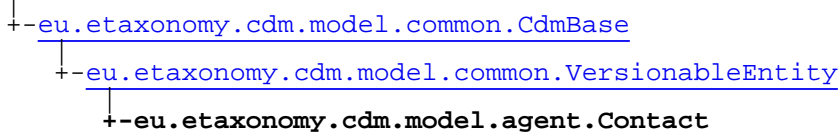**Methods inherited from interface** `eu.etaxonomy.cdm.model.common.IMediaDocumented`

getMedia

Constructors

Agent

public **Agent**()

eu.etaxonomy.cdm.model.agent
Class Contact

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.agent.Contact
```

All Implemented Interfaces:
java.io.Serializable

---

public class **Contact**
extends VersionableEntity

http://rs.tdwg.org/ontology/voc/ContactDetails#ContactDetails

---

Field Summary

protected	addresses

Constructor Summary

public	Contact()

Method Summary

void	addAddress(Address address)
java.util.Set	getAddresses()
java.lang.String	getEmail()
java.lang.String	getFax()
java.lang.String	getPhone()
java.lang.String	getUrl()
void	removeAddress(Address address)
void	setAddresses(java.util.Set addresses)
void	setEmail(java.lang.String email)
void	setFax(java.lang.String fax)

---

void	[setPhone](java.lang.String phone)
void	[setUrl](java.lang.String url)

Methods inherited from class [eu.etaxonomy.cdm.model.common.VersionableEntity](#)

[getNextVersion](#), [getPreviousVersion](#), [getUpdated](#), [getUpdatedBy](#), [getValidFrom](#), [getValidTo](#), [setNextVersion](#), [setPreviousVersion](#), [setUpdated](#), [setUpdatedBy](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase](#)

[addPropertyChangeListener](#), [addPropertyChangeListener](#), [equals](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [getCreated](#), [getCreatedBy](#), [getId](#), [getUuid](#), [hasListeners](#), [removePropertyChangeListener](#), [removePropertyChangeListener](#), [setCreated](#), [setCreatedBy](#), [setId](#), [setUuid](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

addresses

protected java.util.Set **addresses**

Constructors

Contact

public **Contact**()

Methods

getAddresses

public java.util.Set **getAddresses**()

setAddresses

protected void **setAddresses**(java.util.Set addresses)

addAddress

public void **addAddress**(Address address)

---

removeAddress

public void **removeAddress**(Address address)

---

getEmail

public java.lang.String **getEmail**()

---

setEmail

public void **setEmail**(java.lang.String email)

Parameters:
  email - email

---

getUrl

public java.lang.String **getUrl**()

---

setUrl

public void **setUrl**(java.lang.String url)

Parameters:
  url - url

---

getPhone

public java.lang.String **getPhone**()

---

setPhone

public void **setPhone**(java.lang.String phone)

Parameters:
  phone - phone

(continued from last page)

getFax

```
public java.lang.String getFax()
```

setFax

```
public void setFax(java.lang.String fax)
```

>**Parameters:**
>
>>`fax` - fax

getFax

```
public java.lang.String getFax()
```

eu.etaxonomy.cdm.model.agent
Class Institution

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.agent.Agent
                            |
                            +-eu.etaxonomy.cdm.model.agent.Institution
```

All Implemented Interfaces:
        java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Institution**
extends Agent

http://rs.tdwg.org/ontology/voc/Institution.rdf

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	Institution()

Method Summary

void	addTypes(InstitutionType t)
java.lang.String	generateTitle()
java.lang.String	getCode()
Contact	getContact()
Institution	getIsPartOf()
java.lang.String	getName()
java.util.Set	getTypes()
void	removeTypes(InstitutionType t)

---

void	setCode(java.lang.String code)
void	setContact(Contact contact)
void	setIsPartOf(Institution isPartOf)
void	setName(java.lang.String name)
void	setTypes(java.util.Set types)

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Institution

```
public Institution()
```

Methods

getContact

```
public Contact getContact()
```

setContact

```
public void setContact(Contact contact)
```

getTypes

```
public java.util.Set getTypes()
```

addTypes

```
public void addTypes(InstitutionType t)
```

removeTypes

```
public void removeTypes(InstitutionType t)
```

setTypes

```
protected void setTypes(java.util.Set types)
```

getIsPartOf

```
public Institution getIsPartOf()
```

setIsPartOf

```
public void setIsPartOf(Institution isPartOf)
```

getCode

```
public java.lang.String getCode()
```

setCode

```
public void setCode(java.lang.String code)
```

getName

```
public java.lang.String getName()
```
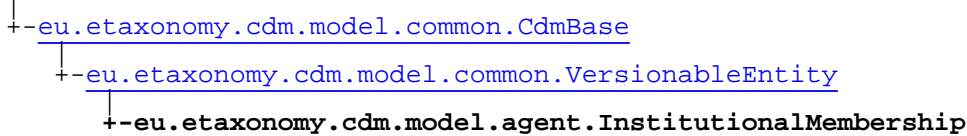
setName

```
public void setName(java.lang.String name)
```

generateTitle

```
public java.lang.String generateTitle()
```

eu.etaxonomy.cdm.model.agent
Class InstitutionalMembership

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.agent.InstitutionalMembership
```

All Implemented Interfaces:
    java.io.Serializable

---

public class **InstitutionalMembership**
extends VersionableEntity

Constructor Summary

public	**InstitutionalMembership**(Institution institute, Person person, TimePeriod period, java.lang.String department, java.lang.String role)

Method Summary

java.lang.String	**getDepartment**()
Institution	**getInstitute**()
TimePeriod	**getPeriod**()
Person	**getPerson**()
java.lang.String	**getRole**()
void	**setDepartment**(java.lang.String department)
void	**setInstitute**(Institution newInstitute)
void	**setPeriod**(TimePeriod period)
void	**setPerson**(Person newPerson)
void	**setRole**(java.lang.String role)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity
getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

---

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

InstitutionalMembership

```
public InstitutionalMembership(Institution institute,
                               Person person,
                               TimePeriod period,
                               java.lang.String department,
                               java.lang.String role)
```

Methods

getPerson

```
public Person getPerson()
```

setPerson

```
public void setPerson(Person newPerson)
```

getInstitute

```
public Institution getInstitute()
```

setInstitute

```
public void setInstitute(Institution newInstitute)
```

getPeriod

```
public TimePeriod getPeriod()
```

setPeriod

`public void` **`setPeriod`**`(`TimePeriod` period)`

Parameters:
> `period` - period

getDepartment

`public java.lang.String` **`getDepartment`**`()`

setDepartment

`public void` **`setDepartment`**`(java.lang.String department)`

Parameters:
> `department` - department

getRole

`public java.lang.String` **`getRole`**`()`

setRole

`public void` **`setRole`**`(java.lang.String role)`

Parameters:
> `role` - role

eu.etaxonomy.cdm.model.agent
Class InstitutionType

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.TermBase
                │
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    │
                    +-eu.etaxonomy.cdm.model.agent.InstitutionType
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm

---

public class **InstitutionType**
extends DefinedTermBase

http://rs.tdwg.org/ontology/voc/InstitutionType

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	InstitutionType()
public	InstitutionType(java.lang.String term, java.lang.String label)

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IDefTerm`

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

# Constructors

InstitutionType

```
public InstitutionType()
```

InstitutionType

```
public InstitutionType(java.lang.String term,
                       java.lang.String label)
```

eu.etaxonomy.cdm.model.agent
Class Person

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.agent.Agent
                            |
                            +-eu.etaxonomy.cdm.model.agent.Person
```
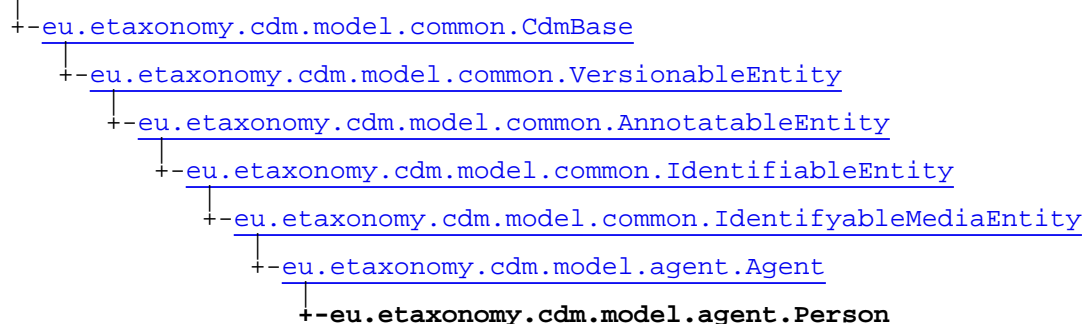
All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Person**
extends Agent

http://rs.tdwg.org/ontology/voc/Person.rdf

Field Summary

protected	institutionalMemberships

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	Person()
public	Person(java.lang.String firstname, java.lang.String lastname, java.lang.String abbreviation)

Method Summary

void	addInstitutionalMembership(Institution institution, TimePeriod period, java.lang.String department, java.lang.String role)
void	addKeyword(Keyword keyword)
java.lang.String	generateTitle()
Contact	getContact()
java.lang.String	getFirstname()

java.util.Set	getInstitutionalMemberships()	
java.util.Set	getKeywords()	
java.lang.String	getLastname()	
TimePeriod	getLifespan()	
java.lang.String	getPrefix()	
java.lang.String	getSuffix()	
void	removeInstitutionalMembership(InstitutionalMembership ims)	
void	removeKeyword(Keyword keyword)	
void	setContact(Contact contact)	
void	setFirstname(java.lang.String firstname)	
void	setInstitutionalMemberships(java.util.Set institutionalMemberships)	
void	setKeywords(java.util.Set keywords)	
void	setLastname(java.lang.String lastname)	
void	setLifespan(TimePeriod lifespan)	
void	setPrefix(java.lang.String prefix)	
void	setSuffix(java.lang.String suffix)	

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Fields

institutionalMemberships

protected java.util.Set **institutionalMemberships**

Constructors

Person

public **Person**()

Person

public **Person**(java.lang.String firstname,
              java.lang.String lastname,
              java.lang.String abbreviation)

Methods

getInstitutionalMemberships

public java.util.Set **getInstitutionalMemberships**()

setInstitutionalMemberships

```
protected void setInstitutionalMemberships(java.util.Set institutionalMemberships)
```

addInstitutionalMembership

```
public void addInstitutionalMembership(Institution institution,
        TimePeriod period,
        java.lang.String department,
        java.lang.String role)
```

removeInstitutionalMembership

```
public void removeInstitutionalMembership(InstitutionalMembership ims)
```

getKeywords

```
public java.util.Set getKeywords()
```

setKeywords

```
public void setKeywords(java.util.Set keywords)
```

addKeyword

```
public void addKeyword(Keyword keyword)
```

removeKeyword

```
public void removeKeyword(Keyword keyword)
```

getContact

```
public Contact getContact()
```

setContact

```
public void setContact(Contact contact)
```

getPrefix

```
public java.lang.String getPrefix()
```

setPrefix

```
public void setPrefix(java.lang.String prefix)
```

getFirstname

```
public java.lang.String getFirstname()
```

setFirstname

```
public void setFirstname(java.lang.String firstname)
```

getLastname

```
public java.lang.String getLastname()
```

setLastname

```
public void setLastname(java.lang.String lastname)
```

getSuffix

```
public java.lang.String getSuffix()
```

setSuffix

```
public void setSuffix(java.lang.String suffix)
```

getLifespan

```
public TimePeriod getLifespan()
```

setLifespan

```
public void setLifespan(TimePeriod lifespan)
```

Parameters:
> `lifespan` - lifespan

generateTitle

`public java.lang.String` **`generateTitle`**`()`

eu.etaxonomy.cdm.model.agent
Class Team

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.agent.Agent
                            |
                            +-eu.etaxonomy.cdm.model.agent.Team
```

All Implemented Interfaces:
java.io.Serializable**,** IOriginalSource**,** IMediaDocumented

---

public class **Team**
extends Agent

An author team may exist for itself or may be built with the persons who belong to it. {At least one otf the attributes shortName or fullName must exist.}

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	Team()

Method Summary

void	addTeamMember(Person person)
java.lang.String	generateTitle()
java.util.List	getTeamMembers()
void	removeTeamMember(Person person)
void	setTeamMembers(java.util.List teamMembers)

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity`

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifiableEntity`

---

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Team

public **Team**()

Methods

getTeamMembers

public java.util.List **getTeamMembers**()

setTeamMembers

```
protected void setTeamMembers(java.util.List teamMembers)
```

addTeamMember

```
public void addTeamMember(Person person)
```

removeTeamMember

```
public void removeTeamMember(Person person)
```

generateTitle

```
public java.lang.String generateTitle()
```

```
protected void setTeamMembers(java.util.List teamMembers)
```

Package

eu.etaxonomy.cdm.model.common

Provides general technical or common classes on the base of which are built the model classes from all others thematic packages.

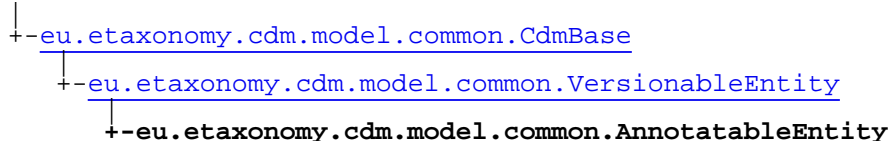# UML Diagrams

Base classes

Term base

Defined terms

Language

Media

Source

eu.etaxonomy.cdm.model.common
Class AnnotatableEntity

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
```

All Implemented Interfaces:
    java.io.Serializable

Direct Known Subclasses:
    HomotypicalGroup, EventBase, IdentifiableEntity, Media, ReferencedEntityBase

---

public abstract class **AnnotatableEntity**
extends VersionableEntity

Abstract superclass implementing human annotations and machine markers to be assigned to CDM objects.

Field Summary

protected	annotations
protected	markers

Constructor Summary

public	AnnotatableEntity()

Method Summary

void	addAnnotations(Annotation annotation)
void	addMarker(Marker marker)
java.util.Set	getAnnotations()
java.util.Set	getMarkers()
void	removeAnnotations(Annotation annotation)
void	removeMarker(Marker marker)
void	setAnnotations(java.util.Set annotations)
void	setMarkers(java.util.Set markers)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

markers

protected java.util.Set **markers**

annotations

protected java.util.Set **annotations**

Constructors

AnnotatableEntity

public **AnnotatableEntity**()

Methods

getMarkers

public java.util.Set **getMarkers**()

addMarker

public void **addMarker**(Marker marker)

removeMarker

```
public void removeMarker(Marker marker)
```

setMarkers

```
protected void setMarkers(java.util.Set markers)
```

getAnnotations

```
public java.util.Set getAnnotations()
```

addAnnotations

```
public void addAnnotations(Annotation annotation)
```

removeAnnotations

```
public void removeAnnotations(Annotation annotation)
```

setAnnotations

```
protected void setAnnotations(java.util.Set annotations)
```

eu.etaxonomy.cdm.model.common
Class Annotation

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.LanguageString
                |
                +-eu.etaxonomy.cdm.model.common.Annotation
```
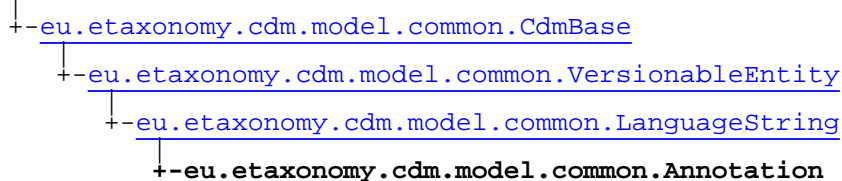
All Implemented Interfaces:
> java.io.Serializable

---

public class **Annotation**
extends LanguageString

Fields inherited from class eu.etaxonomy.cdm.model.common.LanguageString
text

Constructor Summary

public	Annotation(java.lang.String text, Language lang)

Method Summary

AnnotatableEntity	getAnnotatedObj()
Person	getCommentator()
java.net.URL	getLinkbackUrl()
void	setAnnotatedObj(AnnotatableEntity newAnnotatedObj)
void	setCommentator(Person commentator)
void	setLinkbackUrl(java.net.URL linkbackUrl)

Methods inherited from class eu.etaxonomy.cdm.model.common.LanguageString
getLanguage, getLanguageLabel, getLanguageLabel, getLanguageText, getLanguageText, getText, setLanguage, setText

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity
getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

---

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

Annotation

```
public Annotation(java.lang.String text,
                  Language lang)
```

Methods

getAnnotatedObj

```
public AnnotatableEntity getAnnotatedObj()
```

setAnnotatedObj

```
protected void setAnnotatedObj(AnnotatableEntity newAnnotatedObj)
```

getCommentator

```
public Person getCommentator()
```

setCommentator

```
public void setCommentator(Person commentator)
```

getLinkbackUrl

```
public java.net.URL getLinkbackUrl()
```
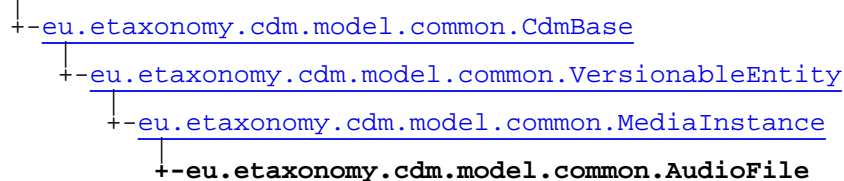
setLinkbackUrl

```
public void setLinkbackUrl(java.net.URL linkbackUrl)
```

(continued from last page)

eu.etaxonomy.cdm.model.common
Class AudioFile

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.MediaInstance
                |
                +-eu.etaxonomy.cdm.model.common.AudioFile
```

All Implemented Interfaces:
> java.io.Serializable

---

public class **AudioFile**
extends MediaInstance

Constructor Summary

public	AudioFile()

Method Summary

int	getDuration()
void	setDuration(int duration)

Methods inherited from class eu.etaxonomy.cdm.model.common.MediaInstance
getMedia, getMimeType, getSize, getUri, setMedia, setMimeType, setSize, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity
getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase
addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Constructors

AudioFile

public **AudioFile**()

Methods

getDuration

public int **getDuration**()

setDuration

public void **setDuration**(int duration)

> **Parameters:**
> duration - duration

eu.etaxonomy.cdm.model.common
Class CdmBase

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
```

All Implemented Interfaces:
> java.io.Serializable

Direct Known Subclasses:
> VersionableEntity

---

public abstract class **CdmBase**
extends java.lang.Object
implements java.io.Serializable

The base class for all CDM domain classes implementing UUIDs and bean property change event firing. It provides a globally unique UUID and keeps track of creation date and person. The UUID is the same for different versions (see `VersionableEntity`) of a CDM object, so a locally unique id exists in addition that allows to safely access and store several objects (=version) with the same UUID. This class together with the `eu.etaxonomy.cdm.aspectj.PropertyChangeAspect` will fire bean change events to all registered listeners. Listener registration and event firing is done with the help of the `java.beans.PropertyChangeSupport` class.

Constructor Summary

public	CdmBase() Class constructor assigning a unique UUID and creation date.

Method Summary

void	addPropertyChangeListener(java.beans.PropertyChangeListener listener) see PropertyChangeSupport.addPropertyChangeListener(java.beans.PropertyChangeListener)
void	addPropertyChangeListener(java.lang.String propertyName, java.beans.PropertyChangeListener listener) see PropertyChangeSupport.addPropertyChangeListener(java.lang.String, java.beans.PropertyChangeListener)
boolean	equals(java.lang.Object obj) Is true if UUID and created timestamp are the same for the passed Object and this one.
void	firePropertyChange(java.beans.PropertyChangeEvent evt)
void	firePropertyChange(java.lang.String property, boolean oldval, boolean newval)
void	firePropertyChange(java.lang.String property, float oldval, float newval)
void	firePropertyChange(java.lang.String property, int oldval, int newval)

void	**firePropertyChange**(java.lang.String property, java.lang.Object oldval, java.lang.Object newval)
void	**firePropertyChange**(java.lang.String property, java.lang.String oldval, java.lang.String newval)
java.util.Calendar	**getCreated**()
Person	**getCreatedBy**()
int	**getId**() Returns local unique identifier for the concrete subclass
java.util.UUID	**getUuid**()
boolean	**hasListeners**(java.lang.String propertyName)
void	**removePropertyChangeListener**(java.beans.PropertyChangeListener listener) see PropertyChangeSupport.addPropertyChangeListener(java.beans.PropertyChangeListener)
void	**removePropertyChangeListener**(java.lang.String propertyName, java.beans.PropertyChangeListener listener)
void	**setCreated**(java.util.Calendar created) Sets the timestamp this object was created.
void	**setCreatedBy**(Person createdBy)
void	**setId**(int id) Assigns a unique local ID to this object.
void	**setUuid**(java.util.UUID uuid)
java.lang.String	**toString**() Returns the class, id and uuid as a string for any CDM object.

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

CdmBase

public **CdmBase**()

Class constructor assigning a unique UUID and creation date. UUID can be changed later via setUuid method.

Methods

addPropertyChangeListener

```
public void addPropertyChangeListener(java.beans.PropertyChangeListener listener)
```

see PropertyChangeSupport.addPropertyChangeListener(java.beans.PropertyChangeListener)

Parameters:
listener

addPropertyChangeListener

```
public void addPropertyChangeListener(java.lang.String propertyName,
        java.beans.PropertyChangeListener listener)
```

see PropertyChangeSupport.addPropertyChangeListener(java.lang.String,
java.beans.PropertyChangeListener)

removePropertyChangeListener

```
public void removePropertyChangeListener(java.beans.PropertyChangeListener listener)
```

see PropertyChangeSupport.addPropertyChangeListener(java.beans.PropertyChangeListener)

removePropertyChangeListener

```
public void removePropertyChangeListener(java.lang.String propertyName,
        java.beans.PropertyChangeListener listener)
```

See Also:
PropertyChangeSupport.addPropertyChangeListener(java.lang.String,
java.beans.PropertyChangeListener)

hasListeners

```
public boolean hasListeners(java.lang.String propertyName)
```

firePropertyChange

```
public void firePropertyChange(java.lang.String property,
        java.lang.String oldval,
        java.lang.String newval)
```

firePropertyChange

```
public void firePropertyChange(java.lang.String property,
        int oldval,
        int newval)
```

firePropertyChange

```
public void firePropertyChange(java.lang.String property,
        float oldval,
        float newval)
```

firePropertyChange

```
public void firePropertyChange(java.lang.String property,
        boolean oldval,
        boolean newval)
```

firePropertyChange

```
public void firePropertyChange(java.lang.String property,
        java.lang.Object oldval,
        java.lang.Object newval)
```

firePropertyChange

```
public void firePropertyChange(java.beans.PropertyChangeEvent evt)
```

getId

```
public int getId()
```

> Returns local unique identifier for the concrete subclass

> **Returns:**

setId

```
public void setId(int id)
```

> Assigns a unique local ID to this object. Because of the EJB3 @Id and @GeneratedValue annotation this id will be set automatically by the persistence framework when object is saved.

> **Parameters:**
> id

getUuid

```
public java.util.UUID getUuid()
```

setUuid

```
public void setUuid(java.util.UUID uuid)
```

getCreated

`public java.util.Calendar` **`getCreated`**`()`

setCreated

`public void` **`setCreated`**`(java.util.Calendar created)`

> Sets the timestamp this object was created. Most databases cannot store milliseconds, so they are removed by this method. Caution: We are planning to replace the Calendar class with a different datetime representation which is more suitable for hibernate see `TRAC ticket`

> **Parameters:**
> `created`

getCreatedBy

`public` [Person] **`getCreatedBy`**`()`

setCreatedBy

`public void` **`setCreatedBy`**`(`[Person] `createdBy)`

equals

`public boolean` **`equals`**`(java.lang.Object obj)`

> Is true if UUID and created timestamp are the same for the passed Object and this one.

> **See Also:**
> `Object.equals(java.lang.Object)`

toString

`public java.lang.String` **`toString`**`()`

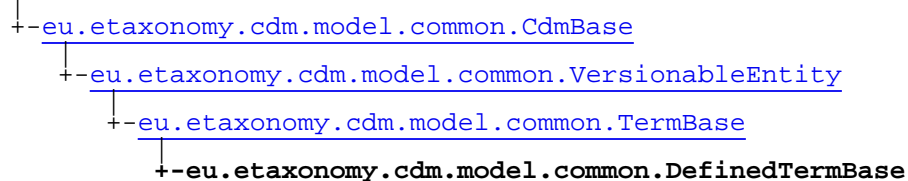> Returns the class, id and uuid as a string for any CDM object. For example: Taxon#13

> **See Also:**
> `Object.toString()`

eu.etaxonomy.cdm.model.common
Class DefinedTermBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
```

All Implemented Interfaces:
> IDefTerm, java.io.Serializable

Direct Known Subclasses:
> BibtexEntryType, DerivationEventType, PreservationMethod, Continent, NamedAreaType, ReferenceSystem, WaterbodyOrCountry, FeatureType, MeasurementUnit, StatisticalMeasure, TextFormat, ExtensionType, Language, MarkerType, OrderedTermBase, RightsTerm, InstitutionType

---

public abstract class **DefinedTermBase**
extends TermBase
implements java.io.Serializable, IDefTerm

workaround for enumerations, base type according to TDWG. For linear ordering use partOf relation and BreadthFirst. Default iterator order should therefore be BreadthFirst (not DepthFirst)

Field Summary

protected	**vocabulary**
protected static	**vocabularyStore**

Constructor Summary

public	**DefinedTermBase**()
public	**DefinedTermBase**(java.lang.String term, java.lang.String label)

Method Summary

void	**addIncludes**(DefinedTermBase includes)
void	**addMedia**(Media media)
static DefinedTermBase	**findByUuid**(java.util.UUID uuid)
java.util.Set	**getGeneralizationOf**()
java.util.Set	**getIncludes**()

DefinedTermBase	getKindOf()
java.util.Set	getMedia()
DefinedTermBase	getPartOf()
TermVocabulary	getPersistentVocabulary()
TermVocabulary	getVocabulary()
void	readCsvLine(java.util.List csvLine)
void	readCsvLine(java.util.List csvLine, Language lang)
void	removeIncludes(TermBase includes)
void	removeMedia(Media media)
void	setGeneralizationOf(java.util.Set generalizationOf)
void	setIncludes(java.util.Set includes)
void	setKindOf(DefinedTermBase kindOf)
void	setMedia(java.util.Set media)
void	setPartOf(DefinedTermBase partOf)
void	setPersistentVocabulary(TermVocabulary newVocabulary)
void	setVocabulary(TermVocabulary newVocabulary)
static void	setVocabularyStore(IVocabularyStore vocabularyStore)
void	writeCsvLine(CSVWriter writer)

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Fields

vocabularyStore

```
protected static eu.etaxonomy.cdm.model.common.init.IVocabularyStore vocabularyStore
```

vocabulary

```
protected eu.etaxonomy.cdm.model.common.TermVocabulary vocabulary
```

Constructors

DefinedTermBase

```
public DefinedTermBase()
```

DefinedTermBase

```
public DefinedTermBase(java.lang.String term,
                       java.lang.String label)
```

Methods

setVocabularyStore

```
public static void setVocabularyStore(IVocabularyStore vocabularyStore)
```

findByUuid

```
public static DefinedTermBase findByUuid(java.util.UUID uuid)
```

readCsvLine

```
public void readCsvLine(java.util.List csvLine)
```

readCsvLine

```
public void readCsvLine(java.util.List csvLine,
        Language lang)
```

writeCsvLine

```
public void writeCsvLine(CSVWriter writer)
```

getKindOf

```
public DefinedTermBase getKindOf()
```

setKindOf

```
public void setKindOf(DefinedTermBase kindOf)
```

getGeneralizationOf

```
public java.util.Set getGeneralizationOf()
```

setGeneralizationOf

```
public void setGeneralizationOf(java.util.Set generalizationOf)
```

getPartOf

```
public DefinedTermBase getPartOf()
```

setPartOf

```
public void setPartOf(DefinedTermBase partOf)
```

getIncludes

public java.util.Set **getIncludes**()

setIncludes

public void **setIncludes**(java.util.Set includes)

addIncludes

public void **addIncludes**(DefinedTermBase includes)

removeIncludes

public void **removeIncludes**(TermBase includes)

getMedia

public java.util.Set **getMedia**()

setMedia

public void **setMedia**(java.util.Set media)

addMedia

public void **addMedia**(Media media)

removeMedia

public void **removeMedia**(Media media)

getVocabulary

public TermVocabulary **getVocabulary**()

setVocabulary

```
public void setVocabulary(TermVocabulary newVocabulary)
```

getPersistentVocabulary

```
protected TermVocabulary getPersistentVocabulary()
```

## setPersistentVocabulary

```
protected void setPersistentVocabulary(TermVocabulary newVocabulary)
```

```
public void setVocabulary(TermVocabulary newVocabulary)
```

eu.etaxonomy.cdm.model.common
Class EventBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.EventBase
```
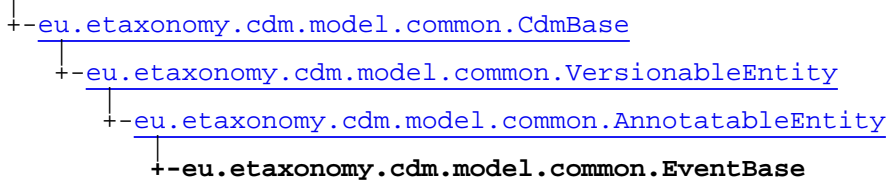
All Implemented Interfaces:
> IEvent, java.io.Serializable

Direct Known Subclasses:
> DerivationEvent, DeterminationEvent, GatheringEvent

---

public abstract class **EventBase**
extends AnnotatableEntity
implements java.io.Serializable, IEvent

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	EventBase()

Method Summary

Agent	getActor()
java.lang.String	getDescription()
TimePeriod	getTimeperiod()
void	setActor(Agent actor)
void	setDescription(java.lang.String description)
void	setTimeperiod(TimePeriod timeperiod)

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

---

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IEvent

getActor, getTimeperiod, setActor, setTimeperiod

Constructors

EventBase

public **EventBase**()

Methods

getTimeperiod

public TimePeriod **getTimeperiod**()

setTimeperiod

public void **setTimeperiod**(TimePeriod timeperiod)

getActor

public Agent **getActor**()

setActor

public void **setActor**(Agent actor)

getDescription
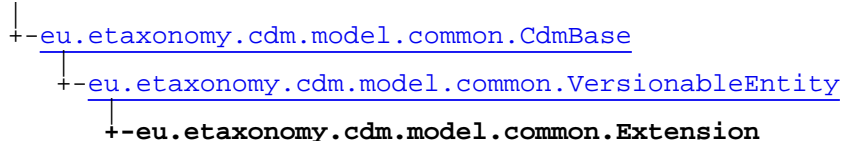
```
public java.lang.String getDescription()
```

setDescription

```
public void setDescription(java.lang.String description)
```

```
public java.lang.String getDescription()
```

eu.etaxonomy.cdm.model.common
Class Extension

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.Extension
```

All Implemented Interfaces:
> java.io.Serializable

---

public class **Extension**
extends VersionableEntity

This class aims to make available more "attributes" for identifiable entities in a flexible way. Application developers (and even users) can define their own "attributes" as an ExtensionType and add data to Identifiable instances via Extension instances.

Constructor Summary

public	Extension()

Method Summary

IdentifiableEntity	getExtendedObj()
ExtensionType	getType()
java.lang.String	getValue()
void	setExtendedObj(IdentifiableEntity extendedObj)
void	setType(ExtensionType type)
void	setValue(java.lang.String value)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

Extension

public **Extension**()

Methods

getExtendedObj

public [IdentifiableEntity](#) **getExtendedObj**()

setExtendedObj

public void **setExtendedObj**([IdentifiableEntity](#) extendedObj)

getType

public [ExtensionType](#) **getType**()

setType

public void **setType**([ExtensionType](#) type)

> **Parameters:**
> type - type

getValue

public java.lang.String **getValue**()

setValue

public void **setValue**(java.lang.String value)

> **Parameters:**
> value - value

eu.etaxonomy.cdm.model.common
Class ExtensionType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.ExtensionType
```
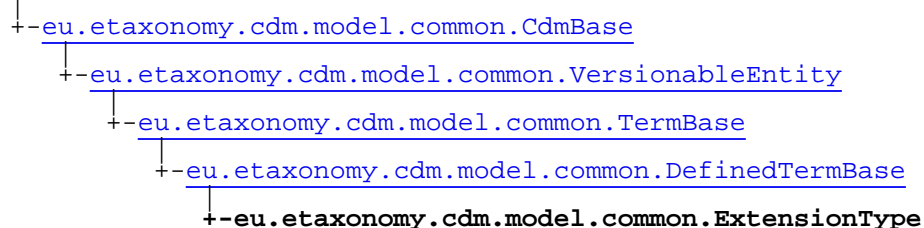
All Implemented Interfaces:
> java.io.Serializable, IDefTerm

---

public class **ExtensionType**
extends DefinedTermBase

Extension types similar to dynamically defined attributes. These are not data types, but rather content types like "DOI", "2nd nomenclatural reference", "3rd hybrid parent" or specific local identifiers.

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	ExtensionType()
public	ExtensionType(java.lang.String term, java.lang.String label)

Method Summary

static ExtensionType	RDF_FRAGMENT()
static ExtensionType	XML_FRAGMENT()

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

ExtensionType

public **ExtensionType**()

ExtensionType

public **ExtensionType**(java.lang.String term,
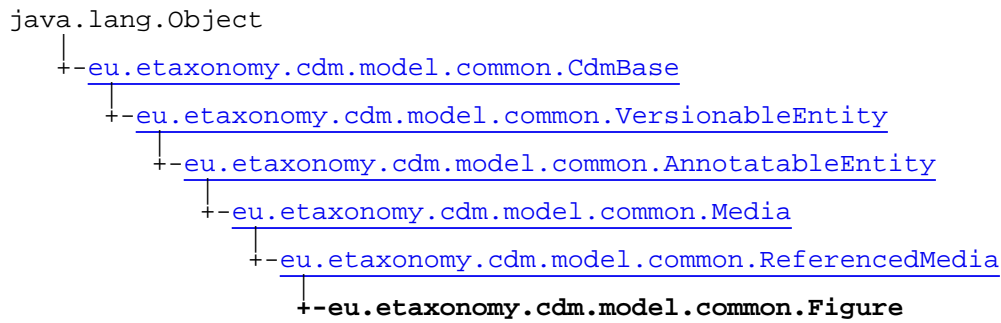   java.lang.String label)

Methods

XML_FRAGMENT

public final static ExtensionType **XML_FRAGMENT**()

RDF_FRAGMENT

public final static ExtensionType **RDF_FRAGMENT**()

eu.etaxonomy.cdm.model.common
Class Figure

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.Media
                    |
                    +-eu.etaxonomy.cdm.model.common.ReferencedMedia
                        |
                        +-eu.etaxonomy.cdm.model.common.Figure
```

All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **Figure**
extends ReferencedMedia

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

`annotations`, `markers`

Constructor Summary

public	Figure()

Methods inherited from class `eu.etaxonomy.cdm.model.common.ReferencedMedia`

`getCitation`, `getCitationMicroReference`, `setCitation`, `setCitationMicroReference`

Methods inherited from class `eu.etaxonomy.cdm.model.common.Media`

`addDescription`, `addDescription`, `addInstance`, `addRights`, `getArtist`, `getDescription`, `getInstances`, `getMediaCreated`, `getRights`, `getTitle`, `removeDescription`, `removeInstance`, `removeRights`, `setArtist`, `setDescription`, `setInstances`, `setMediaCreated`, `setRights`, `setTitle`

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

`addAnnotations`, `addMarker`, `getAnnotations`, `getMarkers`, `removeAnnotations`, `removeMarker`, `setAnnotations`, `setMarkers`

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

`getNextVersion`, `getPreviousVersion`, `getUpdated`, `getUpdatedBy`, `getValidFrom`, `getValidTo`, `setNextVersion`, `setPreviousVersion`, `setUpdated`, `setUpdatedBy`

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IReferencedEntity`

getCitation

Constructors

Figure

public **Figure**()

eu.etaxonomy.cdm.model.common
Interface IDefTerm

All Known Implementing Classes:
DefinedTermBase

---

public interface **IDefTerm**
extends

Method Summary

TermVocabulary	getVocabulary()
void	readCsvLine(java.util.List csvLine)
void	setVocabulary(TermVocabulary newVocabulary)
void	writeCsvLine(CSVWriter writer)

Methods

readCsvLine

public void **readCsvLine**(java.util.List csvLine)

---

writeCsvLine

public void **writeCsvLine**(CSVWriter writer)

---

getVocabulary

public TermVocabulary **getVocabulary**()

---

setVocabulary

public void **setVocabulary**(TermVocabulary newVocabulary)

---

eu.etaxonomy.cdm.model.common
Class IdentifiableEntity

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
```

All Implemented Interfaces:
IOriginalSource, java.io.Serializable

Direct Known Subclasses:
TaxonBase, TaxonNameBase, Sequence, DescriptionBase, IdentifyableMediaEntity

---

public abstract class **IdentifiableEntity**
extends AnnotatableEntity
implements java.io.Serializable, IOriginalSource

Superclass for the primary CDM classes that can be referenced from outside via LSIDs and contain a simple generated title string as a label for human reading. All subclasses inherit the ability to store additional properties that are stored as `Extensions`, basically a string value with a type term. Any number of right statements can be attached as well as multiple `OriginalSource` objects. Original sources carry a reference to the source, an ID within that source and the original title/label of this object as it was used in that source (originalNameString). A Taxon for example that was taken from 2 sources like FaunaEuropaea and IPNI would have two originalSource objects. The originalSource representing that taxon as it was found in IPNI would contain IPNI as the reference, the IPNI id of the taxon and the name of the taxon exactly as it was used in IPNI.

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`
annotations, markers

Constructor Summary

public	IdentifiableEntity()

Method Summary

void	addExtension(Extension extension)
void	addRights(Rights right)
void	addSource(OriginalSource source)
abstract java.lang.String	generateTitle()
java.util.Set	getExtensions()
java.lang.String	getLsid()

---

java.util.Set	getRights()	
java.util.Set	getSources()	
java.lang.String	getTitleCache()	
boolean	isProtectedTitleCache()	
void	removeExtension(Extension extension)	
void	removeRights(Rights right)	
void	removeSource(OriginalSource source)	
void	setExtensions(java.util.Set extensions)	
void	setLsid(java.lang.String lsid)	
void	setProtectedTitleCache(boolean protectedTitleCache)	
void	setRights(java.util.Set rights)	
void	setSources(java.util.Set sources)	
void	setTitleCache(java.lang.String titleCache)	
void	setTitleCache(java.lang.String titleCache, boolean protectCache)	

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Constructors

IdentifiableEntity

public **IdentifiableEntity**()

Methods

getLsid

public java.lang.String **getLsid**()

setLsid

public void **setLsid**(java.lang.String lsid)

generateTitle

public abstract java.lang.String **generateTitle**()

getTitleCache

public java.lang.String **getTitleCache**()

setTitleCache

public void **setTitleCache**(java.lang.String titleCache)

setTitleCache

public void **setTitleCache**(java.lang.String titleCache,
        boolean protectCache)

getRights

public java.util.Set **getRights**()

setRights

```
protected void setRights(java.util.Set rights)
```

addRights

```
public void addRights(Rights right)
```

removeRights

```
public void removeRights(Rights right)
```

getExtensions

```
public java.util.Set getExtensions()
```

setExtensions

```
protected void setExtensions(java.util.Set extensions)
```

addExtension

```
public void addExtension(Extension extension)
```

removeExtension

```
public void removeExtension(Extension extension)
```

isProtectedTitleCache

```
public boolean isProtectedTitleCache()
```

setProtectedTitleCache

```
public void setProtectedTitleCache(boolean protectedTitleCache)
```

getSources

```
public java.util.Set getSources()
```

setSources

```
protected void setSources(java.util.Set sources)
```

addSource

```
public void addSource(OriginalSource source)
```
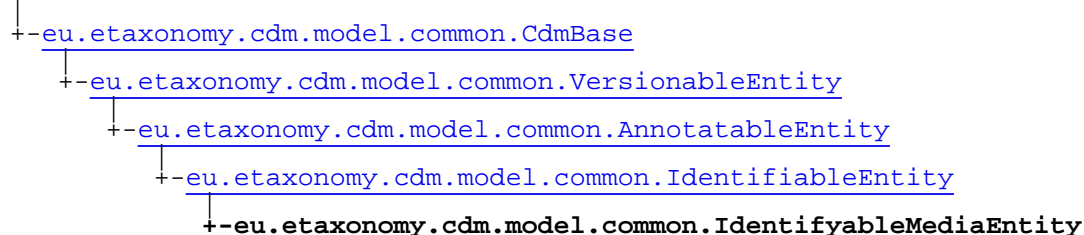
removeSource

```
public void removeSource(OriginalSource source)
```

eu.etaxonomy.cdm.model.common
Class IdentifyableMediaEntity

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
       |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           |
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               |
               +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                   |
                   +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
```

All Implemented Interfaces:
> IMediaDocumented, java.io.Serializable, IOriginalSource

Direct Known Subclasses:
> ReferenceBase, Collection, SpecimenOrObservationBase, Agent

---

public abstract class **IdentifyableMediaEntity**
extends IdentifiableEntity
implements IOriginalSource, java.io.Serializable, IMediaDocumented

---

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

`annotations`,`markers`

Constructor Summary

public	`IdentifyableMediaEntity`()

Method Summary

void	`addMedia`(Media media)
java.util.Set	`getMedia`()
void	`removeMedia`(Media media)
void	`setMedia`(java.util.Set media)

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifiableEntity`

`addExtension`, `addRights`, `addSource`, `generateTitle`, `getExtensions`, `getLsid`, `getRights`, `getSources`, `getTitleCache`, `isProtectedTitleCache`, `removeExtension`, `removeRights`, `removeSource`, `setExtensions`, `setLsid`, `setProtectedTitleCache`, `setRights`, `setSources`, `setTitleCache`, `setTitleCache`

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

IdentifyableMediaEntity

public **IdentifyableMediaEntity**()

Methods

getMedia

public java.util.Set **getMedia**()

setMedia

protected void **setMedia**(java.util.Set media)

addMedia

public void **addMedia**(Media media)

removeMedia

public void **removeMedia**(Media media)

public void **removeMedia**(Media media)

eu.etaxonomy.cdm.model.common
Interface IEvent

All Known Implementing Classes:
[EventBase](#)

---

public interface **IEvent**
extends

Method Summary

[Agent](#)	[getActor](#)()
[TimePeriod](#)	[getTimeperiod](#)()
void	[setActor](#)([Agent](#) actor)
void	[setTimeperiod](#)([TimePeriod](#) timeperiod)

Methods

getTimeperiod

public [TimePeriod](#) **getTimeperiod**()

---

setTimeperiod

public void **setTimeperiod**([TimePeriod](#) timeperiod)

---

getActor

public [Agent](#) **getActor**()

---

setActor

public void **setActor**([Agent](#) actor)

---

eu.etaxonomy.cdm.model.common
Class ImageFile

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.MediaInstance
                |
                +-eu.etaxonomy.cdm.model.common.ImageFile
```
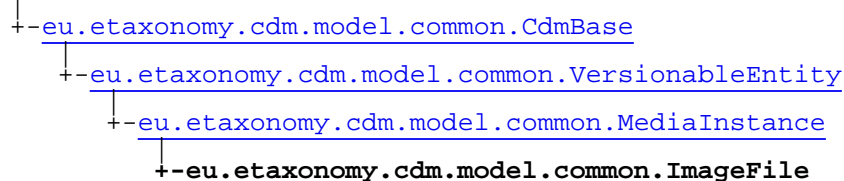
All Implemented Interfaces:
java.io.Serializable

Direct Known Subclasses:
MovieFile

---

public class **ImageFile**
extends MediaInstance

Constructor Summary

public	ImageFile()

Method Summary

int	getHeight()
int	getWidth()
void	setHeight(int height)
void	setWidth(int width)

Methods inherited from class eu.etaxonomy.cdm.model.common.MediaInstance

getMedia, getMimeType, getSize, getUri, setMedia, setMimeType, setSize, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

ImageFile

public **ImageFile**()

Methods

getHeight

public int **getHeight**()

setHeight

public void **setHeight**(int height)

Parameters:
    `height` - height

getWidth

public int **getWidth**()

setWidth

public void **setWidth**(int width)

Parameters:
    `width` - width

eu.etaxonomy.cdm.model.common
Interface IMediaDocumented

All Known Implementing Classes:
> Sequence, IdentifyableMediaEntity

---

public interface **IMediaDocumented**
extends

Method Summary

java.util.Set	getMedia()

Methods

getMedia

```
public java.util.Set getMedia()
```

---

eu.etaxonomy.cdm.model.common
Interface IOriginalSource

All Known Implementing Classes:
> [IdentifiableEntity](#)

---

public interface **IOriginalSource**
extends

Method Summary

void	[addSource](#)([OriginalSource](#) source)
java.util.Set	[getSources](#)()
void	[removeSource](#)([OriginalSource](#) source)

Methods

getSources

public java.util.Set **getSources**()

---

addSource

public void **addSource**([OriginalSource](#) source)

---

removeSource

public void **removeSource**([OriginalSource](#) source)

---

eu.etaxonomy.cdm.model.common
Interface IReferencedEntity

All Known Implementing Classes:
TaxonNameBase, Sequence, ReferencedEntityBase, ReferencedMedia

public interface **IReferencedEntity**
extends

Method Summary

ReferenceBase	getCitation()

Methods

getCitation

public ReferenceBase **getCitation**()

eu.etaxonomy.cdm.model.common
Interface IRelated

public interface **IRelated**
extends

Method Summary

void	addRelationship(RelationshipBase relation)

Methods

addRelationship

public void **addRelationship**(RelationshipBase relation)

eu.etaxonomy.cdm.model.common
Class Keyword

```
java.lang.Object
   └─eu.etaxonomy.cdm.model.common.CdmBase
       └─eu.etaxonomy.cdm.model.common.VersionableEntity
           └─eu.etaxonomy.cdm.model.common.TermBase
               └─eu.etaxonomy.cdm.model.common.DefinedTermBase
                   └─eu.etaxonomy.cdm.model.common.OrderedTermBase
                       +-eu.etaxonomy.cdm.model.common.Keyword
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **Keyword**
extends OrderedTermBase

simple keywords. could be taxonomic scope, geographic scope or anything else

---

Fields inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

orderIndex

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	Keyword()
public	Keyword(java.lang.String term, java.lang.String label)

Methods inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

Keyword

```
public Keyword()
```

Keyword

```
public Keyword(java.lang.String term,
               java.lang.String label)
```

eu.etaxonomy.cdm.model.common
Class Language

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.Language
```
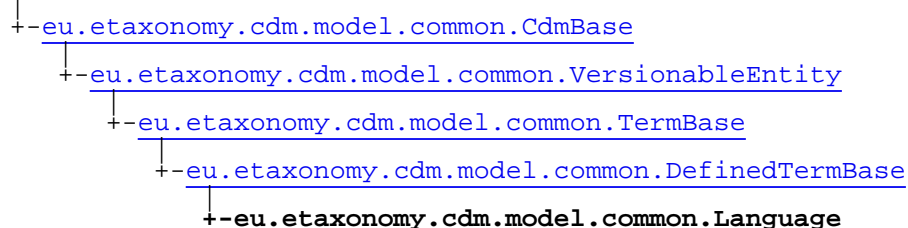
All Implemented Interfaces:
java.io.Serializable, IDefTerm

---

public class **Language**
extends DefinedTermBase

list of languages according to current internet best practices as given by IANA or ISO codes. http://www.ietf.org/rfc/rfc4646.txt http://www.loc.gov/standards/iso639-2/php/English_list.php

---

Field Summary

public static final	uuidEnglish

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	Language()
public	Language(java.util.UUID uuid)
public	Language(char[] iso639_1, char[] iso639_2, java.lang.String englishLabel, java.lang.String frenchLabel)
public	Language(java.lang.String text, java.lang.String label, Language lang)
public	Language(java.lang.String label, java.lang.String text)

Method Summary

static Language	ARABIC()
static Language	CHINESE()
static Language	DEFAULT()

static [Language](#)	[DUTCH](#)()	
static [Language](#)	[ENGLISH](#)()	
static [Language](#)	[FRENCH](#)()	
static [Language](#)	[GERMAN](#)()	
static [Language](#)	[getUUID](#)(java.util.UUID uuid)	
static [Language](#)	[HINDI](#)()	
static [Language](#)	[ITALIAN](#)()	
static [Language](#)	[JAPANESE](#)()	
static [Language](#)	[POLISH](#)()	
static [Language](#)	[PORTUGUESE](#)()	
void	[readCsvLine](#)(java.util.List csvLine)	
static [Language](#)	[RUSSIAN](#)()	
static [Language](#)	[SPANISH](#)()	
void	[writeCsvLine](#)(CSVWriter writer)	

Methods inherited from class [eu.etaxonomy.cdm.model.common.DefinedTermBase](#)

[addIncludes](#), [addMedia](#), [findByUuid](#), [getGeneralizationOf](#), [getIncludes](#), [getKindOf](#), [getMedia](#), [getPartOf](#), [getPersistentVocabulary](#), [getVocabulary](#), [readCsvLine](#), [readCsvLine](#), [removeIncludes](#), [removeMedia](#), [setGeneralizationOf](#), [setIncludes](#), [setKindOf](#), [setMedia](#), [setPartOf](#), [setPersistentVocabulary](#), [setVocabulary](#), [setVocabularyStore](#), [writeCsvLine](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.TermBase](#)

[addRepresentation](#), [equals](#), [getDescription](#), [getDescription](#), [getLabel](#), [getLabel](#), [getRepresentation](#), [getRepresentations](#), [getUri](#), [removeRepresentation](#), [setRepresentations](#), [setUri](#), [toString](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.VersionableEntity](#)

[getNextVersion](#), [getPreviousVersion](#), [getUpdated](#), [getUpdatedBy](#), [getValidFrom](#), [getValidTo](#), [setNextVersion](#), [setPreviousVersion](#), [setUpdated](#), [setUpdatedBy](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase](#)

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Fields

uuidEnglish

public static final java.util.UUID **uuidEnglish**

Constructors

Language

public **Language**()

Language

public **Language**(java.util.UUID uuid)

Language

```
public Language(char[] iso639_1,
                char[] iso639_2,
                java.lang.String englishLabel,
                java.lang.String frenchLabel)
```

Language

```
public Language(java.lang.String text,
                java.lang.String label,
                Language lang)
```

(continued from last page)

Language

```
public Language(java.lang.String label,
                java.lang.String text)
```

Methods

getUUID

```
public final static Language getUUID(java.util.UUID uuid)
```

DEFAULT

```
public final static Language DEFAULT()
```

CHINESE

```
public final static Language CHINESE()
```

ENGLISH

```
public final static Language ENGLISH()
```

SPANISH

```
public final static Language SPANISH()
```

HINDI

```
public final static Language HINDI()
```

ARABIC

```
public final static Language ARABIC()
```

RUSSIAN

```
public final static Language RUSSIAN()
```

PORTUGUESE

```
public final static Language PORTUGUESE()
```

JAPANESE

```
public final static Language JAPANESE()
```

GERMAN

```
public final static Language GERMAN()
```

FRENCH

```
public final static Language FRENCH()
```

ITALIAN

```
public final static Language ITALIAN()
```

DUTCH

```
public final static Language DUTCH()
```

POLISH

```
public final static Language POLISH()
```
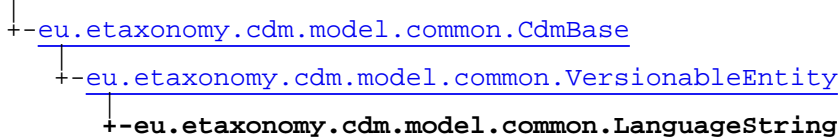
readCsvLine

```
public void readCsvLine(java.util.List csvLine)
```

writeCsvLine

```
public void writeCsvLine(CSVWriter writer)
```

eu.etaxonomy.cdm.model.common
Class LanguageString

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.LanguageString
```

All Implemented Interfaces:
> java.io.Serializable

Direct Known Subclasses:
> Annotation, Representation, Rights

---

public class **LanguageString**
extends VersionableEntity

Field Summary

protected	text

Constructor Summary

public	LanguageString()
public	LanguageString(java.lang.String text, Language lang)

Method Summary

Language	getLanguage()
java.lang.String	getLanguageLabel()
java.lang.String	getLanguageLabel(Language lang)
java.lang.String	getLanguageText()
java.lang.String	getLanguageText(Language lang)
java.lang.String	getText()
void	setLanguage(Language language)
void	setText(java.lang.String text)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

---

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

text

protected java.lang.String **text**

Constructors

LanguageString

public **LanguageString**()

LanguageString

public **LanguageString**(java.lang.String text,
                        Language lang)

Methods

getLanguage

public Language **getLanguage**()

setLanguage

public void **setLanguage**(Language language)

getText

```
public java.lang.String getText()
```

setText

```
protected void setText(java.lang.String text)
```

getLanguageLabel

```
public java.lang.String getLanguageLabel()
```

getLanguageLabel

```
public java.lang.String getLanguageLabel(Language lang)
```
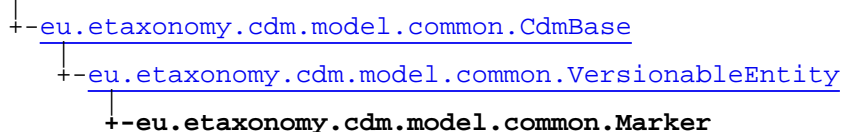
getLanguageText

```
public java.lang.String getLanguageText()
```

getLanguageText

```
public java.lang.String getLanguageText(Language lang)
```

eu.etaxonomy.cdm.model.common
Class Marker

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.Marker
```

All Implemented Interfaces:
> java.io.Serializable

---

public class **Marker**
extends VersionableEntity

This class aims to make available some "flags" for identifiable entities in a flexible way. Application developers (and even users) can define their own "flags" as a MarkerType.

Constructor Summary

public	Marker()

Method Summary

boolean	getFlag()
AnnotatableEntity	getMarkedObj()
MarkerType	getType()
void	setFlag(boolean flag)
void	setMarkedObj(AnnotatableEntity newMarkedObject)
void	setType(MarkerType type)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

Marker

public **Marker**()

Methods

getMarkedObj

public [AnnotatableEntity](#) **getMarkedObj**()

setMarkedObj

protected void **setMarkedObj**([AnnotatableEntity](#) newMarkedObject)

getType

public [MarkerType](#) **getType**()

setType

public void **setType**([MarkerType](#) type)

getFlag

public boolean **getFlag**()

setFlag

public void **setFlag**(boolean flag)

eu.etaxonomy.cdm.model.common
Class MarkerType

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.TermBase
                │
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    │
                    +-eu.etaxonomy.cdm.model.common.MarkerType
```
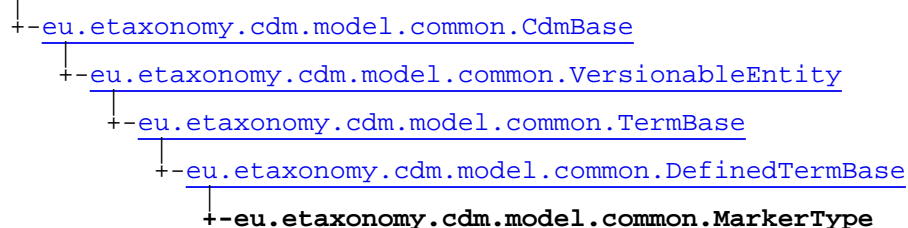
All Implemented Interfaces:
        java.io.Serializable, IDefTerm

---

public class **MarkerType**
extends DefinedTermBase

Marker types similar to dynamically defined attributes. These content types like "IS_DOUBTFUL", "COMPLETE" or specific local flags.

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	**MarkerType**(java.lang.String term, java.lang.String label)

Method Summary

static MarkerType	**COMPLETE**()
static MarkerType	**IMPORTED**()
static MarkerType	**IS_DOUBTFUL**()
static MarkerType	**TO_BE_CHECKED**()

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

MarkerType

```
public MarkerType(java.lang.String term,
                  java.lang.String label)
```

Methods

IMPORTED

```
public final static MarkerType IMPORTED()
```

TO_BE_CHECKED

```
public final static MarkerType TO_BE_CHECKED()
```

IS_DOUBTFUL

```
public final static MarkerType IS_DOUBTFUL()
```

COMPLETE

public final static MarkerType **COMPLETE**()

COMPLETE

public final static MarkerType **COMPLETE**()

eu.etaxonomy.cdm.model.common
Class Media

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.Media
```
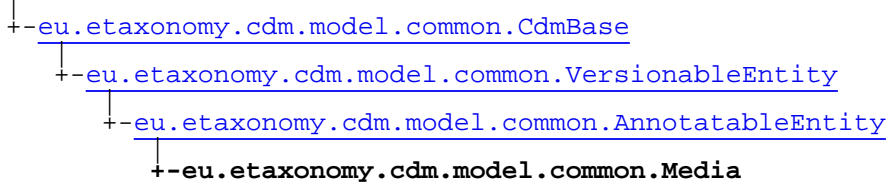
All Implemented Interfaces:
> java.io.Serializable

Direct Known Subclasses:
> IdentificationKey, ReferencedMedia

---

public class **Media**
extends AnnotatableEntity

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	Media()

Method Summary

void	addDescription(LanguageString description)
void	addDescription(java.lang.String text, Language lang)
void	addInstance(MediaInstance instance)
void	addRights(Rights rights)
Agent	getArtist()
MultilanguageSet	getDescription()
java.util.Set	getInstances()
java.util.Calendar	getMediaCreated()
java.util.Set	getRights()

MultilanguageSet	getTitle()	
void	removeDescription(Language lang)	
void	removeInstance(MediaInstance instance)	
void	removeRights(Rights rights)	
void	setArtist(Agent artist)	
void	setDescription(MultilanguageSet description)	
void	setInstances(java.util.Set instances)	
void	setMediaCreated(java.util.Calendar mediaCreated)	
void	setRights(java.util.Set rights)	
void	setTitle(MultilanguageSet title)	

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

Media

public **Media**()

Methods

getInstances

`public java.util.Set` **`getInstances`**`()`

setInstances

`protected void` **`setInstances`**`(java.util.Set instances)`

addInstance

`public void` **`addInstance`**`(`MediaInstance` instance)`

removeInstance

`public void` **`removeInstance`**`(`MediaInstance` instance)`

getArtist

`public` Agent **`getArtist`**`()`

setArtist

`public void` **`setArtist`**`(`Agent` artist)`

getRights

`public java.util.Set` **`getRights`**`()`

setRights

`protected void` **`setRights`**`(java.util.Set rights)`

addRights

`public void` **`addRights`**`(`Rights` rights)`

removeRights

public void **removeRights**(Rights rights)

getTitle

public MultilanguageSet **getTitle**()

setTitle

public void **setTitle**(MultilanguageSet title)

getMediaCreated

public java.util.Calendar **getMediaCreated**()

setMediaCreated

public void **setMediaCreated**(java.util.Calendar mediaCreated)

getDescription

public MultilanguageSet **getDescription**()

setDescription

protected void **setDescription**(MultilanguageSet description)

addDescription

public void **addDescription**(LanguageString description)

addDescription

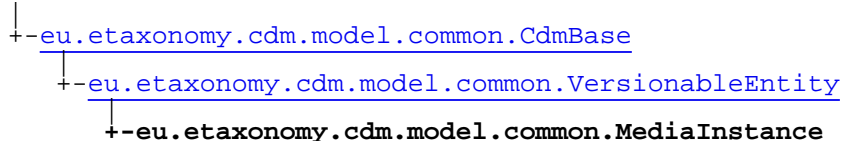public void **addDescription**(java.lang.String text,
        Language lang)

removeDescription

public void **removeDescription**(Language lang)

(continued from last page)

eu.etaxonomy.cdm.model.common
Class MediaInstance

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.MediaInstance
```

All Implemented Interfaces:
> java.io.Serializable

Direct Known Subclasses:
> AudioFile, ImageFile

---

public class **MediaInstance**
extends VersionableEntity

metadata for an external file such as images, phylogenetic trees, or audio recordings available through the location attribute!

Constructor Summary

public	MediaInstance()

Method Summary

Media	getMedia()
java.lang.String	getMimeType()
int	getSize()
java.lang.String	getUri()
void	setMedia(Media media)
void	setMimeType(java.lang.String mimeType)
void	setSize(int size)
void	setUri(java.lang.String uri)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity
getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

[addPropertyChangeListener](), [addPropertyChangeListener](), [equals](), [firePropertyChange](),
[firePropertyChange](), [firePropertyChange](), [firePropertyChange](), [firePropertyChange](),
[firePropertyChange](), [getCreated](), [getCreatedBy](), [getId](), [getUuid](), [hasListeners](),
[removePropertyChangeListener](), [removePropertyChangeListener](), [setCreated](), [setCreatedBy](),
[setId](), [setUuid](), [toString]()

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

MediaInstance

public **MediaInstance**()

Methods

getMimeType

public java.lang.String **getMimeType**()

setMimeType

public void **setMimeType**(java.lang.String mimeType)

Parameters:
   `mimeType` - mimeType

getUri

public java.lang.String **getUri**()

setUri

public void **setUri**(java.lang.String uri)

Parameters:
   `uri` - uri

getSize

public int **getSize**()

setSize

```
public void setSize(int size)
```

Parameters:
   size - size

getMedia

```
public Media getMedia()
```

setMedia

```
public void setMedia(Media media)
```

```
public void setSize(int size)
```

eu.etaxonomy.cdm.model.common
Class MovieFile

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.MediaInstance
                |
                +-eu.etaxonomy.cdm.model.common.ImageFile
                    |
                    +-eu.etaxonomy.cdm.model.common.MovieFile
```
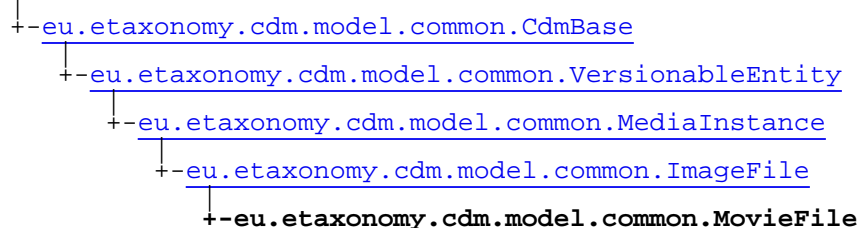
All Implemented Interfaces:
> java.io.Serializable

---

public class **MovieFile**
extends ImageFile

Constructor Summary

public	MovieFile()

Method Summary

int	getDuration()
void	setDuration(int duration)

Methods inherited from class eu.etaxonomy.cdm.model.common.ImageFile

getHeight, getWidth, setHeight, setWidth

Methods inherited from class eu.etaxonomy.cdm.model.common.MediaInstance

getMedia, getMimeType, getSize, getUri, setMedia, setMimeType, setSize, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

MovieFile

public **MovieFile**()

Methods

getDuration

public int **getDuration**()

setDuration

public void **setDuration**(int duration)

    Parameters:
        duration - duration

eu.etaxonomy.cdm.model.common
Class MultilanguageSet

```
java.lang.Object
    │
    +-java.util.AbstractCollection
        │
        +-java.util.AbstractSet
            │
            +-java.util.HashSet
                │
                +-eu.etaxonomy.cdm.model.common.MultilanguageSet
```

All Implemented Interfaces:
> java.util.Collection**,** java.util.Set**,** java.io.Serializable**,** java.lang.Cloneable**,** java.util.Set

---

public class **MultilanguageSet**
extends java.util.HashSet

Constructor Summary

public	[MultilanguageSet](#)()

Method Summary

void	[add](#)(java.lang.String text, [Language](#) lang)
[LanguageString](#)	[get](#)([Language](#) lang)
void	[remove](#)([Language](#) lang)

Methods inherited from class java.util.HashSet
add, clear, clone, contains, isEmpty, iterator, remove, size

Methods inherited from class java.util.AbstractSet
equals, hashCode, removeAll

Methods inherited from class java.util.AbstractCollection
add, addAll, clear, contains, containsAll, isEmpty, iterator, remove, removeAll, retainAll, size, toArray, toArray, toString

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.util.Collection
add, addAll, clear, contains, containsAll, equals, hashCode, isEmpty, iterator, remove, removeAll, retainAll, size, toArray, toArray

---

Methods inherited from interface `java.lang.Iterable`

```
iterator
```

Methods inherited from interface `java.util.Set`

```
add, addAll, clear, contains, containsAll, equals, hashCode, isEmpty, iterator,
remove, removeAll, retainAll, size, toArray, toArray
```

Methods inherited from interface `java.util.Collection`

```
add, addAll, clear, contains, containsAll, equals, hashCode, isEmpty, iterator,
remove, removeAll, retainAll, size, toArray, toArray
```

Methods inherited from interface `java.lang.Iterable`

```
iterator
```

Methods inherited from interface `java.util.Set`

```
add, addAll, clear, contains, containsAll, equals, hashCode, isEmpty, iterator,
remove, removeAll, retainAll, size, toArray, toArray
```

Methods inherited from interface `java.util.Collection`

```
add, addAll, clear, contains, containsAll, equals, hashCode, isEmpty, iterator,
remove, removeAll, retainAll, size, toArray, toArray
```

Methods inherited from interface `java.lang.Iterable`

```
iterator
```

Constructors

MultilanguageSet

```
public MultilanguageSet()
```

Methods

add

```
public void add(java.lang.String text,
        Language lang)
```

remove

```
public void remove(Language lang)
```

get

public LanguageString **get**(Language lang)

get

public LanguageString **get**(Language lang)

eu.etaxonomy.cdm.model.common
Class NoDefinedTermClassException

```
java.lang.Object
    |
    +-java.lang.Throwable
        |
        +-java.lang.Exception
            |
            +-eu.etaxonomy.cdm.model.common.NoDefinedTermClassException
```

All Implemented Interfaces:
        java.io.Serializable

---

public class **NoDefinedTermClassException**
extends java.lang.Exception

Constructor Summary

public	[NoDefinedTermClassException]()()
public	[NoDefinedTermClassException]()(java.lang.String arg0)
public	[NoDefinedTermClassException]()(java.lang.Throwable arg0)
public	[NoDefinedTermClassException]()(java.lang.String arg0, java.lang.Throwable arg1)

Methods inherited from class `java.lang.Throwable`

fillInStackTrace, getCause, getLocalizedMessage, getMessage, getStackTrace, initCause, printStackTrace, printStackTrace, printStackTrace, setStackTrace, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Constructors

NoDefinedTermClassException

public **NoDefinedTermClassException**()

NoDefinedTermClassException

public **NoDefinedTermClassException**(java.lang.String arg0)

NoDefinedTermClassException

```
public NoDefinedTermClassException(java.lang.Throwable arg0)
```

NoDefinedTermClassException

```
public NoDefinedTermClassException(java.lang.String arg0,
                                   java.lang.Throwable arg1)
```

eu.etaxonomy.cdm.model.common
Class OrderedTermBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
```

All Implemented Interfaces:
> java.lang.Comparable, java.io.Serializable, IDefTerm

Direct Known Subclasses:
> NomenclaturalStatusType, Rank, TypeDesignationStatus, NamedArea, NamedAreaLevel, Modifier, PresenceAbsenceTermBase, State, Keyword, RelationshipTermBase

---

public abstract class **OrderedTermBase**
extends DefinedTermBase
implements IDefTerm, java.io.Serializable, java.lang.Comparable

---

Field Summary

protected	orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	OrderedTermBase()
public	OrderedTermBase(java.lang.String term, java.lang.String label)

Method Summary

int	compareTo(OrderedTermBase orderedTerm)
boolean	decreaseIndex(OrderedTermVocabulary vocabulary) To be used only by OrderedTermVocabulary
boolean	equals(java.lang.Object o)
boolean	incrementIndex(OrderedTermVocabulary vocabulary) To be used only by OrderedTermVocabulary

---

boolean	isHigher(OrderedTermBase orderedTerm)
	If this term is higher than the parameter term, true is returned, else false.
boolean	isLower(OrderedTermBase orderedTerm)
	If this term is lower than the parameter term, true is returned, else false.
void	setVocabulary(TermVocabulary newVocabulary)

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IDefTerm`

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface `java.lang.Comparable`

compareTo

Fields

orderIndex

```
protected int orderIndex
```

Constructors

OrderedTermBase

public **OrderedTermBase**()

OrderedTermBase

public **OrderedTermBase**(java.lang.String term,
                          java.lang.String label)

Methods

compareTo

public int **compareTo**(OrderedTermBase orderedTerm)

isLower

public boolean **isLower**(OrderedTermBase orderedTerm)

If this term is lower than the parameter term, true is returned, else false. If the parameter term is null, an Exception is thrown.

Parameters:
orderedTerm

Returns:
boolean result of the comparison

isHigher

public boolean **isHigher**(OrderedTermBase orderedTerm)

If this term is higher than the parameter term, true is returned, else false. If the parameter term is null, an Exception is thrown.

Parameters:
orderedTerm

Returns:
boolean result of the comparison

setVocabulary

public void **setVocabulary**(TermVocabulary newVocabulary)

decreaseIndex

`public boolean` **`decreaseIndex`**`(`OrderedTermVocabulary` vocabulary)`

> To be used only by OrderedTermVocabulary

incrementIndex

`public boolean` **`incrementIndex`**`(`OrderedTermVocabulary` vocabulary)`

> To be used only by OrderedTermVocabulary

equals

`public boolean` **`equals`**`(java.lang.Object o)`

> Is true if UUID and created timestamp are the same for the passed Object and this one.

`public boolean` **`decreaseIndex`**`(`OrderedTermVocabulary` vocabulary)`

> To be used only by OrderedTermVocabulary

eu.etaxonomy.cdm.model.common
Class OrderedTermVocabulary

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.TermVocabulary
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermVocabulary
```
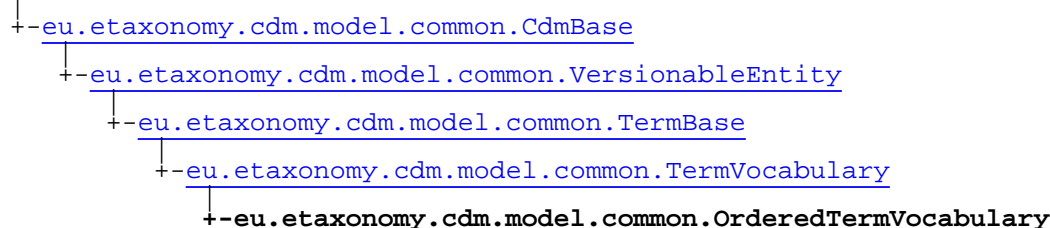
All Implemented Interfaces:
> java.io.Serializable, java.lang.Iterable

---

public class **OrderedTermVocabulary**
extends TermVocabulary

Fields inherited from class `eu.etaxonomy.cdm.model.common.TermVocabulary`

termClass, terms

Constructor Summary

public	OrderedTermVocabulary()
public	OrderedTermVocabulary(java.lang.String term, java.lang.String label, java.lang.String termSourceUri)

Method Summary

void	addTerm(OrderedTermBase term)
void	addTermAbove(OrderedTermBase termToBeAdded, OrderedTermBase lowerTerm)
void	addTermBelow(OrderedTermBase termToBeAdded, OrderedTermBase higherTerm)
java.util.SortedSet	getEqualTerms(OrderedTermBase otb)
java.util.SortedSet	getHigherAndEqualTerms(OrderedTermBase otb)
java.util.SortedSet	getHigherTerms(OrderedTermBase otb)
OrderedTermBase	getHighestTerm()
java.util.SortedSet	getLowerAndEqualTerms(OrderedTermBase otb)
java.util.SortedSet	getLowerTerms(OrderedTermBase otb)

OrderedTermBase	getLowestTerm()
java.util.Set	getNewTermSet()
OrderedTermBase	getNextHigherTerm(OrderedTermBase otb)
OrderedTermBase	getNextLowerTerm(OrderedTermBase otb)
boolean	indexChangeAllowed(OrderedTermBase otb)
void	removeTerm(OrderedTermBase term)

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermVocabulary`

addTerm, findByUuid, getNewTermSet, getPersistentTerms, getTermClass, getTerms,
getTermSourceUri, getUUID, iterator, LANGUAGE, removeTerm, setPersistentTerms,
setTerms, setTermSourceUri, size

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel,
getRepresentation, getRepresentations, getUri, removeRepresentation,
setRepresentations, setUri, toString

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom,
getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange,
firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange,
firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners,
removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy,
setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Methods inherited from interface `java.lang.Iterable`

iterator

Constructors

OrderedTermVocabulary

public **OrderedTermVocabulary**()

OrderedTermVocabulary

```
public OrderedTermVocabulary(java.lang.String term,
                             java.lang.String label,
                             java.lang.String termSourceUri)
```

Parameters:
    term
    label
    termSourceUri

Methods

getNewTermSet

```
protected java.util.Set getNewTermSet()
```

getHigherAndEqualTerms

```
public java.util.SortedSet getHigherAndEqualTerms(OrderedTermBase otb)
```

getHigherTerms

```
public java.util.SortedSet getHigherTerms(OrderedTermBase otb)
```

getLowerAndEqualTerms

```
public java.util.SortedSet getLowerAndEqualTerms(OrderedTermBase otb)
```

getLowerTerms

```
public java.util.SortedSet getLowerTerms(OrderedTermBase otb)
```

getEqualTerms

```
public java.util.SortedSet getEqualTerms(OrderedTermBase otb)
```

getNextHigherTerm

```
public OrderedTermBase getNextHigherTerm(OrderedTermBase otb)
```

getNextLowerTerm

public OrderedTermBase **getNextLowerTerm**(OrderedTermBase otb)

getLowestTerm

public OrderedTermBase **getLowestTerm**()

getHighestTerm

public OrderedTermBase **getHighestTerm**()

addTerm

public void **addTerm**(OrderedTermBase term)
    throws WrongTermTypeException

addTermAbove

public void **addTermAbove**(OrderedTermBase termToBeAdded,
        OrderedTermBase lowerTerm)
    throws WrongTermTypeException

addTermBelow

public void **addTermBelow**(OrderedTermBase termToBeAdded,
        OrderedTermBase higherTerm)
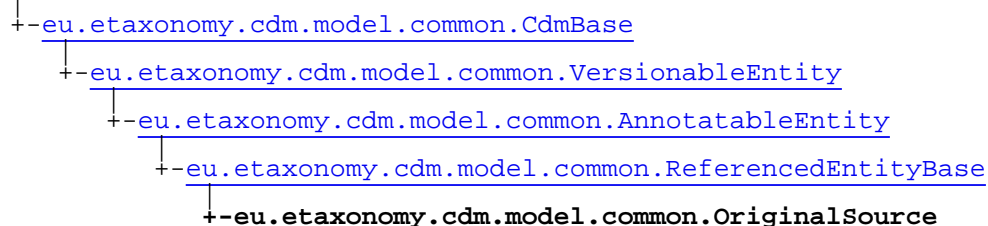   throws WrongTermTypeException

removeTerm

public void **removeTerm**(OrderedTermBase term)

indexChangeAllowed

public boolean **indexChangeAllowed**(OrderedTermBase otb)

eu.etaxonomy.cdm.model.common
Class OriginalSource

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OriginalSource
```

All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **OriginalSource**
extends ReferencedEntityBase

Other names/labels/titles (abreviated or not) for the same object (person, reference, source, etc.)

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	OriginalSource()

Method Summary

java.lang.String	getIdInSource()
IdentifiableEntity	getSourcedObj()
void	setIdInSource(java.lang.String idInSource)
void	setSourcedObj(IdentifiableEntity sourcedObj)

Methods inherited from class `eu.etaxonomy.cdm.model.common.ReferencedEntityBase`

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

---

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

OriginalSource

public **OriginalSource**()

Methods

getIdInSource

public java.lang.String **getIdInSource**()

setIdInSource

public void **setIdInSource**(java.lang.String idInSource)

getSourcedObj

public IdentifiableEntity **getSourcedObj**()

setSourcedObj

public void **setSourcedObj**(IdentifiableEntity sourcedObj)

eu.etaxonomy.cdm.model.common
Class ReferencedEntityBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
```
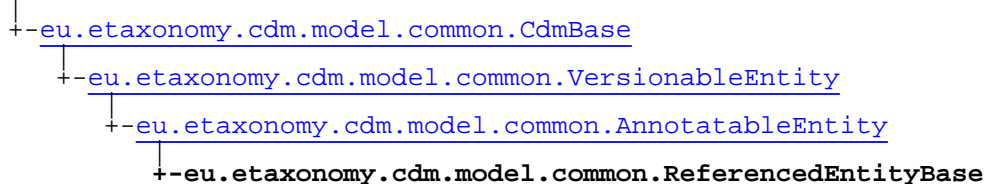
All Implemented Interfaces:
> IReferencedEntity, java.io.Serializable

Direct Known Subclasses:
> SynonymRelationship, TaxonRelationship, HybridRelationship, NameRelationship, NameTypeDesignation, NomenclaturalStatus, SpecimenTypeDesignation, FeatureBase, OriginalSource, RelationshipBase

---

public abstract class **ReferencedEntityBase**
extends AnnotatableEntity
implements java.io.Serializable, IReferencedEntity

abstract class for all objects that may have a reference

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	ReferencedEntityBase()
public	ReferencedEntityBase(ReferenceBase citation, java.lang.String citationMicroReference, java.lang.String originalNameString)

Method Summary

ReferenceBase	getCitation()
java.lang.String	getCitationMicroReference()
java.lang.String	getOriginalNameString()
void	setCitation(ReferenceBase citation)
void	setCitationMicroReference(java.lang.String citationMicroReference)
void	setOriginalNameString(java.lang.String originalNameString)

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

ReferencedEntityBase

public **ReferencedEntityBase**()

ReferencedEntityBase

public **ReferencedEntityBase**(ReferenceBase citation,
                             java.lang.String citationMicroReference,
                             java.lang.String originalNameString)

Methods

getCitationMicroReference

public java.lang.String **getCitationMicroReference**()

---

setCitationMicroReference

public void **setCitationMicroReference**(java.lang.String citationMicroReference)

---

getOriginalNameString

```
public java.lang.String getOriginalNameString()
```

setOriginalNameString

```
public void setOriginalNameString(java.lang.String originalNameString)
```

getCitation

```
public ReferenceBase getCitation()
```

setCitation

```
public void setCitation(ReferenceBase citation)
```

eu.etaxonomy.cdm.model.common
Class ReferencedMedia

```
java.lang.Object
   │
   +-eu.etaxonomy.cdm.model.common.CdmBase
       │
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           │
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               │
               +-eu.etaxonomy.cdm.model.common.Media
                   │
                   +-eu.etaxonomy.cdm.model.common.ReferencedMedia
```
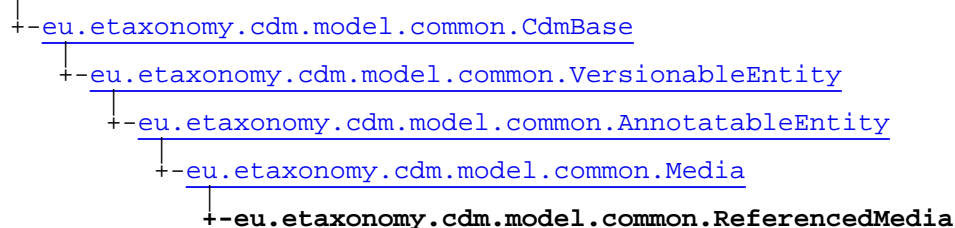
All Implemented Interfaces:
> IReferencedEntity, java.io.Serializable

Direct Known Subclasses:
> PhylogeneticTree, Figure

---

public abstract class **ReferencedMedia**
extends Media
implements java.io.Serializable, IReferencedEntity

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	ReferencedMedia()

Method Summary

ReferenceBase	getCitation()
java.lang.String	getCitationMicroReference()
void	setCitation(ReferenceBase citation)
void	setCitationMicroReference(java.lang.String citationMicroReference)

Methods inherited from class `eu.etaxonomy.cdm.model.common.Media`

addDescription, addDescription, addInstance, addRights, getArtist, getDescription, getInstances, getMediaCreated, getRights, getTitle, removeDescription, removeInstance, removeRights, setArtist, setDescription, setInstances, setMediaCreated, setRights, setTitle

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

---

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

ReferencedMedia

public **ReferencedMedia**()

Methods

getCitation

public ReferenceBase **getCitation**()

setCitation

public void **setCitation**(ReferenceBase citation)

getCitationMicroReference

public java.lang.String **getCitationMicroReference**()

## setCitationMicroReference

```
public void setCitationMicroReference(java.lang.String citationMicroReference)
```

setCitationMicroReference

```
public void setCitationMicroReference(java.lang.String citationMicroReference)
```

eu.etaxonomy.cdm.model.common
Class RelationshipBase

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
       |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           |
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               |
               +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                   |
                   +-eu.etaxonomy.cdm.model.common.RelationshipBase
```
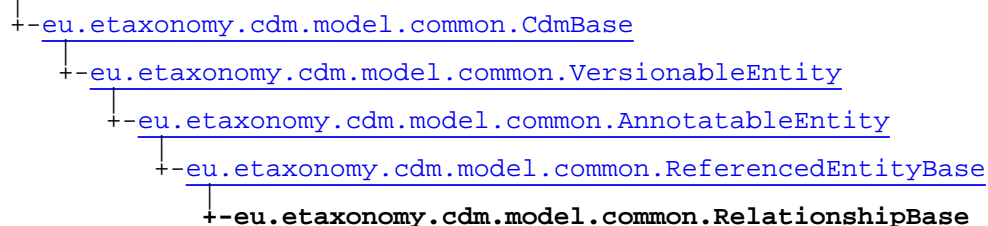
All Implemented Interfaces:
>   java.io.Serializable, IReferencedEntity

---

public abstract class **RelationshipBase**
extends ReferencedEntityBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

protected	**RelationshipBase**(IRelated from, IRelated to, RelationshipTermBase type, ReferenceBase citation, java.lang.String citationMicroReference) creates a relationship between 2 names and adds this relationship object to the respective name relation sets

Method Summary

IRelated	getRelationFrom()
IRelated	getRelationTo()
RelationshipTermBase	getType()

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase
getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity
getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

RelationshipBase

```
protected RelationshipBase(IRelated from,
                           IRelated to,
                           RelationshipTermBase type,
                           ReferenceBase citation,
                           java.lang.String citationMicroReference)
```

creates a relationship between 2 names and adds this relationship object to the respective name relation sets

Parameters:
    toName
    fromName
    type
    ruleConsidered

Methods

getType

```
public RelationshipTermBase getType()
```
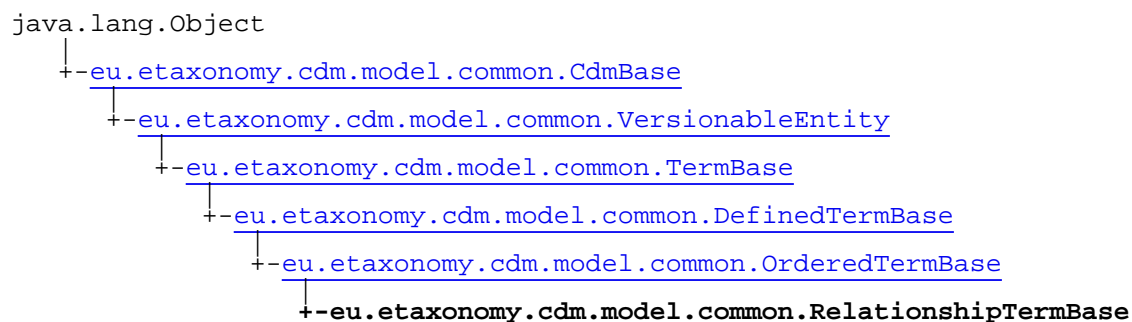
getRelationFrom

```
public IRelated getRelationFrom()
```

getRelationTo

```
public IRelated getRelationTo()
```

eu.etaxonomy.cdm.model.common
Class RelationshipTermBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.common.RelationshipTermBase
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm, java.lang.Comparable

Direct Known Subclasses:
> SynonymRelationshipType, TaxonRelationshipType, HybridRelationshipType, NameRelationshipType

---

public abstract class **RelationshipTermBase**
extends OrderedTermBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

`orderIndex`

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

`vocabulary`, `vocabularyStore`

Constructor Summary

public	`RelationshipTermBase`()
public	`RelationshipTermBase`(java.lang.String term, java.lang.String label, boolean symmetric, boolean transitive)

Method Summary

void	`addInverseRepresentation`(Representation inverseRepresentation)
void	`addRepresentation`(Representation representation, Representation inverseRepresentation)
java.lang.String	`getInverseDescription`()
java.lang.String	`getInverseDescription`(Language lang)
java.lang.String	`getInverseLabel`()

java.lang.String	getInverseLabel(Language lang)
Representation	getInverseRepresentation(Language lang)
java.util.Set	getInverseRepresentations()
boolean	isSymmetric()
boolean	isTransitive()
void	readCsvLine(java.util.List csvLine)
void	removeInverseRepresentation(Representation inverseRepresentation)
void	setInverseRepresentations(java.util.Set inverseRepresentations)
void	setSymmetric(boolean symmetric)
void	setTransitive(boolean transitive)
void	writeCsvLine(CSVWriter writer)

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface `java.lang.Comparable`

```
compareTo
```

Constructors

RelationshipTermBase

public **RelationshipTermBase**()

RelationshipTermBase

```
public RelationshipTermBase(java.lang.String term,
                            java.lang.String label,
                            boolean symmetric,
                            boolean transitive)
```

Methods

isSymmetric

public boolean **isSymmetric**()

setSymmetric

public void **setSymmetric**(boolean symmetric)

isTransitive

public boolean **isTransitive**()

setTransitive

public void **setTransitive**(boolean transitive)

getInverseRepresentations

`public java.util.Set` **`getInverseRepresentations`**`()`

setInverseRepresentations

`protected void` **`setInverseRepresentations`**`(java.util.Set inverseRepresentations)`

addInverseRepresentation

`public void` **`addInverseRepresentation`**`(`Representation` inverseRepresentation)`

removeInverseRepresentation

`public void` **`removeInverseRepresentation`**`(`Representation` inverseRepresentation)`

addRepresentation

`public void` **`addRepresentation`**`(`Representation` representation,`
`        `Representation` inverseRepresentation)`

getInverseRepresentation

`public `Representation` `**`getInverseRepresentation`**`(`Language` lang)`

getInverseLabel

`public java.lang.String` **`getInverseLabel`**`()`

getInverseLabel

`public java.lang.String` **`getInverseLabel`**`(`Language` lang)`

getInverseDescription

`public java.lang.String` **`getInverseDescription`**`()`

getInverseDescription

```
public java.lang.String getInverseDescription(Language lang)
```

readCsvLine

```
public void readCsvLine(java.util.List csvLine)
```

writeCsvLine

```
public void writeCsvLine(CSVWriter writer)
```

getInverseDescription

```
public java.lang.String getInverseDescription(Language lang)
```

eu.etaxonomy.cdm.model.common
Class Representation

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.LanguageString
                |
                +-eu.etaxonomy.cdm.model.common.Representation
```
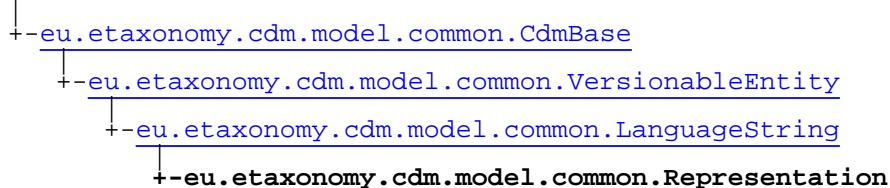
All Implemented Interfaces:
java.io.Serializable

public class **Representation**
extends LanguageString

workaround for enumerations

Fields inherited from class eu.etaxonomy.cdm.model.common.LanguageString

text

Constructor Summary

public	Representation()
public	Representation(java.lang.String text, java.lang.String label, Language lang)

Method Summary

java.lang.String	getAbbreviatedLabel()
java.lang.String	getDescription()
java.lang.String	getLabel()
void	setAbbreviatedLabel(java.lang.String abbreviatedLabel)
void	setDescription(java.lang.String text)
void	setLabel(java.lang.String label)
java.lang.String	toString()

Methods inherited from class eu.etaxonomy.cdm.model.common.LanguageString

getLanguage, getLanguageLabel, getLanguageLabel, getLanguageText, getLanguageText, getText, setLanguage, setText

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

Representation

public **Representation**()

Representation

public **Representation**(java.lang.String text,
                         java.lang.String label,
                         Language lang)

Methods

getLabel

public java.lang.String **getLabel**()

setLabel

public void **setLabel**(java.lang.String label)

getAbbreviatedLabel

public java.lang.String **getAbbreviatedLabel**()

setAbbreviatedLabel

```
public void setAbbreviatedLabel(java.lang.String abbreviatedLabel)
```

getDescription

```
public java.lang.String getDescription()
```

setDescription

```
protected void setDescription(java.lang.String text)
```
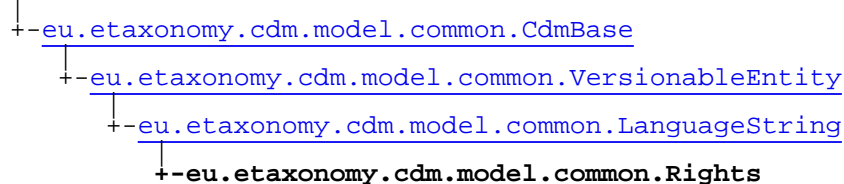
toString

```
public java.lang.String toString()
```

Returns the class, id and uuid as a string for any CDM object. For example: Taxon#13

eu.etaxonomy.cdm.model.common
Class Rights

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.LanguageString
                |
                +-eu.etaxonomy.cdm.model.common.Rights
```

All Implemented Interfaces:
        java.io.Serializable

---

public class **Rights**
extends LanguageString

Typically, rights information includes a statement about various property rights associated with the resource, including intellectual property rights. http://purl.org/dc/elements/1.1/rights http://dublincore.org/documents/dcmi- terms/

Fields inherited from class eu.etaxonomy.cdm.model.common.LanguageString

text

Constructor Summary

public	**Rights**(java.lang.String text, Language lang)

Method Summary

java.lang.String	getAbbreviatedText()
Agent	getAgent()
RightsTerm	getType()
java.lang.String	getUri()
void	setAbbreviatedText(java.lang.String abbreviatedStatement)
void	setAgent(Agent agent)
void	setType(RightsTerm type)
void	setUri(java.lang.String uri)

Methods inherited from class eu.etaxonomy.cdm.model.common.LanguageString

getLanguage, getLanguageLabel, getLanguageLabel, getLanguageText, getLanguageText, getText, setLanguage, setText

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

Rights

```
public Rights(java.lang.String text,
              Language lang)
```

Methods

getType

```
public RightsTerm getType()
```

setType

```
public void setType(RightsTerm type)
```

getUri

```
public java.lang.String getUri()
```

setUri

```
public void setUri(java.lang.String uri)
```

getAbbreviatedText

```
public java.lang.String getAbbreviatedText()
```

setAbbreviatedText

```
public void setAbbreviatedText(java.lang.String abbreviatedStatement)
```
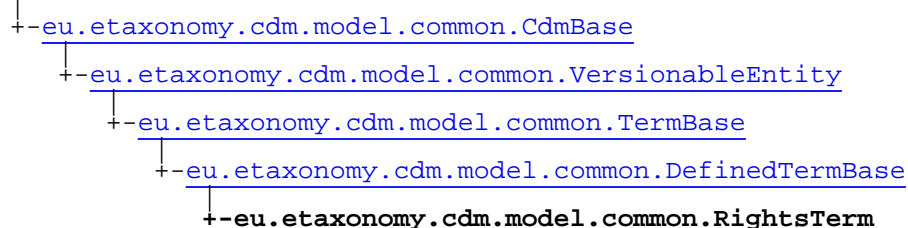
getAgent

```
public Agent getAgent()
```

setAgent

```
public void setAgent(Agent agent)
```

getAbbreviatedText

```
public java.lang.String getAbbreviatedText()
```

eu.etaxonomy.cdm.model.common
Class RightsTerm

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
         |
         +-eu.etaxonomy.cdm.model.common.VersionableEntity
              |
              +-eu.etaxonomy.cdm.model.common.TermBase
                   |
                   +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.common.RightsTerm
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm

---

public class **RightsTerm**
extends DefinedTermBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	RightsTerm(java.lang.String term, java.lang.String label)

Method Summary

static	RightsTerm	ACCESS_RIGHTS()
		http://purl.org/dc/terms/accessRights
static	RightsTerm	COPYRIGHT()
static	RightsTerm	LICENSE()

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

RightsTerm

```
public RightsTerm(java.lang.String term,
                  java.lang.String label)
```

Methods

ACCESS_RIGHTS

```
public final static RightsTerm ACCESS_RIGHTS()
```

> http://purl.org/dc/terms/accessRights
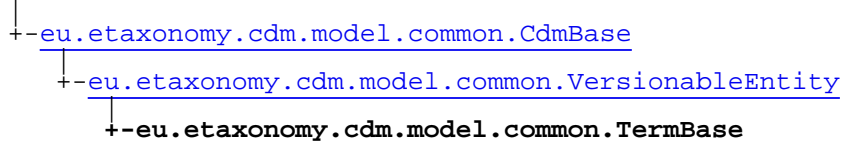

COPYRIGHT

```
public final static RightsTerm COPYRIGHT()
```

LICENSE

```
public final static RightsTerm LICENSE()
```

eu.etaxonomy.cdm.model.common
Class TermBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
```

All Implemented Interfaces:
java.io.Serializable

Direct Known Subclasses:
FeatureTree, DefinedTermBase, TermVocabulary

---

public abstract class **TermBase**
extends VersionableEntity

Constructor Summary

public	TermBase()
public	TermBase(java.lang.String term, java.lang.String label)

Method Summary

void	addRepresentation(Representation representation)
boolean	equals(java.lang.Object obj)
java.lang.String	getDescription()
java.lang.String	getDescription(Language lang)
java.lang.String	getLabel()
java.lang.String	getLabel(Language lang)
Representation	getRepresentation(Language lang)
java.util.Set	getRepresentations()
java.lang.String	getUri()
void	removeRepresentation(Representation representation)
void	setRepresentations(java.util.Set representations)

---

void	[setUri](java.lang.String uri)
java.lang.String	[toString]()

Methods inherited from class [eu.etaxonomy.cdm.model.common.VersionableEntity]

[getNextVersion], [getPreviousVersion], [getUpdated], [getUpdatedBy], [getValidFrom], [getValidTo], [setNextVersion], [setPreviousVersion], [setUpdated], [setUpdatedBy]

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase]

[addPropertyChangeListener], [addPropertyChangeListener], [equals], [firePropertyChange], [firePropertyChange], [firePropertyChange], [firePropertyChange], [firePropertyChange], [firePropertyChange], [getCreated], [getCreatedBy], [getId], [getUuid], [hasListeners], [removePropertyChangeListener], [removePropertyChangeListener], [setCreated], [setCreatedBy], [setId], [setUuid], [toString]

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

TermBase

public **TermBase**()

TermBase

public **TermBase**(java.lang.String term,
                java.lang.String label)

Methods

getRepresentations

public java.util.Set **getRepresentations**()

setRepresentations

public void **setRepresentations**(java.util.Set representations)

addRepresentation

public void **addRepresentation**([Representation] representation)

removeRepresentation

public void **removeRepresentation**([Representation](#) representation)

getRepresentation

public [Representation](#) **getRepresentation**([Language](#) lang)

getUri

public java.lang.String **getUri**()

setUri

public void **setUri**(java.lang.String uri)

getLabel

public java.lang.String **getLabel**()

getLabel

public java.lang.String **getLabel**([Language](#) lang)

getDescription

public java.lang.String **getDescription**()

getDescription

public java.lang.String **getDescription**([Language](#) lang)

equals

public boolean **equals**(java.lang.Object obj)

Is true if UUID and created timestamp are the same for the passed Object and this one.

toString

```
public java.lang.String toString()
```

Returns the class, id and uuid as a string for any CDM object. For example: Taxon#13

toString

```
public java.lang.String toString()
```

Returns the class, id and uuid as a string for any CDM object. For example: Taxon#13

eu.etaxonomy.cdm.model.common
Class TermVocabulary

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.TermVocabulary
```
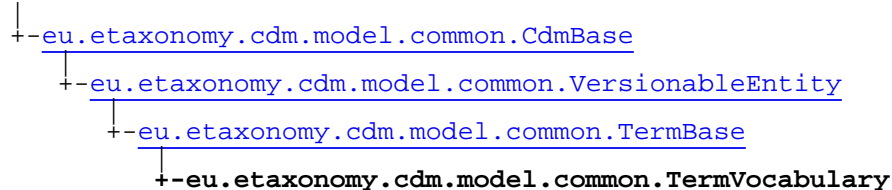
All Implemented Interfaces:
> java.lang.Iterable, java.io.Serializable

Direct Known Subclasses:
> OrderedTermVocabulary

---

public class **TermVocabulary**
extends TermBase
implements java.io.Serializable, java.lang.Iterable

A single enumeration must only contain DefinedTerm instances of one kind (=class)

Field Summary

protected	termClass
public	terms

Constructor Summary

public	TermVocabulary()
public	TermVocabulary(java.lang.String term, java.lang.String label, java.lang.String termSourceUri)

Method Summary

void	addTerm(DefinedTermBase term)
static TermVocabulary	findByUuid(java.util.UUID uuid)
java.util.Set	getNewTermSet()
java.util.Set	getPersistentTerms()
java.lang.Class	getTermClass()
java.util.Set	getTerms()

---

java.lang.String	[getTermSourceUri](javascript:void)()
static [TermVocabulary](javascript:void)	[getUUID](javascript:void)(java.util.UUID uuid)
java.util.Iterator	[iterator](javascript:void)()
static [TermVocabulary](javascript:void)	[LANGUAGE](javascript:void)()
void	[removeTerm](javascript:void)([DefinedTermBase](javascript:void) term)
void	[setPersistentTerms](javascript:void)(java.util.Set terms)
void	[setTerms](javascript:void)(java.util.Set terms)
void	[setTermSourceUri](javascript:void)(java.lang.String vocabularyUri)
int	[size](javascript:void)()

Methods inherited from class [eu.etaxonomy.cdm.model.common.TermBase](javascript:void)

[addRepresentation](javascript:void), [equals](javascript:void), [getDescription](javascript:void), [getDescription](javascript:void), [getLabel](javascript:void), [getLabel](javascript:void), [getRepresentation](javascript:void), [getRepresentations](javascript:void), [getUri](javascript:void), [removeRepresentation](javascript:void), [setRepresentations](javascript:void), [setUri](javascript:void), [toString](javascript:void)

Methods inherited from class [eu.etaxonomy.cdm.model.common.VersionableEntity](javascript:void)

[getNextVersion](javascript:void), [getPreviousVersion](javascript:void), [getUpdated](javascript:void), [getUpdatedBy](javascript:void), [getValidFrom](javascript:void), [getValidTo](javascript:void), [setNextVersion](javascript:void), [setPreviousVersion](javascript:void), [setUpdated](javascript:void), [setUpdatedBy](javascript:void)

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase](javascript:void)

[addPropertyChangeListener](javascript:void), [addPropertyChangeListener](javascript:void), [equals](javascript:void), [firePropertyChange](javascript:void), [firePropertyChange](javascript:void), [firePropertyChange](javascript:void), [firePropertyChange](javascript:void), [firePropertyChange](javascript:void), [firePropertyChange](javascript:void), [getCreated](javascript:void), [getCreatedBy](javascript:void), [getId](javascript:void), [getUuid](javascript:void), [hasListeners](javascript:void), [removePropertyChangeListener](javascript:void), [removePropertyChangeListener](javascript:void), [setCreated](javascript:void), [setCreatedBy](javascript:void), [setId](javascript:void), [setUuid](javascript:void), [toString](javascript:void)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Iterable

iterator

Fields

termClass

protected java.lang.Class **termClass**

terms

```
public java.util.Set terms
```

Constructors

TermVocabulary

```
public TermVocabulary()
```

TermVocabulary

```
public TermVocabulary(java.lang.String term,
                      java.lang.String label,
                      java.lang.String termSourceUri)
```

Methods

findByUuid

```
public static TermVocabulary findByUuid(java.util.UUID uuid)
```

getUUID

```
public final static TermVocabulary getUUID(java.util.UUID uuid)
```

LANGUAGE

```
public final static TermVocabulary LANGUAGE()
```

getNewTermSet

```
protected java.util.Set getNewTermSet()
```

getTerms

```
public java.util.Set getTerms()
```

setTerms

```
protected void setTerms(java.util.Set terms)
```

getPersistentTerms

```
public java.util.Set getPersistentTerms()
```

setPersistentTerms

```
protected void setPersistentTerms(java.util.Set terms)
```

addTerm

```
public void addTerm(DefinedTermBase term)
    throws WrongTermTypeException
```

removeTerm

```
public void removeTerm(DefinedTermBase term)
```

getTermSourceUri

```
public java.lang.String getTermSourceUri()
```

setTermSourceUri

```
public void setTermSourceUri(java.lang.String vocabularyUri)
```

getTermClass

```
public java.lang.Class getTermClass()
```

iterator

```
public java.util.Iterator iterator()
```

size

```
public int size()
```

eu.etaxonomy.cdm.model.common
Class TimePeriod

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.TimePeriod
```

public class **TimePeriod**
extends java.lang.Object

Constructor Summary

public	[TimePeriod](#)()
public	[TimePeriod](#)(java.util.Calendar startDate)
public	[TimePeriod](#)(java.util.Calendar startDate, java.util.Calendar endDate)

Method Summary

java.util.Calendar	[getEnd](#)()
java.util.Calendar	[getStart](#)()
void	[setEnd](#)(java.util.Calendar end)
void	[setStart](#)(java.util.Calendar start)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

TimePeriod

public **TimePeriod**()

TimePeriod

public **TimePeriod**(java.util.Calendar startDate)

TimePeriod

```
public TimePeriod(java.util.Calendar startDate,
                  java.util.Calendar endDate)
```

Methods

getStart

```
public java.util.Calendar getStart()
```

setStart

```
public void setStart(java.util.Calendar start)
```

getEnd

```
public java.util.Calendar getEnd()
```

setEnd

```
public void setEnd(java.util.Calendar end)
```

```
public TimePeriod(java.util.Calendar startDate,
                  java.util.Calendar endDate)
```

eu.etaxonomy.cdm.model.common
Class VersionableEntity

```
java.lang.Object
    |
   +-eu.etaxonomy.cdm.model.common.CdmBase
        |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
```
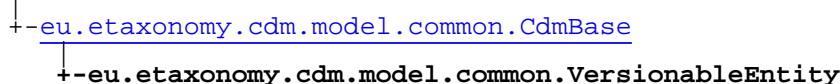
All Implemented Interfaces:
> java.io.Serializable

Direct Known Subclasses:
> GenBankAccession, Locus, FeatureNode, StateData, StatisticalMeasurementValue, AnnotatableEntity, Extension, LanguageString, Marker, MediaInstance, TermBase, Address, Contact, InstitutionalMembership

---

public abstract class **VersionableEntity**
extends CdmBase

The class keeps track of versions via a full linked list to different version objects, or a simple updated/updatedBy property in the same object. Full versioning allows concrete subclasses to keep track of previous or later versions of an object. A different version is another (persistent) java object, but with the same UUID. The version history is established as a linked list of the version objects in time. If versioning via the linked list is used, updated/updatedBy is the same as created/createdBy (better NULL?). Versioning can be turned off and in this case this class provides updated/updatedBy to keep track of the latest change event.
Parameters:
> T

Constructor Summary

public	**VersionableEntity**()

Method Summary

CdmBase	**getNextVersion**() Returns the succeeding version of this object with the same UUID
CdmBase	**getPreviousVersion**()
java.util.Calendar	**getUpdated**()
Person	**getUpdatedBy**()
java.util.Calendar	**getValidFrom**() based on created
java.util.Calendar	**getValidTo**() based on updated
void	**setNextVersion**(CdmBase nextVersion)
void	**setPreviousVersion**(CdmBase previousVersion)
void	**setUpdated**(java.util.Calendar updated)

---

void	[setUpdatedBy](Person updatedBy)

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase](#)

[addPropertyChangeListener](#), [addPropertyChangeListener](#), [equals](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [getCreated](#), [getCreatedBy](#), [getId](#), [getUuid](#), [hasListeners](#), [removePropertyChangeListener](#), [removePropertyChangeListener](#), [setCreated](#), [setCreatedBy](#), [setId](#), [setUuid](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

VersionableEntity

public **VersionableEntity**()

Methods

getNextVersion

public [CdmBase](#) **getNextVersion**()

Returns the succeeding version of this object with the same UUID

Returns:
next, i.e. succeeding version of this object

setNextVersion

public void **setNextVersion**([CdmBase](#) nextVersion)

getPreviousVersion

public [CdmBase](#) **getPreviousVersion**()

setPreviousVersion

public void **setPreviousVersion**([CdmBase](#) previousVersion)

getUpdatedBy

public [Person](#) **getUpdatedBy**()

---

setUpdatedBy

public void **setUpdatedBy**([Person](#) updatedBy)

Parameters:
updatedBy - updatedBy

---

getUpdated

public java.util.Calendar **getUpdated**()

Returns:

---

setUpdated

public void **setUpdated**(java.util.Calendar updated)

Parameters:
updated - updated

---

getValidFrom

public java.util.Calendar **getValidFrom**()

based on created

---

getValidTo

public java.util.Calendar **getValidTo**()

based on updated

---

eu.etaxonomy.cdm.model.common
Class WrongTermTypeException

```
java.lang.Object
    │
    +-java.lang.Throwable
        │
        +-java.lang.Exception
            │
            +-eu.etaxonomy.cdm.model.common.WrongTermTypeException
```

All Implemented Interfaces:
    java.io.Serializable

---

public class **WrongTermTypeException**
extends java.lang.Exception

Constructor Summary

public	WrongTermTypeException()
public	WrongTermTypeException(java.lang.String arg0)
public	WrongTermTypeException(java.lang.Throwable arg0)
public	WrongTermTypeException(java.lang.String arg0, java.lang.Throwable arg1)

Methods inherited from class `java.lang.Throwable`

fillInStackTrace, getCause, getLocalizedMessage, getMessage, getStackTrace, initCause, printStackTrace, printStackTrace, printStackTrace, setStackTrace, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

WrongTermTypeException

public **WrongTermTypeException**()

WrongTermTypeException

public **WrongTermTypeException**(java.lang.String arg0)

WrongTermTypeException

```
public WrongTermTypeException(java.lang.Throwable arg0)
```

WrongTermTypeException

```
public WrongTermTypeException(java.lang.String arg0,
                              java.lang.Throwable arg1)
```

Package

eu.etaxonomy.cdm.model.description

eu.etaxonomy.cdm.model.description
Class AbsenceTerm

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.description.PresenceAbsenceTermBase
                            |
                            +-eu.etaxonomy.cdm.model.description.AbsenceTerm
```
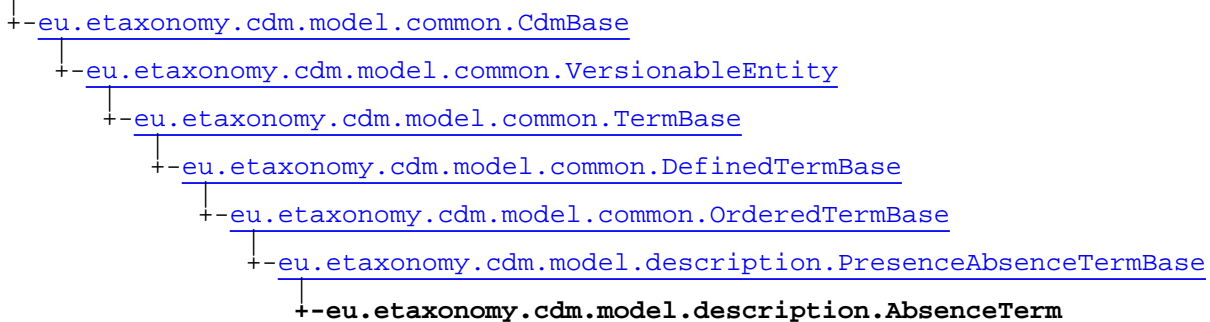
All Implemented Interfaces:
java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **AbsenceTerm**
extends PresenceAbsenceTermBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

orderIndex

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	AbsenceTerm()
public	AbsenceTerm(java.lang.String term, java.lang.String label)

Methods inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

---

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IDefTerm`

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface `java.lang.Comparable`

compareTo

Constructors

AbsenceTerm

public **AbsenceTerm**()

AbsenceTerm

public **AbsenceTerm**(java.lang.String term,
                   java.lang.String label)

eu.etaxonomy.cdm.model.description
Class CategoricalData

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.description.FeatureBase
                        |
                        +-eu.etaxonomy.cdm.model.description.CategoricalData
```
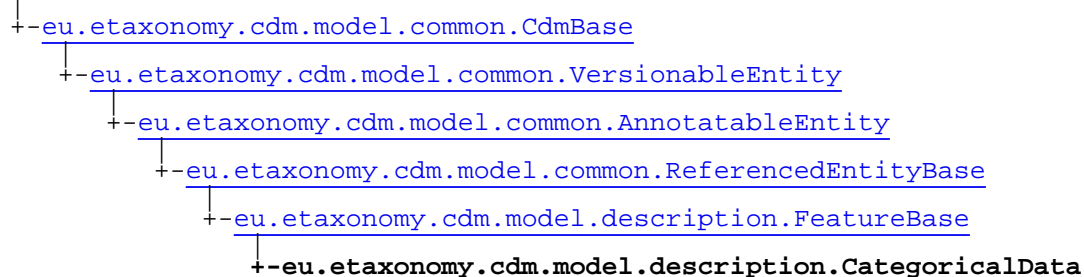
All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **CategoricalData**
extends FeatureBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	CategoricalData()

Method Summary

void	addState(State state)
boolean	getOrderRelevant()
java.util.List	getStates()
void	removeState(State state)
void	setOrderRelevant(boolean orderRelevant)

Methods inherited from class eu.etaxonomy.cdm.model.description.FeatureBase

addMedia, addModifier, addModifyingText, addModifyingText, getMedia, getModifiers, getModifyingText, getType, removeMedia, removeModifier, removeModifyingText, setMedia, setModifiers, setModifyingText, setType

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

---

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

CategoricalData

public **CategoricalData**()

Methods

getStates

public java.util.List **getStates**()

addState

public void **addState**(State state)

removeState

public void **removeState**(State state)

getOrderRelevant

```
public boolean getOrderRelevant()
```

setOrderRelevant

```
public void setOrderRelevant(boolean orderRelevant)
```

```
public boolean getOrderRelevant()
```

eu.etaxonomy.cdm.model.description
Class CommonTaxonName

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.description.FeatureBase
                        |
                        +-eu.etaxonomy.cdm.model.description.CommonTaxonName
```

All Implemented Interfaces:
> java.io.Serializable**,** IReferencedEntity

---

public class **CommonTaxonName**
extends FeatureBase

only valid for Taxa, not specimen/occurrences. Check DescriptionBase relation.

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	CommonTaxonName()

Method Summary

Language	getLanguage()
java.lang.String	getName()
void	setLanguage(Language language)
void	setName(java.lang.String name)

Methods inherited from class eu.etaxonomy.cdm.model.description.FeatureBase
addMedia, addModifier, addModifyingText, addModifyingText, getMedia, getModifiers, getModifyingText, getType, removeMedia, removeModifier, removeModifyingText, setMedia, setModifiers, setModifyingText, setType

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase
getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

---

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

CommonTaxonName

public **CommonTaxonName**()

Methods

getLanguage

public Language **getLanguage**()

setLanguage

public void **setLanguage**(Language language)

getName

public java.lang.String **getName**()

setName

```
public void setName(java.lang.String name)
```

Parameters:
name - name

setName

```
public void setName(java.lang.String name)
```

eu.etaxonomy.cdm.model.description
Class DescriptionBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.description.DescriptionBase
```
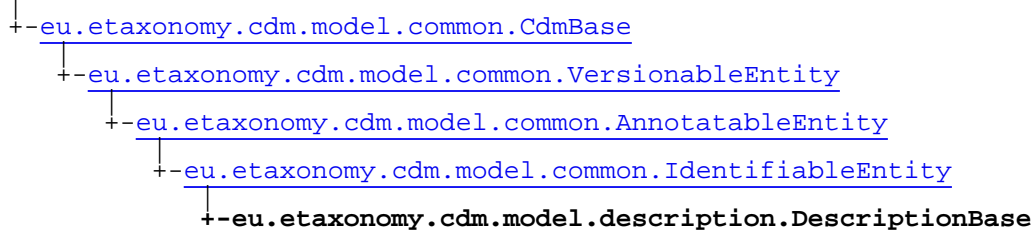
All Implemented Interfaces:
> java.io.Serializable, IOriginalSource

Direct Known Subclasses:
> SpecimenDescription, TaxonDescription

---

public abstract class **DescriptionBase**
extends IdentifiableEntity

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	DescriptionBase()

Method Summary

void	addFeature(FeatureBase feature)
java.lang.String	generateTitle()
java.util.Set	getFeatures()
java.lang.String	getLabel()
ReferenceBase	getSource()
void	removeFeature(FeatureBase feature)
void	setFeatures(java.util.Set features)
void	setLabel(java.lang.String label)
void	setSource(ReferenceBase source)

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Constructors

DescriptionBase

public **DescriptionBase**()

Methods

generateTitle

public java.lang.String **generateTitle**()

getSource

public ReferenceBase **getSource**()

setSource

public void **setSource**([ReferenceBase](#) source)

getFeatures

public java.util.Set **getFeatures**()

setFeatures

protected void **setFeatures**(java.util.Set features)

addFeature

public void **addFeature**([FeatureBase](#) feature)

removeFeature

public void **removeFeature**([FeatureBase](#) feature)

getLabel

public java.lang.String **getLabel**()

setLabel

public void **setLabel**(java.lang.String label)

eu.etaxonomy.cdm.model.description
Class Distribution

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.description.FeatureBase
                        |
                        +-eu.etaxonomy.cdm.model.description.Distribution
```

All Implemented Interfaces:
java.io.Serializable**,** IReferencedEntity

---

public class **Distribution**
extends FeatureBase

fact attribute contains the concrete occurrence term like "Extinct" This allows all terms to enter the database and classify them basically according to class hierarchy of distribution. {validInRegion mandatory} {type is "distribution"}

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	Distribution()

Method Summary

NamedArea	getArea()
PresenceAbsenceTermBase	getStatus()
void	setArea(NamedArea area)
void	setStatus(PresenceAbsenceTermBase status)

Methods inherited from class eu.etaxonomy.cdm.model.description.FeatureBase
addMedia, addModifier, addModifyingText, addModifyingText, getMedia, getModifiers, getModifyingText, getType, removeMedia, removeModifier, removeModifyingText, setMedia, setModifiers, setModifyingText, setType

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase
getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

---

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

`addAnnotations`, `addMarker`, `getAnnotations`, `getMarkers`, `removeAnnotations`, `removeMarker`, `setAnnotations`, `setMarkers`

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

`getNextVersion`, `getPreviousVersion`, `getUpdated`, `getUpdatedBy`, `getValidFrom`, `getValidTo`, `setNextVersion`, `setPreviousVersion`, `setUpdated`, `setUpdatedBy`

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

`addPropertyChangeListener`, `addPropertyChangeListener`, `equals`, `firePropertyChange`, `firePropertyChange`, `firePropertyChange`, `firePropertyChange`, `firePropertyChange`, `firePropertyChange`, `getCreated`, `getCreatedBy`, `getId`, `getUuid`, `hasListeners`, `removePropertyChangeListener`, `removePropertyChangeListener`, `setCreated`, `setCreatedBy`, `setId`, `setUuid`, `toString`

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IReferencedEntity`

`getCitation`

Constructors

Distribution

public **Distribution**()

Methods

getArea

public [NamedArea](#) **getArea**()

setArea

public void **setArea**([NamedArea](#) area)

getStatus

public [PresenceAbsenceTermBase](#) **getStatus**()

setStatus

```
public void setStatus(PresenceAbsenceTermBase status)
```

setStatus

```
public void setStatus(PresenceAbsenceTermBase status)
```

eu.etaxonomy.cdm.model.description
Class FeatureBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.description.FeatureBase
```
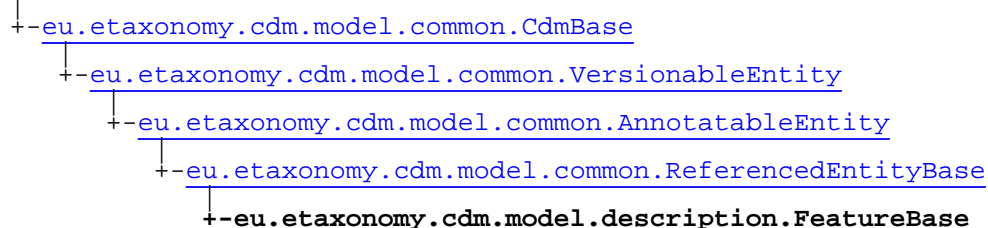
All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

Direct Known Subclasses:
> CategoricalData, CommonTaxonName, Distribution, IndividualsAssociation, QuantitativeData, TaxonInteraction, TextData

---

public abstract class **FeatureBase**
extends ReferencedEntityBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	FeatureBase()

Method Summary

void	addMedia(Media media)
void	addModifier(Modifier modifier)
void	addModifyingText(LanguageString description)
void	addModifyingText(java.lang.String text, Language lang)
java.util.Set	getMedia()
java.util.Set	getModifiers()
MultilanguageSet	getModifyingText()
FeatureType	getType()

void	removeMedia(Media media)
void	removeModifier(Modifier modifier)
void	removeModifyingText(Language lang)
void	setMedia(java.util.Set media)
void	setModifiers(java.util.Set modifiers)
void	setModifyingText(MultilanguageSet modifyingText)
void	setType(FeatureType type)

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

FeatureBase

public **FeatureBase**()

Methods

getMedia

```
public java.util.Set getMedia()
```

setMedia

```
protected void setMedia(java.util.Set media)
```

addMedia

```
public void addMedia(Media media)
```

removeMedia

```
public void removeMedia(Media media)
```

getType

```
public FeatureType getType()
```

setType

```
public void setType(FeatureType type)
```

getModifiers

```
public java.util.Set getModifiers()
```

setModifiers

```
protected void setModifiers(java.util.Set modifiers)
```

addModifier

```
public void addModifier(Modifier modifier)
```

removeModifier

```
public void removeModifier(Modifier modifier)
```

getModifyingText

```
public MultilanguageSet getModifyingText()
```

setModifyingText

```
protected void setModifyingText(MultilanguageSet modifyingText)
```

addModifyingText

```
public void addModifyingText(LanguageString description)
```
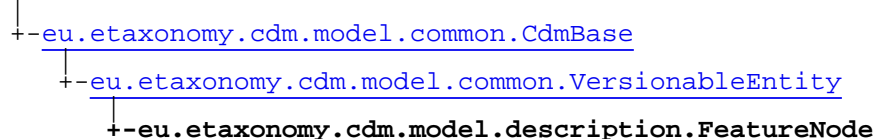
addModifyingText

```
public void addModifyingText(java.lang.String text,
        Language lang)
```

removeModifyingText

```
public void removeModifyingText(Language lang)
```

eu.etaxonomy.cdm.model.description
Class FeatureNode

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
       |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           |
           +-eu.etaxonomy.cdm.model.description.FeatureNode
```

All Implemented Interfaces:
> java.io.Serializable

---

public class **FeatureNode**
extends VersionableEntity

Constructor Summary

public	FeatureNode()

Method Summary

java.util.List	getChildren()
FeatureNode	getParent()
FeatureType	getType()
void	setChildren(java.util.List children)
void	setParent(FeatureNode parent)
void	setType(FeatureType type)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

FeatureNode

public **FeatureNode**()

Methods

getType

public [FeatureType](#) **getType**()

setType

public void **setType**([FeatureType](#) type)

getParent

public [FeatureNode](#) **getParent**()

setParent

public void **setParent**([FeatureNode](#) parent)

getChildren

public java.util.List **getChildren**()

setChildren

public void **setChildren**(java.util.List children)

eu.etaxonomy.cdm.model.description
Class FeatureTree

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.description.FeatureTree
```

All Implemented Interfaces:
> java.io.Serializable

---
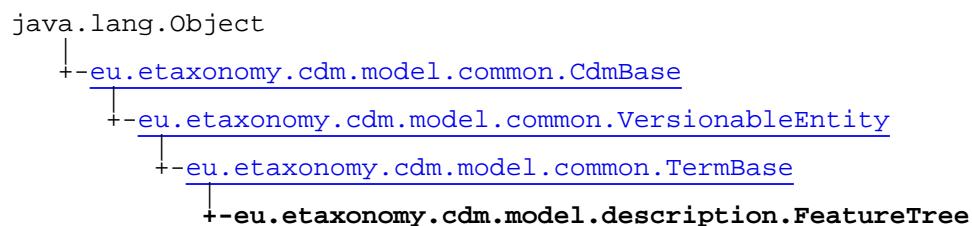
public class **FeatureTree**
extends TermBase

Feature trees arrange concepts and features/characters. They may also be used to define flat char. subsets for filtering purposes. A feature tree is build out of feature nodes, which can be hierarchihcally organised

---

Constructor Summary

public	FeatureTree()

Method Summary

java.util.Set	getNodes()
FeatureNode	getRoot()
void	setNodes(java.util.Set nodes)
void	setRoot(FeatureNode root)

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

FeatureTree

```
public FeatureTree()
```

Methods

getNodes

```
public java.util.Set getNodes()
```

setNodes

```
public void setNodes(java.util.Set nodes)
```
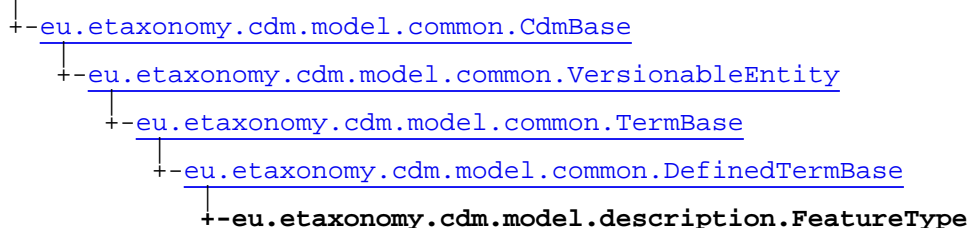
getRoot

```
public FeatureNode getRoot()
```

setRoot

```
public void setRoot(FeatureNode root)
```

eu.etaxonomy.cdm.model.description
Class FeatureType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.description.FeatureType
```

All Implemented Interfaces:
　　　　java.io.Serializable**,** IDefTerm

---

public class **FeatureType**
extends DefinedTermBase

NEEDS TO BE COMPLEMENTED SPM / TDWG http://rs.tdwg. org/ontology/voc/SpeciesProfileModel

---

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	FeatureType(java.lang.String term, java.lang.String label)

Method Summary

void	addRecommendedModifierEnumeration(TermVocabulary recommendedModifierEnumeration)
void	addRecommendedStatisticalMeasure(StatisticalMeasure recommendedStatisticalMeasure)
void	addSupportedCategoricalEnumeration(TermVocabulary supportedCategoricalEnumeration)
static FeatureType	COMMON_NAME()
static FeatureType	DISTRIBUTION()
java.util.Set	getRecommendedModifierEnumeration()
java.util.Set	getRecommendedStatisticalMeasures()
java.util.Set	getSupportedCategoricalEnumerations()

static [FeatureType](#)	[HYBRID_PARENT](#)()	
	special kind of OrganismInteraction	
boolean	[isSupportsCommonTaxonName](#)()	
boolean	[isSupportsDistribution](#)()	
boolean	[isSupportsIndividualAssociation](#)()	
boolean	[isSupportsQuantitativeData](#)()	
boolean	[isSupportsTaxonInteraction](#)()	
boolean	[isSupportsTextData](#)()	
void	[removeRecommendedModifierEnumeration](#)([TermVocabulary](#) recommendedModifierEnumeration)	
void	[removeRecommendedStatisticalMeasure](#)([StatisticalMeasure](#) recommendedStatisticalMeasure)	
void	[removeSupportedCategoricalEnumeration](#)([TermVocabulary](#) supportedCategoricalEnumeration)	
void	[setRecommendedModifierEnumeration](#)(java.util.Set recommendedModifierEnumeration)	
void	[setRecommendedStatisticalMeasures](#)(java.util.Set recommendedStatisticalMeasures)	
void	[setSupportedCategoricalEnumerations](#)(java.util.Set supportedCategoricalEnumerations)	
void	[setSupportsCommonTaxonName](#)(boolean supportsCommonTaxonName)	
void	[setSupportsDistribution](#)(boolean supportsDistribution)	
void	[setSupportsIndividualAssociation](#)(boolean supportsIndividualAssociation)	
void	[setSupportsQuantitativeData](#)(boolean supportsQuantitativeData)	
void	[setSupportsTaxonInteraction](#)(boolean supportsTaxonInteraction)	
void	[setSupportsTextData](#)(boolean supportsTextData)	

Methods inherited from class [eu.etaxonomy.cdm.model.common.DefinedTermBase](#)

[addIncludes](#), [addMedia](#), [findByUuid](#), [getGeneralizationOf](#), [getIncludes](#), [getKindOf](#), [getMedia](#), [getPartOf](#), [getPersistentVocabulary](#), [getVocabulary](#), [readCsvLine](#), [readCsvLine](#), [removeIncludes](#), [removeMedia](#), [setGeneralizationOf](#), [setIncludes](#), [setKindOf](#), [setMedia](#), [setPartOf](#), [setPersistentVocabulary](#), [setVocabulary](#), [setVocabularyStore](#), [writeCsvLine](#)

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

FeatureType

public **FeatureType**(java.lang.String term,
                    java.lang.String label)

Methods

isSupportsQuantitativeData

public boolean **isSupportsQuantitativeData**()

setSupportsQuantitativeData

public void **setSupportsQuantitativeData**(boolean supportsQuantitativeData)

isSupportsTextData

public boolean **isSupportsTextData**()

(continued from last page)

setSupportsTextData

```
public void setSupportsTextData(boolean supportsTextData)
```

isSupportsDistribution

```
public boolean isSupportsDistribution()
```

setSupportsDistribution

```
public void setSupportsDistribution(boolean supportsDistribution)
```

isSupportsIndividualAssociation

```
public boolean isSupportsIndividualAssociation()
```

setSupportsIndividualAssociation

```
public void setSupportsIndividualAssociation(boolean supportsIndividualAssociation)
```

isSupportsTaxonInteraction

```
public boolean isSupportsTaxonInteraction()
```

setSupportsTaxonInteraction

```
public void setSupportsTaxonInteraction(boolean supportsTaxonInteraction)
```

isSupportsCommonTaxonName

```
public boolean isSupportsCommonTaxonName()
```

setSupportsCommonTaxonName

```
public void setSupportsCommonTaxonName(boolean supportsCommonTaxonName)
```

getRecommendedModifierEnumeration

```
public java.util.Set getRecommendedModifierEnumeration()
```

setRecommendedModifierEnumeration

```
protected void setRecommendedModifierEnumeration(java.util.Set
recommendedModifierEnumeration)
```

addRecommendedModifierEnumeration

```
public void addRecommendedModifierEnumeration(TermVocabulary
recommendedModifierEnumeration)
```

removeRecommendedModifierEnumeration

```
public void removeRecommendedModifierEnumeration(TermVocabulary
recommendedModifierEnumeration)
```

getRecommendedStatisticalMeasures

```
public java.util.Set getRecommendedStatisticalMeasures()
```

setRecommendedStatisticalMeasures

```
protected void setRecommendedStatisticalMeasures(java.util.Set
recommendedStatisticalMeasures)
```

addRecommendedStatisticalMeasure

```
public void addRecommendedStatisticalMeasure(StatisticalMeasure
recommendedStatisticalMeasure)
```

removeRecommendedStatisticalMeasure

```
public void removeRecommendedStatisticalMeasure(StatisticalMeasure
recommendedStatisticalMeasure)
```

getSupportedCategoricalEnumerations

```
public java.util.Set getSupportedCategoricalEnumerations()
```

setSupportedCategoricalEnumerations

```
protected void setSupportedCategoricalEnumerations(java.util.Set
supportedCategoricalEnumerations)
```

addSupportedCategoricalEnumeration

```
public void addSupportedCategoricalEnumeration(TermVocabulary
supportedCategoricalEnumeration)
```

removeSupportedCategoricalEnumeration

```
public void removeSupportedCategoricalEnumeration(TermVocabulary
supportedCategoricalEnumeration)
```

DISTRIBUTION

```
public final static FeatureType DISTRIBUTION()
```

HYBRID_PARENT

```
public final static FeatureType HYBRID_PARENT()
```

> special kind of OrganismInteraction

COMMON_NAME

```
public final static FeatureType COMMON_NAME()
```

eu.etaxonomy.cdm.model.description
Class IdentificationKey

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.Media
                    |
                    +-eu.etaxonomy.cdm.model.description.IdentificationKey
```

All Implemented Interfaces:
> java.io.Serializable

---

public class **IdentificationKey**
extends Media

Dichotomous or multifurcating authored keys (incl. legacy data)

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	IdentificationKey()

Method Summary

void	addCoveredTaxon(Taxon taxon)
java.util.Set	getCoveredTaxa()
void	removeCoveredTaxon(Taxon taxon)
void	setCoveredTaxa(java.util.Set coveredTaxa)

Methods inherited from class eu.etaxonomy.cdm.model.common.Media

addDescription, addDescription, addInstance, addRights, getArtist, getDescription, getInstances, getMediaCreated, getRights, getTitle, removeDescription, removeInstance, removeRights, setArtist, setDescription, setInstances, setMediaCreated, setRights, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

---

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

IdentificationKey

public **IdentificationKey**()

Methods

getCoveredTaxa

public java.util.Set **getCoveredTaxa**()

setCoveredTaxa

protected void **setCoveredTaxa**(java.util.Set coveredTaxa)

addCoveredTaxon

public void **addCoveredTaxon**(Taxon taxon)

removeCoveredTaxon

public void **removeCoveredTaxon**(Taxon taxon)

eu.etaxonomy.cdm.model.description
Class IndividualsAssociation

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.description.FeatureBase
                        |
                        +-eu.etaxonomy.cdm.model.description.IndividualsAssociation
```

All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **IndividualsAssociation**
extends FeatureBase

{type is "host" or "hybrid_parent"}

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	IndividualsAssociation()

Method Summary

void	addDescription(LanguageString description)
void	addDescription(java.lang.String text, Language lang)
SpecimenOrObservationBase	getAssociatedSpecimenOrObservation()
MultilanguageSet	getDescription()
void	removeDescription(Language lang)
void	setAssociatedSpecimenOrObservation(SpecimenOrObservationBase associatedSpecimenOrObservation)

Methods inherited from class eu.etaxonomy.cdm.model.description.FeatureBase
addMedia, addModifier, addModifyingText, addModifyingText, getMedia, getModifiers, getModifyingText, getType, removeMedia, removeModifier, removeModifyingText, setMedia, setModifiers, setModifyingText, setType

---

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

IndividualsAssociation

public **IndividualsAssociation**()

Methods

getAssociatedSpecimenOrObservation

public SpecimenOrObservationBase **getAssociatedSpecimenOrObservation**()

setAssociatedSpecimenOrObservation

public void **setAssociatedSpecimenOrObservation**(SpecimenOrObservationBase associatedSpecimenOrObservation)

getDescription

public [MultilanguageSet](#) **getDescription**()

addDescription

public void **addDescription**([LanguageString](#) description)
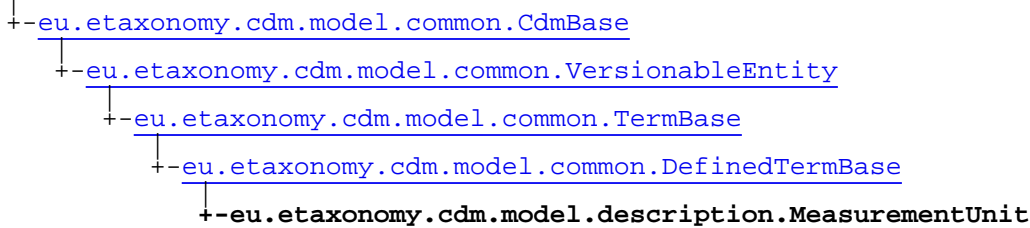
addDescription

public void **addDescription**(java.lang.String text,
        [Language](#) lang)

removeDescription

public void **removeDescription**([Language](#) lang)

public [MultilanguageSet](#) **getDescription**()

eu.etaxonomy.cdm.model.description
Class MeasurementUnit

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.description.MeasurementUnit
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm

---

public class **MeasurementUnit**
extends DefinedTermBase

This class contains the measurement units such as "centimeter" or "degree Celsius"

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

vocabulary, vocabularyStore

Constructor Summary

public	MeasurementUnit()
public	MeasurementUnit(java.lang.String term, java.lang.String label)

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

---

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

MeasurementUnit

public **MeasurementUnit**()

MeasurementUnit

public **MeasurementUnit**(java.lang.String term,
                          java.lang.String label)

eu.etaxonomy.cdm.model.description
Class Modifier

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.description.Modifier
```
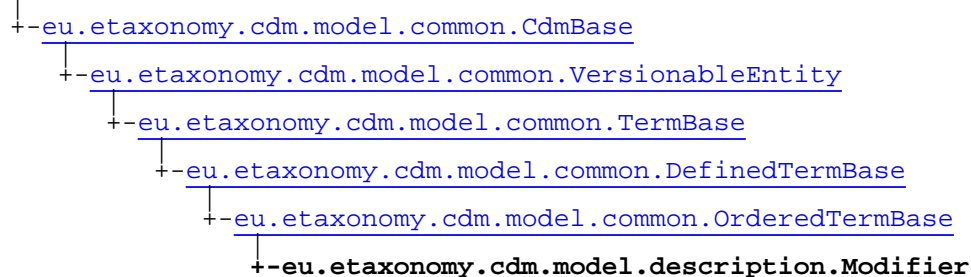
All Implemented Interfaces:
> java.io.Serializable**,** IDefTerm**,** java.lang.Comparable

Direct Known Subclasses:
> DeterminationModifier**,** Scope

---

public class **Modifier**
extends OrderedTermBase

This class contains possible modulations for the InfoItems such as "variance", "maximum", "often", "probably"

Fields inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

orderIndex

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	Modifier()
public	Modifier(java.lang.String term, java.lang.String label)

Methods inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

---

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

Modifier

public **Modifier**()

Modifier

public **Modifier**(java.lang.String term,
                java.lang.String label)

eu.etaxonomy.cdm.model.description
Class PresenceAbsenceTermBase

```
java.lang.Object
   │
   +-eu.etaxonomy.cdm.model.common.CdmBase
       │
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           │
           +-eu.etaxonomy.cdm.model.common.TermBase
               │
               +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                   │
                   +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                       │
                       +-eu.etaxonomy.cdm.model.description.PresenceAbsenceTermBase
```

All Implemented Interfaces:
> java.io.Serializable**,** IDefTerm**,** java.lang.Comparable

Direct Known Subclasses:
> AbsenceTerm**,** PresenceTerm

---

public abstract class **PresenceAbsenceTermBase**
extends OrderedTermBase

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	PresenceAbsenceTermBase()
public	PresenceAbsenceTermBase(java.lang.String term, java.lang.String label)

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

---

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

PresenceAbsenceTermBase

public **PresenceAbsenceTermBase**()

PresenceAbsenceTermBase

public **PresenceAbsenceTermBase**(java.lang.String term,
                                  java.lang.String label)

eu.etaxonomy.cdm.model.description
Class PresenceTerm

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
             |
             +-eu.etaxonomy.cdm.model.common.TermBase
                  |
                  +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                       |
                       +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                            |
                            +-eu.etaxonomy.cdm.model.description.PresenceAbsenceTermBase
                                 |
                                 +-eu.etaxonomy.cdm.model.description.PresenceTerm
```

All Implemented Interfaces:
java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **PresenceTerm**
extends PresenceAbsenceTermBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

orderIndex

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	PresenceTerm()
public	PresenceTerm(java.lang.String term, java.lang.String label)

Methods inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

---

Methods inherited from class [eu.etaxonomy.cdm.model.common.VersionableEntity](#)

[getNextVersion](#), [getPreviousVersion](#), [getUpdated](#), [getUpdatedBy](#), [getValidFrom](#), [getValidTo](#), [setNextVersion](#), [setPreviousVersion](#), [setUpdated](#), [setUpdatedBy](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase](#)

[addPropertyChangeListener](#), [addPropertyChangeListener](#), [equals](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [getCreated](#), [getCreatedBy](#), [getId](#), [getUuid](#), [hasListeners](#), [removePropertyChangeListener](#), [removePropertyChangeListener](#), [setCreated](#), [setCreatedBy](#), [setId](#), [setUuid](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [eu.etaxonomy.cdm.model.common.IDefTerm](#)

[getVocabulary](#), [readCsvLine](#), [setVocabulary](#), [writeCsvLine](#)

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

PresenceTerm

public **PresenceTerm**()

PresenceTerm

public **PresenceTerm**(java.lang.String term,
                       java.lang.String label)

eu.etaxonomy.cdm.model.description
Class QuantitativeData

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.description.FeatureBase
                        |
                        +-eu.etaxonomy.cdm.model.description.QuantitativeData
```

All Implemented Interfaces:
        java.io.Serializable, IReferencedEntity

---

public class **QuantitativeData**
extends FeatureBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	QuantitativeData()

Method Summary

void	addStatisticalValue(StatisticalMeasurementValue statisticalValue)
float	getMax()
float	getMin()
java.util.Set	getStatisticalValues()
float	getTypicalLowerBoundary()
float	getTypicalUpperBoundary()
MeasurementUnit	getUnit()
void	removeStatisticalValue(StatisticalMeasurementValue statisticalValue)
void	setStatisticalValues(java.util.Set statisticalValues)

---

void	setUnit(MeasurementUnit unit)

Methods inherited from class eu.etaxonomy.cdm.model.description.FeatureBase

addMedia, addModifier, addModifyingText, addModifyingText, getMedia, getModifiers, getModifyingText, getType, removeMedia, removeModifier, removeModifyingText, setMedia, setModifiers, setModifyingText, setType

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

QuantitativeData

public **QuantitativeData**()

Methods

getStatisticalValues

public java.util.Set **getStatisticalValues**()

setStatisticalValues

```
protected void setStatisticalValues(java.util.Set statisticalValues)
```

addStatisticalValue

```
public void addStatisticalValue(StatisticalMeasurementValue statisticalValue)
```

removeStatisticalValue

```
public void removeStatisticalValue(StatisticalMeasurementValue statisticalValue)
```

getUnit

```
public MeasurementUnit getUnit()
```

setUnit

```
public void setUnit(MeasurementUnit unit)
```

getMin

```
public float getMin()
```

getMax

```
public float getMax()
```
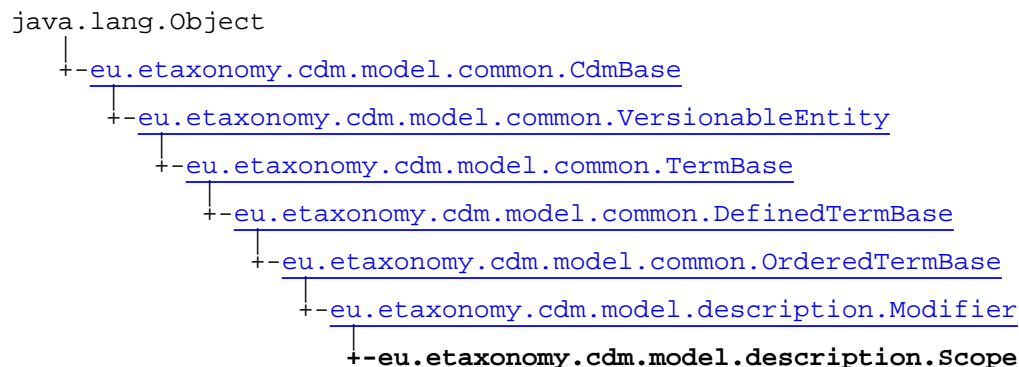
getTypicalLowerBoundary

```
public float getTypicalLowerBoundary()
```

getTypicalUpperBoundary

```
public float getTypicalUpperBoundary()
```

eu.etaxonomy.cdm.model.description
Class Scope

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.description.Modifier
                            |
                            +-eu.etaxonomy.cdm.model.description.Scope
```

All Implemented Interfaces:
java.io.Serializable, IDefTerm, java.lang.Comparable

Direct Known Subclasses:
Sex, Stage

---

public class **Scope**
extends Modifier

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

vocabulary, vocabularyStore

Constructor Summary

public	Scope()
public	Scope(java.lang.String term, java.lang.String label)

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

Scope

public **Scope**()
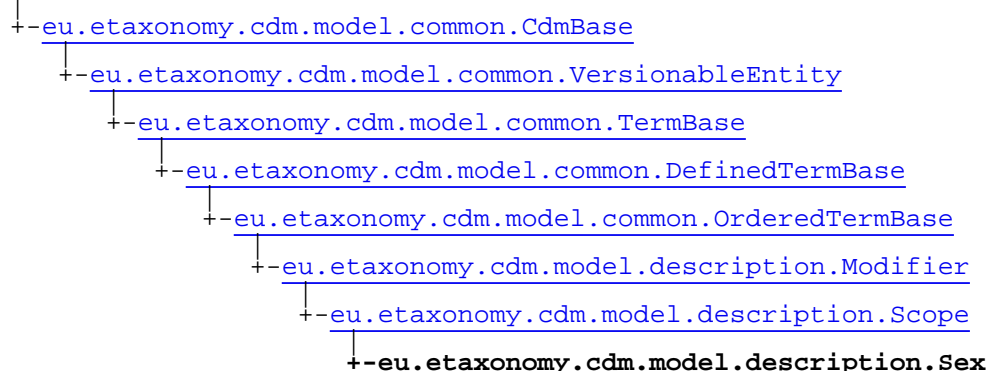
Scope

public **Scope**(java.lang.String term,
            java.lang.String label)

eu.etaxonomy.cdm.model.description
Class Sex

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.TermBase
                │
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    │
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        │
                        +-eu.etaxonomy.cdm.model.description.Modifier
                            │
                            +-eu.etaxonomy.cdm.model.description.Scope
                                │
                                +-eu.etaxonomy.cdm.model.description.Sex
```

All Implemented Interfaces:
java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **Sex**
extends Scope

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	Sex()
public	Sex(java.lang.String term, java.lang.String label)

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

Sex

public **Sex**()

Sex

public **Sex**(java.lang.String term,
          java.lang.String label)

eu.etaxonomy.cdm.model.description
Class SpecimenDescription

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.description.DescriptionBase
                        |
                        +-eu.etaxonomy.cdm.model.description.SpecimenDescription
```

All Implemented Interfaces:
java.io.Serializable, IOriginalSource

---

public class **SpecimenDescription**
extends DescriptionBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	SpecimenDescription()

Method Summary

void	addDescribedSpecimenOrObservations(SpecimenOrObservationBase describedSpecimenOrObservation)
java.util.Set	getDescribedSpecimenOrObservations()
void	removeDescribedSpecimenOrObservations(SpecimenOrObservationBase describedSpecimenOrObservation)
void	setDescribedSpecimenOrObservations(java.util.Set describedSpecimenOrObservations)

Methods inherited from class eu.etaxonomy.cdm.model.description.DescriptionBase

addFeature, generateTitle, getFeatures, getLabel, getSource, removeFeature, setFeatures, setLabel, setSource

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Constructors

SpecimenDescription

public **SpecimenDescription**()

Methods

getDescribedSpecimenOrObservations

public java.util.Set **getDescribedSpecimenOrObservations**()

setDescribedSpecimenOrObservations

public void **setDescribedSpecimenOrObservations**(java.util.Set describedSpecimenOrObservations)

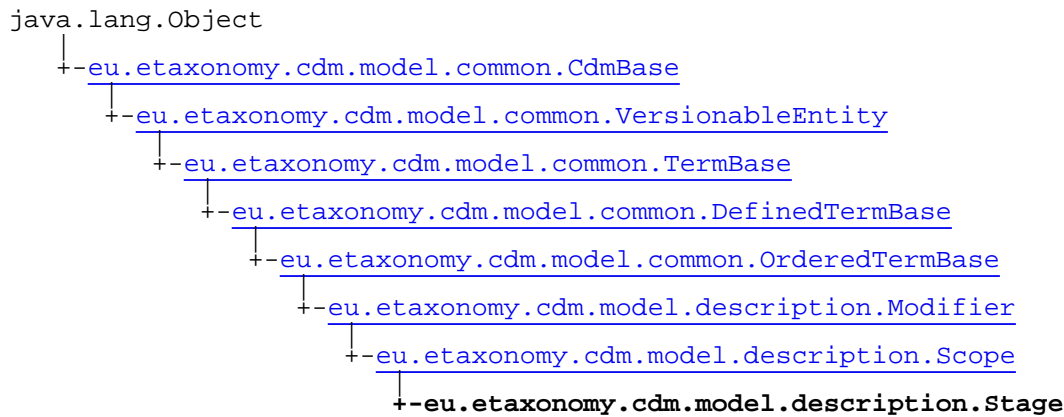## addDescribedSpecimenOrObservations

```
public void addDescribedSpecimenOrObservations(SpecimenOrObservationBase
describedSpecimenOrObservation)
```

removeDescribedSpecimenOrObservations

```
public void removeDescribedSpecimenOrObservations(SpecimenOrObservationBase
describedSpecimenOrObservation)
```

eu.etaxonomy.cdm.model.description
Class Stage

```
java.lang.Object
   │
   +-eu.etaxonomy.cdm.model.common.CdmBase
      │
      +-eu.etaxonomy.cdm.model.common.VersionableEntity
         │
         +-eu.etaxonomy.cdm.model.common.TermBase
            │
            +-eu.etaxonomy.cdm.model.common.DefinedTermBase
               │
               +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                  │
                  +-eu.etaxonomy.cdm.model.description.Modifier
                     │
                     +-eu.etaxonomy.cdm.model.description.Scope
                        │
                        +-eu.etaxonomy.cdm.model.description.Stage
```

All Implemented Interfaces:
java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **Stage**
extends Scope

Fields inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

orderIndex

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	Stage()
public	Stage(java.lang.String term, java.lang.String label)

Methods inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

Stage

public **Stage**()

Stage

public **Stage**(java.lang.String term,
            java.lang.String label)

eu.etaxonomy.cdm.model.description
Class State

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.description.State
```
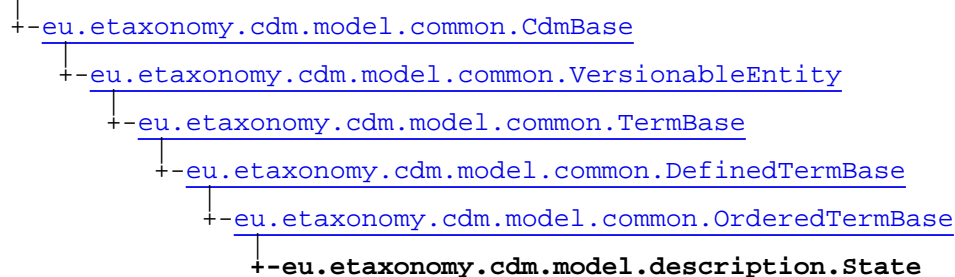
All Implemented Interfaces:
java.io.Serializable**,** IDefTerm**,** java.lang.Comparable

---

public class **State**
extends OrderedTermBase

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	State()
public	State(java.lang.String term, java.lang.String label)

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase
addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable
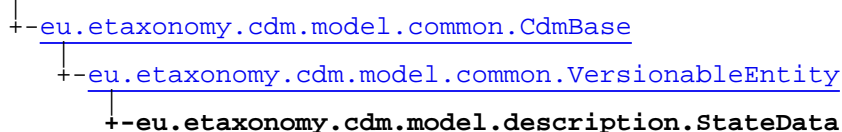
compareTo

Constructors

State

public **State**()

State

public **State**(java.lang.String term,
             java.lang.String label)

eu.etaxonomy.cdm.model.description
Class StateData

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.description.StateData
```

All Implemented Interfaces:
> java.io.Serializable

---

public class **StateData**
extends VersionableEntity

Constructor Summary

public	StateData()

Method Summary

void	addModifier(Modifier modifier)
void	addModifyingText(LanguageString text)
void	addModifyingText(java.lang.String text, Language lang)
java.util.Set	getModifiers()
MultilanguageSet	getModifyingText()
State	getState()
void	removeModifier(Modifier modifier)
void	removeModifyingText(Language lang)
void	setState(State state)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity
getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

StateData

```
public StateData()
```

Methods

getState

```
public State getState()
```

setState

```
public void setState(State state)
```

getModifiers

```
public java.util.Set getModifiers()
```

addModifier

```
public void addModifier(Modifier modifier)
```

removeModifier

```
public void removeModifier(Modifier modifier)
```

getModifyingText

```
public MultilanguageSet getModifyingText()
```

addModifyingText

```
public void addModifyingText(java.lang.String text,
        Language lang)
```
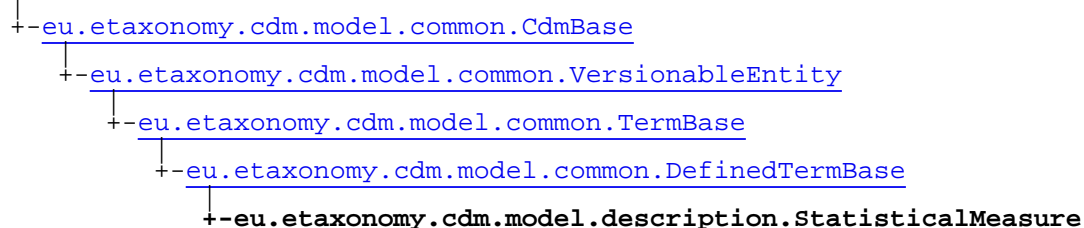
addModifyingText

```
public void addModifyingText(LanguageString text)
```

removeModifyingText

```
public void removeModifyingText(Language lang)
```

eu.etaxonomy.cdm.model.description
Class StatisticalMeasure

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.description.StatisticalMeasure
```

All Implemented Interfaces:
java.io.Serializable, IDefTerm

---

public class **StatisticalMeasure**
extends DefinedTermBase

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	StatisticalMeasure()
public	StatisticalMeasure(java.lang.String term, java.lang.String label)

Method Summary

static StatisticalMeasure	AVERAGE()
static StatisticalMeasure	MAX()
static StatisticalMeasure	MIN()
static StatisticalMeasure	SAMPLE_SIZE()
static StatisticalMeasure	TYPICAL_LOWER_BOUNDARY()
static StatisticalMeasure	TYPICAL_UPPER_BOUNDARY()
static StatisticalMeasure	VARIANCE()

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

StatisticalMeasure

public **StatisticalMeasure**()

StatisticalMeasure

public **StatisticalMeasure**(java.lang.String term,
                             java.lang.String label)

Methods

MIN

public final static StatisticalMeasure **MIN**()

MAX

```
public final static StatisticalMeasure MAX()
```

AVERAGE

```
public final static StatisticalMeasure AVERAGE()
```

SAMPLE_SIZE

```
public final static StatisticalMeasure SAMPLE_SIZE()
```

VARIANCE

```
public final static StatisticalMeasure VARIANCE()
```

TYPICAL_LOWER_BOUNDARY

```
public final static StatisticalMeasure TYPICAL_LOWER_BOUNDARY()
```

TYPICAL_UPPER_BOUNDARY

```
public final static StatisticalMeasure TYPICAL_UPPER_BOUNDARY()
```

eu.etaxonomy.cdm.model.description
Class StatisticalMeasurementValue

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
          |
          +-eu.etaxonomy.cdm.model.common.VersionableEntity
                |
                +-eu.etaxonomy.cdm.model.description.StatisticalMeasurementValue
```
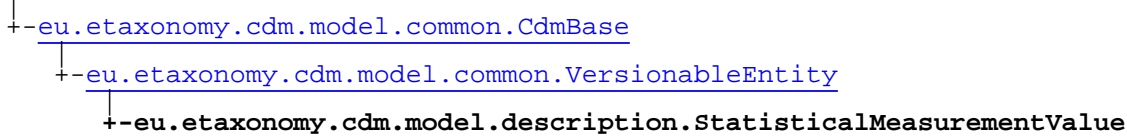
All Implemented Interfaces:
        java.io.Serializable

---

public class **StatisticalMeasurementValue**
extends VersionableEntity

Constructor Summary

public	StatisticalMeasurementValue()

Method Summary

void	addModifier(Modifier modifier)
java.util.Set	getModifiers()
StatisticalMeasure	getType()
float	getValue()
void	removeModifier(Modifier modifier)
void	setModifiers(java.util.Set modifiers)
void	setType(StatisticalMeasure type)
void	setValue(float value)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Constructors

StatisticalMeasurementValue

public **StatisticalMeasurementValue**()

Methods

getType

public [StatisticalMeasure](#) **getType**()

setType

public void **setType**([StatisticalMeasure](#) type)

getValue

public float **getValue**()

setValue

public void **setValue**(float value)

getModifiers

public java.util.Set **getModifiers**()

setModifiers

protected void **setModifiers**(java.util.Set modifiers)

addModifier

public void **addModifier**([Modifier](#) modifier)

removeModifier

```
public void removeModifier(Modifier modifier)
```

removeModifier

```
public void removeModifier(Modifier modifier)
```

eu.etaxonomy.cdm.model.description
Class TaxonDescription

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.description.DescriptionBase
                        |
                        +-eu.etaxonomy.cdm.model.description.TaxonDescription
```

All Implemented Interfaces:
java.io.Serializable, IOriginalSource

---

public class **TaxonDescription**
extends DescriptionBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	TaxonDescription()

Method Summary

void	addGeoScope(NamedArea geoScope)
void	addScope(Scope scope)
java.util.Set	getGeoScopes()
java.util.Set	getScopes()
Taxon	getTaxon()
void	removeGeoScope(NamedArea geoScope)
void	removeScope(Scope scope)
void	setGeoScopes(java.util.Set geoScopes)
void	setScopes(java.util.Set scopes)

---

void	setTaxon(Taxon taxon)	

Methods inherited from class eu.etaxonomy.cdm.model.description.DescriptionBase

addFeature, generateTitle, getFeatures, getLabel, getSource, removeFeature, setFeatures, setLabel, setSource

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Constructors

TaxonDescription

public **TaxonDescription**()

Methods

getGeoScopes

public java.util.Set **getGeoScopes**()

setGeoScopes

protected void **setGeoScopes**(java.util.Set geoScopes)

addGeoScope

public void **addGeoScope**(NamedArea geoScope)

removeGeoScope

public void **removeGeoScope**(NamedArea geoScope)

getScopes

public java.util.Set **getScopes**()

setScopes

protected void **setScopes**(java.util.Set scopes)

addScope

public void **addScope**(Scope scope)

removeScope

public void **removeScope**(Scope scope)

getTaxon

public Taxon **getTaxon**()

setTaxon

public void **setTaxon**(Taxon taxon)

eu.etaxonomy.cdm.model.description
Class TaxonInteraction

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
       |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           |
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               |
               +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                   |
                   +-eu.etaxonomy.cdm.model.description.FeatureBase
                       |
                       +-eu.etaxonomy.cdm.model.description.TaxonInteraction
```

All Implemented Interfaces:
> java.io.Serializable**,** IReferencedEntity

---

public class **TaxonInteraction**
extends FeatureBase

FIXME

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	TaxonInteraction()

Method Summary

void	addDescription(LanguageString description)
void	addDescription(java.lang.String text, Language lang)
MultilanguageSet	getDescription()
Taxon	getTaxon2()
void	removeDescription(Language lang)
void	setTaxon2(Taxon taxon2)

Methods inherited from class eu.etaxonomy.cdm.model.description.FeatureBase
addMedia, addModifier, addModifyingText, addModifyingText, getMedia, getModifiers, getModifyingText, getType, removeMedia, removeModifier, removeModifyingText, setMedia, setModifiers, setModifyingText, setType

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

---

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

TaxonInteraction

public **TaxonInteraction**()

Methods

getTaxon2

public Taxon **getTaxon2**()

setTaxon2

public void **setTaxon2**(Taxon taxon2)

getDescription

public MultilanguageSet **getDescription**()

addDescription

public void **addDescription**(LanguageString description)

addDescription

public void **addDescription**(java.lang.String text,
        Language lang)

removeDescription

public void **removeDescription**(Language lang)

public MultilanguageSet **getDescription**()

eu.etaxonomy.cdm.model.description
Class TextData

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.description.FeatureBase
                        |
                        +-eu.etaxonomy.cdm.model.description.TextData
```
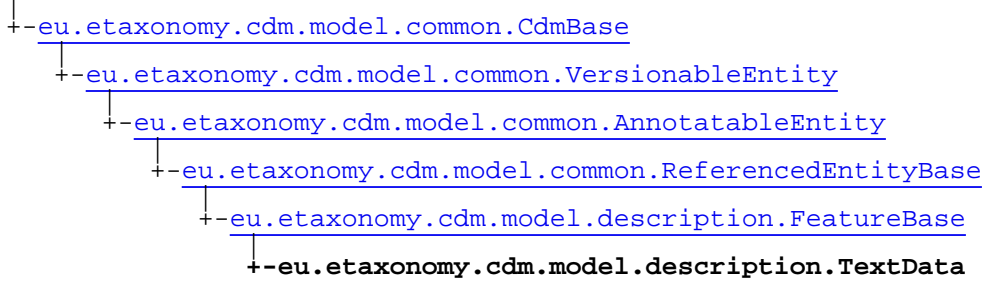
All Implemented Interfaces:
    java.io.Serializable, IReferencedEntity

---

public class **TextData**
extends FeatureBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	TextData()

Method Summary

void	addText(LanguageString text)
void	addText(java.lang.String text, Language lang)
TextFormat	getFormat()
MultilanguageSet	getTexts()
void	removeText(Language lang)
void	setFormat(TextFormat format)

Methods inherited from class eu.etaxonomy.cdm.model.description.FeatureBase
addMedia, addModifier, addModifyingText, addModifyingText, getMedia, getModifiers, getModifyingText, getType, removeMedia, removeModifier, removeModifyingText, setMedia, setModifiers, setModifyingText, setType

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

TextData

public **TextData**()

Methods

getTexts

public MultilanguageSet **getTexts**()

addText

public void **addText**(java.lang.String text,
        Language lang)

(continued from last page)

addText

public void **addText**([LanguageString](#) text)

---

removeText

public void **removeText**([Language](#) lang)

---

getFormat

public [TextFormat](#) **getFormat**()

---

setFormat

public void **setFormat**([TextFormat](#) format)

---

eu.etaxonomy.cdm.model.description
Class TextFormat

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.TermBase
                │
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    │
                    +-eu.etaxonomy.cdm.model.description.TextFormat
```
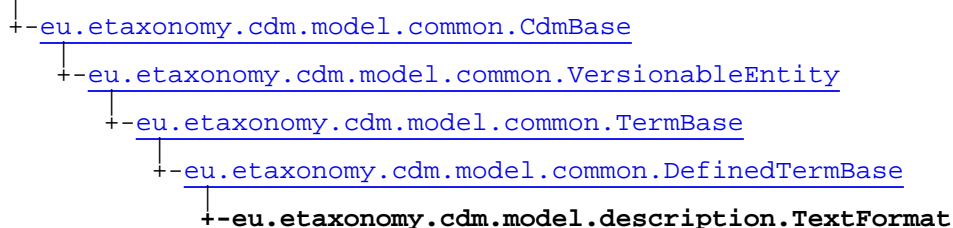
All Implemented Interfaces:
> java.io.Serializable, IDefTerm

---

public class **TextFormat**
extends DefinedTermBase

kind of format used for structuring text. E.g. xml schema namespace, rdf, or any other format

---

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

vocabulary, vocabularyStore

Constructor Summary

public	TextFormat()
public	TextFormat(java.lang.String term, java.lang.String label)

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

---

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

TextFormat

public **TextFormat**()

TextFormat

public **TextFormat**(java.lang.String term,
                    java.lang.String label)

Package
eu.etaxonomy.cdm.model.location

eu.etaxonomy.cdm.model.location
Class Continent

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.location.Continent
```

All Implemented Interfaces:
    java.io.Serializable, IDefTerm

public class **Continent**
extends DefinedTermBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	Continent()
public	Continent(java.lang.String term, java.lang.String label)

Method Summary

static Continent	AFRICA()
static Continent	ANTARCTICA()
static Continent	ASIA()
static Continent	EUROPE()
static Continent	getUUID(java.util.UUID uuid)
static Continent	NORTH_AMERICA()
static Continent	OCEANIA()
static Continent	SOUTH_AMERICA()

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

---

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

Continent

public **Continent**()

Continent

public **Continent**(java.lang.String term,
                java.lang.String label)

Methods

getUUID

public final static Continent **getUUID**(java.util.UUID uuid)

EUROPE

```
public final static Continent EUROPE()
```

AFRICA

```
public final static Continent AFRICA()
```

ASIA

```
public final static Continent ASIA()
```

NORTH_AMERICA

```
public final static Continent NORTH_AMERICA()
```

ANTARCTICA

```
public final static Continent ANTARCTICA()
```

SOUTH_AMERICA

```
public final static Continent SOUTH_AMERICA()
```

OCEANIA

```
public final static Continent OCEANIA()
```

eu.etaxonomy.cdm.model.location
Class NamedArea

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.TermBase
                │
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    │
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        │
                        +-eu.etaxonomy.cdm.model.location.NamedArea
```
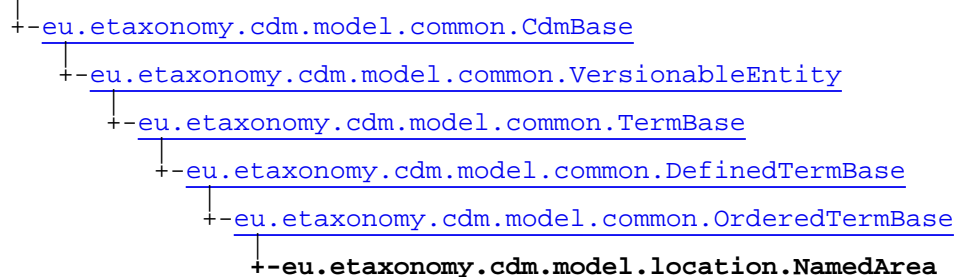
All Implemented Interfaces:
        java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **NamedArea**
extends OrderedTermBase

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	NamedArea()
public	NamedArea(java.lang.String term, java.lang.String label)

Method Summary

void	addWaterbodyOrCountry(WaterbodyOrCountry waterbodyOrCountry)
NamedAreaLevel	getLevel()
Point	getPointApproximation()
Media	getShape()
NamedAreaType	getType()
TimePeriod	getValidPeriod()
java.util.Set	getWaterbodiesOrCountries()

---

	void	removeWaterbodyOrCountry(WaterbodyOrCountry waterbodyOrCountry)
	void	setLevel(NamedAreaLevel level)
	void	setPointApproximation(Point pointApproximation)
	void	setShape(Media shape)
	void	setType(NamedAreaType type)
	void	setValidPeriod(TimePeriod validPeriod)
	void	setWaterbodiesOrCountries(java.util.Set waterbodiesOrCountries)

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface `java.lang.Comparable`

compareTo

Constructors

NamedArea

public **NamedArea**()

NamedArea

public **NamedArea**(java.lang.String term,
                   java.lang.String label)

Methods

getType

public [NamedAreaType](#) **getType**()

setType

public void **setType**([NamedAreaType](#) type)

getLevel

public [NamedAreaLevel](#) **getLevel**()

setLevel

public void **setLevel**([NamedAreaLevel](#) level)

getValidPeriod

public [TimePeriod](#) **getValidPeriod**()

setValidPeriod

public void **setValidPeriod**([TimePeriod](#) validPeriod)

getShape

```
public Media getShape()
```

setShape

```
public void setShape(Media shape)
```

getWaterbodiesOrCountries

```
public java.util.Set getWaterbodiesOrCountries()
```

setWaterbodiesOrCountries

```
protected void setWaterbodiesOrCountries(java.util.Set waterbodiesOrCountries)
```

addWaterbodyOrCountry

```
public void addWaterbodyOrCountry(WaterbodyOrCountry waterbodyOrCountry)
```

removeWaterbodyOrCountry

```
public void removeWaterbodyOrCountry(WaterbodyOrCountry waterbodyOrCountry)
```

getPointApproximation

```
public Point getPointApproximation()
```
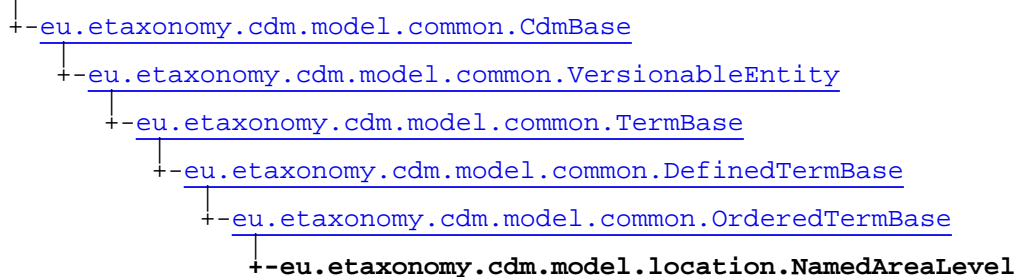
setPointApproximation

```
public void setPointApproximation(Point pointApproximation)
```

eu.etaxonomy.cdm.model.location
Class NamedAreaLevel

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.location.NamedAreaLevel
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **NamedAreaLevel**
extends OrderedTermBase

Controlled vocabulary to diferenctiate levels of areas such as province, state, etc.

Fields inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

orderIndex

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	NamedAreaLevel()
public	NamedAreaLevel(java.lang.String term, java.lang.String label)

Method Summary

static NamedAreaLevel	NATURE_RESERVE()
static NamedAreaLevel	PROVINCE()
static NamedAreaLevel	STATE()
static NamedAreaLevel	TDWG_LEVEL1() continents
static NamedAreaLevel	TDWG_LEVEL2() larger regions
static NamedAreaLevel	TDWG_LEVEL3() mostly countries

static NamedAreaLevel	TDWG_LEVEL4()	
static NamedAreaLevel	TOWN()	

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

NamedAreaLevel

public **NamedAreaLevel**()

NamedAreaLevel

```
public NamedAreaLevel(java.lang.String term,
                      java.lang.String label)
```

Methods

TDWG_LEVEL1

```
public final static NamedAreaLevel TDWG_LEVEL1()
```

> continents

TDWG_LEVEL2

```
public final static NamedAreaLevel TDWG_LEVEL2()
```

> larger regions

TDWG_LEVEL3

```
public final static NamedAreaLevel TDWG_LEVEL3()
```

> mostly countries

TDWG_LEVEL4

```
public final static NamedAreaLevel TDWG_LEVEL4()
```

NATURE_RESERVE

```
public final static NamedAreaLevel NATURE_RESERVE()
```

STATE

```
public final static NamedAreaLevel STATE()
```

PROVINCE

```
public final static NamedAreaLevel PROVINCE()
```
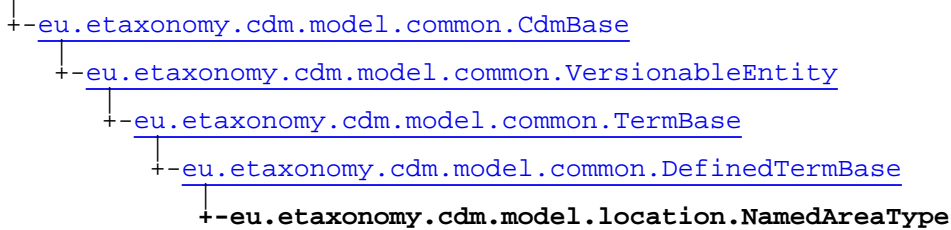
TOWN

```
public final static NamedAreaLevel TOWN()
```

eu.etaxonomy.cdm.model.location
Class NamedAreaType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.location.NamedAreaType
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm

---

public class **NamedAreaType**
extends DefinedTermBase

Controlled vocabulary to diferenctiate categories of areas

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	NamedAreaType(java.lang.String term, java.lang.String label)

Method Summary

static NamedAreaType	ADMINISTRATION_AREA() The boundaries depend on administration (county, state, reserve, etc.)
static NamedAreaType	NATURAL_AREA() The boundaries are given by natural factors (mountains, valleys, climate, etc.)

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

NamedAreaType

```
public NamedAreaType(java.lang.String term,
                     java.lang.String label)
```

Methods

NATURAL_AREA

public final static NamedAreaType **NATURAL_AREA**()

> The boundaries are given by natural factors (mountains, valleys, climate, etc.)

ADMINISTRATION_AREA

public final static NamedAreaType **ADMINISTRATION_AREA**()

> The boundaries depend on administration (county, state, reserve, etc.)

eu.etaxonomy.cdm.model.location
Class Point

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.location.Point
```

public class **Point**
extends java.lang.Object

Constructor Summary

public	[Point](#)()

Method Summary

java.lang.Integer	[getErrorRadius](#)()
java.lang.Float	[getLatitude](#)()
java.lang.Float	[getLongitude](#)()
[ReferenceSystem](#)	[getReferenceSystem](#)()
void	[setErrorRadius](#)(java.lang.Integer errorRadius)
void	[setLatitude](#)(java.lang.Float latitude)
void	[setLongitude](#)(java.lang.Float longitude)
void	[setReferenceSystem](#)([ReferenceSystem](#) referenceSystem)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

Point

public **Point**()

Methods

getReferenceSystem

public [ReferenceSystem](#) **getReferenceSystem**()

setReferenceSystem

public void **setReferenceSystem**([ReferenceSystem](#) referenceSystem)

> **Parameters:**
> referenceSystem - referenceSystem

getLongitude

public java.lang.Float **getLongitude**()

setLongitude

public void **setLongitude**(java.lang.Float longitude)

> **Parameters:**
> longitude - longitude

getLatitude

public java.lang.Float **getLatitude**()

setLatitude

public void **setLatitude**(java.lang.Float latitude)

> **Parameters:**
> latitude - latitude

getErrorRadius

public java.lang.Integer **getErrorRadius**()

setErrorRadius

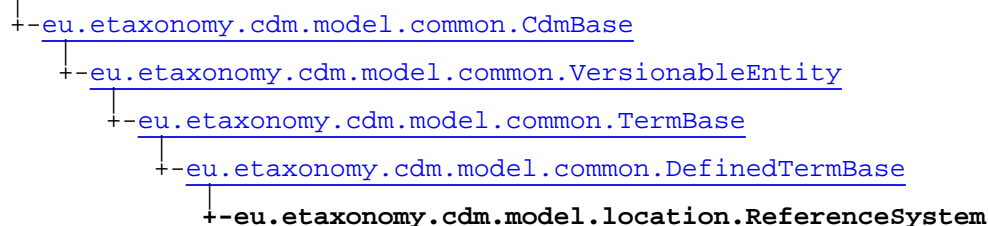public void **setErrorRadius**(java.lang.Integer errorRadius)

(continued from last page)

Parameters:
    `errorRadius` - errorRadius

eu.etaxonomy.cdm.model.location
Class ReferenceSystem

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.TermBase
                │
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    │
                    +-eu.etaxonomy.cdm.model.location.ReferenceSystem
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm

---

public class **ReferenceSystem**
extends DefinedTermBase

Reference systems for coordinates also according to OGC (Open Geographical Consosrtium) The list should be extensible at runtime through configuration. This needs to be investigated.

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

vocabulary, vocabularyStore

Constructor Summary

public	ReferenceSystem(java.lang.String term, java.lang.String label)

Method Summary

static ReferenceSystem	WGS84()

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

ReferenceSystem

```
public ReferenceSystem(java.lang.String term,
                       java.lang.String label)
```

Methods

WGS84

```
public final static ReferenceSystem WGS84()
```

eu.etaxonomy.cdm.model.location
Class WaterbodyOrCountry

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.location.WaterbodyOrCountry
```

All Implemented Interfaces:
java.io.Serializable, IDefTerm

---

public class **WaterbodyOrCountry**
extends DefinedTermBase

+/- current ISO codes. year given with each entry http://userpage.chemie.fu-berlin.de/diverse/doc/ISO_3166.html
http://www.davros.org/misc/iso3166.txt

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	WaterbodyOrCountry()
public	WaterbodyOrCountry(java.lang.String term, java.lang.String label)

Method Summary

void	addContinents(Continent continent)
java.util.Set	getContinents()
java.lang.String	getIso2code()
TimePeriod	getValidPeriod()
void	readCsvLine(java.util.List csvLine)
void	removeContinents(Continent continent)
void	setContinents(java.util.Set continents)
void	setIso2code(java.lang.String iso2code)

void	setValidPeriod(TimePeriod validPeriod)
void	writeCsvLine(CSVWriter writer)

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

WaterbodyOrCountry

public **WaterbodyOrCountry**()

WaterbodyOrCountry

public **WaterbodyOrCountry**(java.lang.String term,
                       java.lang.String label)

Methods

getContinents

public java.util.Set **getContinents**()

---

setContinents

protected void **setContinents**(java.util.Set continents)

---

addContinents

public void **addContinents**(Continent continent)

---

removeContinents

public void **removeContinents**(Continent continent)

---

getIso2code

public java.lang.String **getIso2code**()

---

setIso2code

public void **setIso2code**(java.lang.String iso2code)

Parameters:
    iso2code - iso2code

---

getValidPeriod

public TimePeriod **getValidPeriod**()

---

setValidPeriod

public void **setValidPeriod**(TimePeriod validPeriod)

Parameters:
    validPeriod - validPeriod

---

readCsvLine

```
public void readCsvLine(java.util.List csvLine)
```

writeCsvLine

```
public void writeCsvLine(CSVWriter writer)
```

readCsvLine

```
public void readCsvLine(java.util.List csvLine)
```

Package

eu.etaxonomy.cdm.model.molecular

eu.etaxonomy.cdm.model.molecular
Class DnaSample

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
      |
      +-eu.etaxonomy.cdm.model.common.VersionableEntity
         |
         +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
            |
            +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
               |
               +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                  |
                  +-eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase
                     |
                     +-eu.etaxonomy.cdm.model.occurrence.DerivedUnit
                        |
                        +-eu.etaxonomy.cdm.model.occurrence.Specimen
                           |
                           +-eu.etaxonomy.cdm.model.molecular.DnaSample
```

All Implemented Interfaces:
        java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **DnaSample**
extends Specimen

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	DnaSample()

Method Summary

void	addSequences(Sequence sequence)
java.lang.String	getBankNumber()
java.util.Set	getExtractedFrom()
java.util.Set	getSequences()
Collection	getStoredAt()
void	removeSequences(Sequence sequence)
void	setBankNumber(java.lang.String bankNumber)

void	setSequences(java.util.Set sequences)
void	setStoredAt(Collection storedAt)

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.Specimen

getPreservation, setPreservation

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.DerivedUnit

getCatalogNumber, getCollection, getDerivedFrom, getGatheringEvent, getOriginals, getStoredUnder, setCatalogNumber, setCollection, setDerivedFrom, setStoredUnder

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase

addDefinition, addDefinition, addDerivationEvent, addDetermination, generateTitle, getDefinition, getDerivationEvents, getDeterminations, getGatheringEvent, getIndividualCount, getLifeStage, getOriginalUnit, getSex, removeDefinition, removeDerivationEvent, removeDetermination, setDerivationEvents, setDeterminations, setIndividualCount, setLifeStage, setSex

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource , getSources , removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

DnaSample

public **DnaSample**()

Methods

getSequences

public java.util.Set **getSequences**()

setSequences

protected void **setSequences**(java.util.Set sequences)

addSequences

public void **addSequences**(Sequence sequence)

removeSequences

public void **removeSequences**(Sequence sequence)

getStoredAt

public Collection **getStoredAt**()

setStoredAt

public void **setStoredAt**(Collection storedAt)

getExtractedFrom

```
public java.util.Set getExtractedFrom()
```

getBankNumber

```
public java.lang.String getBankNumber()
```

setBankNumber

```
public void setBankNumber(java.lang.String bankNumber)
```

getExtractedFrom

```
public java.util.Set getExtractedFrom()
```

eu.etaxonomy.cdm.model.molecular
Class GenBankAccession

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.molecular.GenBankAccession
```
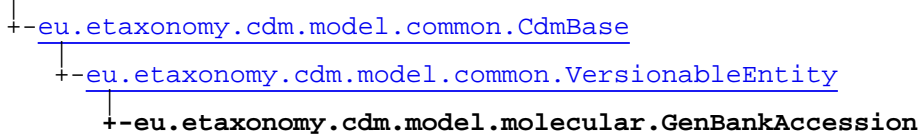
All Implemented Interfaces:
> java.io.Serializable

---

public class **GenBankAccession**
extends VersionableEntity

Constructor Summary

public	GenBankAccession()

Method Summary

java.lang.String	getAccessionNumber()
java.lang.String	getUri()
void	setAccessionNumber(java.lang.String accessionNumber)
void	setUri(java.lang.String uri)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Constructors

GenBankAccession

public **GenBankAccession**()

Methods

getAccessionNumber

public java.lang.String **getAccessionNumber**()

setAccessionNumber

public void **setAccessionNumber**(java.lang.String accessionNumber)

Parameters:
    accessionNumber - accessionNumber

getUri

public java.lang.String **getUri**()

setUri

public void **setUri**(java.lang.String uri)

Parameters:
    uri - uri

eu.etaxonomy.cdm.model.molecular
Class Locus

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.molecular.Locus
```
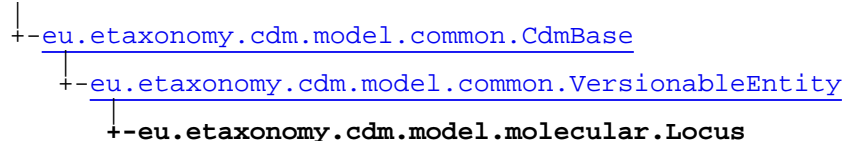
All Implemented Interfaces:
> java.io.Serializable

---

public class **Locus**
extends VersionableEntity

The region name of a DNA string. E.g. 18S, COX, etc.

Constructor Summary

public	Locus()

Method Summary

java.lang.String	getDescription()
java.lang.String	getName()
void	setDescription(java.lang.String description)
void	setName(java.lang.String name)

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Constructors

Locus

```
public Locus()
```

Methods

getName

```
public java.lang.String getName()
```

setName

```
public void setName(java.lang.String name)
```

Parameters:
name - name

getDescription

```
public java.lang.String getDescription()
```

setDescription

```
public void setDescription(java.lang.String description)
```

Parameters:
description - description

eu.etaxonomy.cdm.model.molecular
Class PhylogeneticTree

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.Media
                    |
                    +-eu.etaxonomy.cdm.model.common.ReferencedMedia
                        |
                        +-eu.etaxonomy.cdm.model.molecular.PhylogeneticTree
```
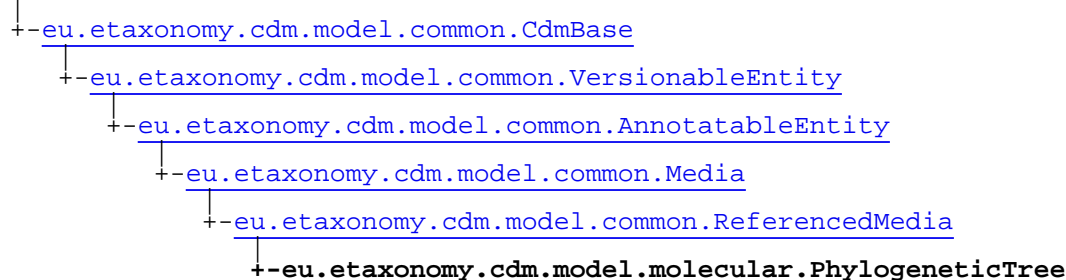
All Implemented Interfaces:
> java.io.Serializable**,** IReferencedEntity

---

public class **PhylogeneticTree**
extends ReferencedMedia

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	PhylogeneticTree()

Method Summary

void	addUsedSequences(Sequence usedSequence)
java.util.Set	getUsedSequences()
void	removeUsedSequences(Sequence usedSequence)
void	setUsedSequences(java.util.Set usedSequences)

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedMedia
getCitation, getCitationMicroReference, setCitation, setCitationMicroReference

Methods inherited from class eu.etaxonomy.cdm.model.common.Media
addDescription, addDescription, addInstance, addRights, getArtist, getDescription, getInstances, getMediaCreated, getRights, getTitle, removeDescription, removeInstance, removeRights, setArtist, setDescription, setInstances, setMediaCreated, setRights, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

PhylogeneticTree

public **PhylogeneticTree**()

Methods

getUsedSequences

public java.util.Set **getUsedSequences**()

setUsedSequences

protected void **setUsedSequences**(java.util.Set usedSequences)

addUsedSequences

public void **addUsedSequences**(Sequence usedSequence)

removeUsedSequences

```
public void removeUsedSequences(Sequence usedSequence)
```

removeUsedSequences

```
public void removeUsedSequences(Sequence usedSequence)
```

eu.etaxonomy.cdm.model.molecular
Class Sequence

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.molecular.Sequence
```

All Implemented Interfaces:
    IMediaDocumented**,** IReferencedEntity**,** java.io.Serializable**,** IOriginalSource

---

public class **Sequence**
extends IdentifiableEntity
implements IOriginalSource, java.io.Serializable, IReferencedEntity, IMediaDocumented

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	Sequence()

Method Summary

void	addChromatogram(Media chromatogram)
void	addCitation(ReferenceBase citation)
void	addGenBankAccession(GenBankAccession genBankAccession)
java.lang.String	generateTitle()
java.util.Set	getChromatograms()
ReferenceBase	getCitation()
java.lang.String	getCitationMicroReference()
java.util.Set	getCitations()
java.util.Calendar	getDateSequenced()

java.util.Set	getGenBankAccession()	
java.lang.Integer	getLength()	
Locus	getLocus()	
java.util.Set	getMedia()	
ReferenceBase	getPublishedIn()	
java.lang.String	getSequence()	
boolean	isBarcode()	
void	removeChromatogram(Media chromatogram)	
void	removeCitation(ReferenceBase citation)	
void	removeGenBankAccession(GenBankAccession genBankAccession)	
void	setBarcode(boolean isBarcode)	
void	setChromatograms(java.util.Set chromatograms)	
void	setCitationMicroReference(java.lang.String citationMicroReference)	
void	setCitations(java.util.Set citations)	
void	setDateSequenced(java.util.Calendar dateSequenced)	
void	setGenBankAccession(java.util.Set genBankAccession)	
void	setLength(java.lang.Integer length)	
void	setLocus(Locus locus)	
void	setPublishedIn(ReferenceBase publishedIn)	
void	setSequence(java.lang.String sequence)	

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Sequence

public **Sequence**()

Methods

getLocus

public Locus **getLocus**()

setLocus

public void **setLocus**(Locus locus)

getPublishedIn

public ReferenceBase **getPublishedIn**()

setPublishedIn

public void **setPublishedIn**(ReferenceBase publishedIn)

getCitations

public java.util.Set **getCitations**()

setCitations

protected void **setCitations**(java.util.Set citations)

addCitation

public void **addCitation**(ReferenceBase citation)

removeCitation

public void **removeCitation**(ReferenceBase citation)

getGenBankAccession

public java.util.Set **getGenBankAccession**()

setGenBankAccession

protected void **setGenBankAccession**(java.util.Set genBankAccession)

addGenBankAccession

public void **addGenBankAccession**(GenBankAccession genBankAccession)

removeGenBankAccession

public void **removeGenBankAccession**(GenBankAccession genBankAccession)

getChromatograms

`public java.util.Set ` **`getChromatograms`**`()`

setChromatograms

`protected void ` **`setChromatograms`**`(java.util.Set chromatograms)`

addChromatogram

`public void ` **`addChromatogram`**`(`Media` chromatogram)`

removeChromatogram

`public void ` **`removeChromatogram`**`(`Media` chromatogram)`

getMedia

`public java.util.Set ` **`getMedia`**`()`

getSequence

`public java.lang.String ` **`getSequence`**`()`

setSequence

`public void ` **`setSequence`**`(java.lang.String sequence)`

Parameters:
   sequence - sequence

getLength

`public java.lang.Integer ` **`getLength`**`()`

setLength

`public void ` **`setLength`**`(java.lang.Integer length)`

(continued from last page)

Parameters:
     `length` - length

getDateSequenced

`public java.util.Calendar `**`getDateSequenced`**`()`

setDateSequenced

`public void `**`setDateSequenced`**`(java.util.Calendar dateSequenced)`

Parameters:
     `dateSequenced` - dateSequenced

isBarcode

`public boolean `**`isBarcode`**`()`

setBarcode

`public void `**`setBarcode`**`(boolean isBarcode)`

Parameters:
     `isBarcode` - isBarcode

getCitationMicroReference

`public java.lang.String `**`getCitationMicroReference`**`()`

setCitationMicroReference

`public void `**`setCitationMicroReference`**`(java.lang.String citationMicroReference)`

Parameters:
     `citationMicroReference` - citationMicroReference

generateTitle

`public java.lang.String `**`generateTitle`**`()`

getCitation

`public `[ReferenceBase]` `**`getCitation`**`()`

Package
eu.etaxonomy.cdm.model.name

eu.etaxonomy.cdm.model.name
Class BacterialName

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.name.TaxonNameBase
                        |
                        +-eu.etaxonomy.cdm.model.name.NonViralName
                            |
                            +-eu.etaxonomy.cdm.model.name.BacterialName
```
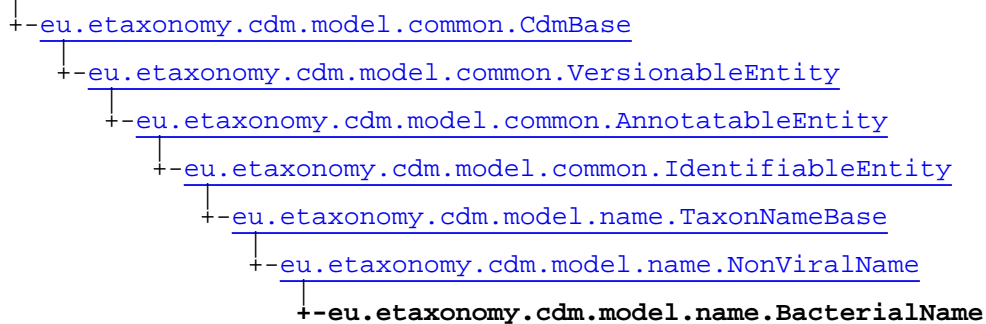
All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IReferencedEntity

---

public class **BacterialName**
extends NonViralName

Taxon name class for bacteria

Fields inherited from class eu.etaxonomy.cdm.model.name.TaxonNameBase
cacheStrategy, nameParser, nameTypeDesignations, protectedNameCache

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	BacterialName(Rank rank)

Method Summary

java.lang.String	getNameApprobation()
java.lang.String	getSubGenusAuthorship()
void	setNameApprobation(java.lang.String nameApprobation)
void	setSubGenusAuthorship(java.lang.String subGenusAuthorship)

Methods inherited from class eu.etaxonomy.cdm.model.name.NonViralName

generateTitle, getAuthorshipCache, getBasionymAuthorTeam, getCombinationAuthorTeam, getExBasionymAuthorTeam, getExCombinationAuthorTeam, getGenusOrUninomial, getInfraGenericEpithet, getInfraSpecificEpithet, getSpecificEpithet, isCodeCompliant, setAuthorshipCache, setBasionymAuthorTeam, setCombinationAuthorTeam, setExBasionymAuthorTeam, setExCombinationAuthorTeam, setGenusOrUninomial, setInfraGenericEpithet, setInfraSpecificEpithet, setSpecificEpithet

Methods inherited from class `eu.etaxonomy.cdm.model.name.TaxonNameBase`

addNameRelationship, addRelationshipFromName, addRelationshipToName, addStatus, addTypeDesignation, addTypeDesignation, generateNameCache, getAppendedPhrase, getBasionym, getCacheStrategy, getCitation, getCitationString, getHasProblem, getHomotypicalGroup, getNameCache, getNameRelations, getNameTypeDesignations, getNomenclaturalMicroReference, getNomenclaturalReference, getProblems, getRank, getRelationsFromThisName, getRelationsToThisName, getSpecimenTypeDesignations, getStatus, getSynonyms, getTaxa, getYear, isCodeCompliant, isGenus, isInfraGeneric, isInfraSpecific, isSpecies, isSupraGeneric, isSupraGeneric, removeNameRelationship, removeStatus, removeTypeDesignation, removeTypeDesignation, setAppendedPhrase, setBasionym, setBasionym, setCacheStrategy, setHasProblem, setHomotypicalGroup, setNameCache, setNameTypeDesignations, setNomenclaturalMicroReference, setNomenclaturalReference, setRank, setStatus

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifiableEntity`

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IOriginalSource`

addSource, getSources, removeSource

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IReferencedEntity`

getCitation

Constructors

BacterialName

public **BacterialName**(Rank rank)

Methods

getSubGenusAuthorship

public java.lang.String **getSubGenusAuthorship**()

setSubGenusAuthorship

public void **setSubGenusAuthorship**(java.lang.String subGenusAuthorship)

Parameters:
subGenusAuthorship - subGenusAuthorship

getNameApprobation

public java.lang.String **getNameApprobation**()

setNameApprobation

public void **setNameApprobation**(java.lang.String nameApprobation)

Parameters:
nameApprobation - nameApprobation

eu.etaxonomy.cdm.model.name
Class BotanicalName

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
             |
             +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                  |
                  +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                       |
                       +-eu.etaxonomy.cdm.model.name.TaxonNameBase
                            |
                            +-eu.etaxonomy.cdm.model.name.NonViralName
                                 |
                                 +-eu.etaxonomy.cdm.model.name.BotanicalName
```
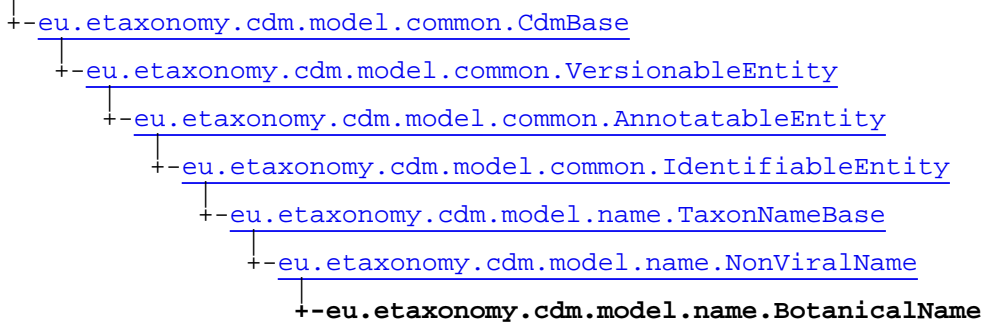
All Implemented Interfaces:
> java.io.Serializable **,** IOriginalSource **,** IReferencedEntity

Direct Known Subclasses:
> CultivarPlantName

---

public class **BotanicalName**
extends NonViralName

Taxon name class for plants

Fields inherited from class eu.etaxonomy.cdm.model.name.TaxonNameBase
cacheStrategy, nameParser, nameTypeDesignations, protectedNameCache

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

protected	BotanicalName()
public	BotanicalName(Rank rank)
public	BotanicalName(Rank rank, java.lang.String genusOrUninomial, java.lang.String specificEpithet, java.lang.String infraSpecificEpithet, Agent combinationAuthorTeam, INomenclaturalReference nomenclaturalReference, java.lang.String nomenclMicroRef)

Method Summary

void	addHybridRelationship(HybridRelationship relationship)
java.util.Set	getChildRelationships()

java.util.Set	getHybridRelationships()	
java.util.Set	getParentRelationships()	
boolean	isAnamorphic()	
boolean	isBinomHybrid()	
boolean	isHybridFormula()	
boolean	isMonomHybrid()	
boolean	isTrinomHybrid()	
static BotanicalName	NewInstance(Rank rank)	
static BotanicalName	PARSED_NAME(java.lang.String fullName) Returns a parsed Name	
static BotanicalName	PARSED_NAME(java.lang.String fullName, Rank rank) Returns a parsed Name	
void	removeHybridRelationship(HybridRelationship relationship)	
void	setAnamorphic(boolean isAnamorphic)	
void	setBinomHybrid(boolean isBinomHybrid)	
void	setHybridFormula(boolean isHybridFormula)	
void	setHybridRelationships(java.util.Set relationships)	
void	setMonomHybrid(boolean isMonomHybrid)	
void	setTrinomHybrid(boolean isTrinomHybrid)	

Methods inherited from class eu.etaxonomy.cdm.model.name.NonViralName

generateTitle, getAuthorshipCache, getBasionymAuthorTeam, getCombinationAuthorTeam, getExBasionymAuthorTeam, getExCombinationAuthorTeam, getGenusOrUninomial, getInfraGenericEpithet, getInfraSpecificEpithet, getSpecificEpithet, isCodeCompliant, setAuthorshipCache, setBasionymAuthorTeam, setCombinationAuthorTeam, setExBasionymAuthorTeam, setExCombinationAuthorTeam, setGenusOrUninomial, setInfraGenericEpithet, setInfraSpecificEpithet, setSpecificEpithet

Methods inherited from class eu.etaxonomy.cdm.model.name.TaxonNameBase

addNameRelationship, addRelationshipFromName, addRelationshipToName, addStatus, addTypeDesignation, addTypeDesignation, generateNameCache, getAppendedPhrase, getBasionym, getCacheStrategy, getCitation, getCitationString, getHasProblem, getHomotypicalGroup, getNameCache, getNameRelations, getNameTypeDesignations, getNomenclaturalMicroReference, getNomenclaturalReference, getProblems, getRank, getRelationsFromThisName, getRelationsToThisName, getSpecimenTypeDesignations, getStatus, getSynonyms, getTaxa, getYear, isCodeCompliant, isGenus, isInfraGeneric, isInfraSpecific, isSpecies, isSupraGeneric, isSupraGeneric, removeNameRelationship, removeStatus, removeTypeDesignation, removeTypeDesignation, setAppendedPhrase, setBasionym, setBasionym, setCacheStrategy, setHasProblem, setHomotypicalGroup, setNameCache, setNameTypeDesignations, setNomenclaturalMicroReference, setNomenclaturalReference, setRank, setStatus

---

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

---

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

BotanicalName

```
protected BotanicalName()
```

BotanicalName

```
public BotanicalName(Rank rank)
```

BotanicalName

```
public BotanicalName(Rank rank,
                     java.lang.String genusOrUninomial,
                     java.lang.String specificEpithet,
                     java.lang.String infraSpecificEpithet,
                     Agent combinationAuthorTeam,
                     INomenclaturalReference nomenclaturalReference,
                     java.lang.String nomenclMicroRef)
```

Methods

NewInstance

```
public static BotanicalName NewInstance(Rank rank)
```

Parameters:
    rank

Returns:

PARSED_NAME

```
public static BotanicalName PARSED_NAME(java.lang.String fullName)
```

Returns a parsed Name

Parameters:
    fullName

Returns:

PARSED_NAME

```
public static BotanicalName PARSED_NAME(java.lang.String fullName,
        Rank rank)
```

Returns a parsed Name

Parameters:
    fullName

Returns:

getHybridRelationships

```
public java.util.Set getHybridRelationships()
```

setHybridRelationships

```
protected void setHybridRelationships(java.util.Set relationships)
```

addHybridRelationship

```
public void addHybridRelationship(HybridRelationship relationship)
```

removeHybridRelationship

```
public void removeHybridRelationship(HybridRelationship relationship)
```

getParentRelationships

```
public java.util.Set getParentRelationships()
```

getChildRelationships

```
public java.util.Set getChildRelationships()
```

isHybridFormula

```
public boolean isHybridFormula()
```

setHybridFormula

```
public void setHybridFormula(boolean isHybridFormula)
```

Parameters:
    isHybridFormula - isHybridFormula

isMonomHybrid

```
public boolean isMonomHybrid()
```

setMonomHybrid

public void **setMonomHybrid**(boolean isMonomHybrid)

Parameters:
isMonomHybrid - isMonomHybrid

isBinomHybrid

public boolean **isBinomHybrid**()

setBinomHybrid

public void **setBinomHybrid**(boolean isBinomHybrid)

Parameters:
isBinomHybrid - isBinomHybrid

isTrinomHybrid

public boolean **isTrinomHybrid**()

setTrinomHybrid

public void **setTrinomHybrid**(boolean isTrinomHybrid)

Parameters:
isTrinomHybrid - isTrinomHybrid

isAnamorphic

public boolean **isAnamorphic**()

setAnamorphic

public void **setAnamorphic**(boolean isAnamorphic)

Parameters:
isAnamorphic - isAnamorphic

eu.etaxonomy.cdm.model.name
Class CultivarPlantName

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                │
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    │
                    +-eu.etaxonomy.cdm.model.name.TaxonNameBase
                        │
                        +-eu.etaxonomy.cdm.model.name.NonViralName
                            │
                            +-eu.etaxonomy.cdm.model.name.BotanicalName
                                │
                                +-eu.etaxonomy.cdm.model.name.CultivarPlantName
```
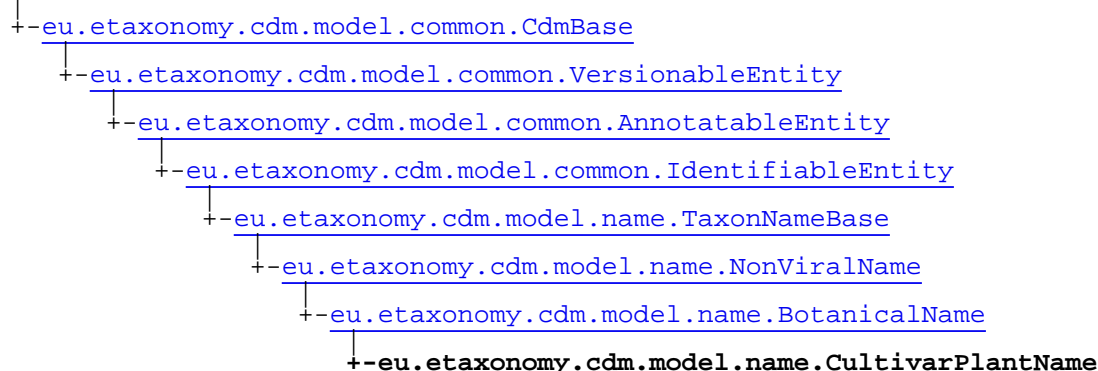
All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IReferencedEntity

---

public class **CultivarPlantName**
extends BotanicalName

Taxon name class for cultivars. {only possible for CULTIVAR, GREX, CONVAR, CULTIVAR_GROUP, GRAFT_CHIMAERA and DENOMINATION_CLASS ranks}

Fields inherited from class `eu.etaxonomy.cdm.model.name.TaxonNameBase`

`cacheStrategy`, `nameParser`, `nameTypeDesignations`, `protectedNameCache`

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

`annotations`, `markers`

Constructor Summary

public	CultivarPlantName(Rank rank)

Method Summary

java.lang.String	getCultivarName()
void	setCultivarName(java.lang.String cultivarName)

Methods inherited from class `eu.etaxonomy.cdm.model.name.BotanicalName`

`addHybridRelationship`, `getChildRelationships`, `getHybridRelationships`, `getParentRelationships`, `isAnamorphic`, `isBinomHybrid`, `isHybridFormula`, `isMonomHybrid`, `isTrinomHybrid`, `NewInstance`, `PARSED_NAME`, `PARSED_NAME`, `removeHybridRelationship`, `setAnamorphic`, `setBinomHybrid`, `setHybridFormula`, `setHybridRelationships`, `setMonomHybrid`, `setTrinomHybrid`

Methods inherited from class `eu.etaxonomy.cdm.model.name.NonViralName`

---

generateTitle, getAuthorshipCache, getBasionymAuthorTeam, getCombinationAuthorTeam, getExBasionymAuthorTeam, getExCombinationAuthorTeam, getGenusOrUninomial, getInfraGenericEpithet, getInfraSpecificEpithet, getSpecificEpithet, isCodeCompliant, setAuthorshipCache, setBasionymAuthorTeam, setCombinationAuthorTeam, setExBasionymAuthorTeam, setExCombinationAuthorTeam, setGenusOrUninomial, setInfraGenericEpithet, setInfraSpecificEpithet, setSpecificEpithet

Methods inherited from class `eu.etaxonomy.cdm.model.name.TaxonNameBase`

addNameRelationship, addRelationshipFromName, addRelationshipToName, addStatus, addTypeDesignation, addTypeDesignation, generateNameCache, getAppendedPhrase, getBasionym, getCacheStrategy, getCitation, getCitationString, getHasProblem, getHomotypicalGroup, getNameCache, getNameRelations, getNameTypeDesignations, getNomenclaturalMicroReference, getNomenclaturalReference, getProblems, getRank, getRelationsFromThisName, getRelationsToThisName, getSpecimenTypeDesignations, getStatus, getSynonyms, getTaxa, getYear, isCodeCompliant, isGenus, isInfraGeneric, isInfraSpecific, isSpecies, isSupraGeneric, isSupraGeneric, removeNameRelationship, removeStatus, removeTypeDesignation, removeTypeDesignation, setAppendedPhrase, setBasionym, setBasionym, setCacheStrategy, setHasProblem, setHomotypicalGroup, setNameCache, setNameTypeDesignations, setNomenclaturalMicroReference, setNomenclaturalReference, setRank, setStatus

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifiableEntity`

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IOriginalSource`

addSource, getSources, removeSource

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IReferencedEntity`

getCitation

Constructors

CultivarPlantName

public **CultivarPlantName**(Rank rank)

Methods

getCultivarName

public java.lang.String **getCultivarName**()

setCultivarName

public void **setCultivarName**(java.lang.String cultivarName)

Parameters:
cultivarName - cultivarName

eu.etaxonomy.cdm.model.name
Class HomotypicalGroup

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.name.HomotypicalGroup
```
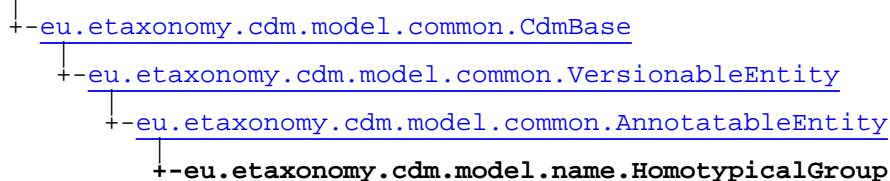
All Implemented Interfaces:
> java.io.Serializable

---

public class **HomotypicalGroup**
extends AnnotatableEntity

A homotypical group represents all names that share the same type specimens. This also includes supergeneric names like genera or families which usually have a name type designation that finally (a name type designation can also point to another supergeneric name) points to a species name, which in turn has a (set of) physical type specimen(s).

Field Summary

protected	typeDesignations
protected	typifiedNames

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	HomotypicalGroup()

Method Summary

void	addTypeDesignation(SpecimenTypeDesignation typeDesignation)
void	addTypeDesignation(Specimen typeSpecimen, TypeDesignationStatus status, ReferenceBase citation, java.lang.String citationMicroReference, java.lang.String originalNameString)
void	addTypifiedName(TaxonNameBase typifiedName)
java.util.List	getSynonymsInGroup(ReferenceBase sec) Retrieves the synonyms of reference sec that are part of this homotypical group.
java.util.Set	getTypeDesignations()

---

java.util.Set	[getTypifiedNames](#)()
void	[removeTypeDesignation](#)([SpecimenTypeDesignation](#) typeDesignation)
void	[removeTypifiedName](#)([TaxonNameBase](#) typifiedName)
void	[setTypeDesignations](#)(java.util.Set typeDesignations)
void	[setTypifiedNames](#)(java.util.Set typifiedNames)

Methods inherited from class [eu.etaxonomy.cdm.model.common.AnnotatableEntity](#)

[addAnnotations](#), [addMarker](#), [getAnnotations](#), [getMarkers](#), [removeAnnotations](#), [removeMarker](#), [setAnnotations](#), [setMarkers](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.VersionableEntity](#)

[getNextVersion](#), [getPreviousVersion](#), [getUpdated](#), [getUpdatedBy](#), [getValidFrom](#), [getValidTo](#), [setNextVersion](#), [setPreviousVersion](#), [setUpdated](#), [setUpdatedBy](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase](#)

[addPropertyChangeListener](#), [addPropertyChangeListener](#), [equals](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [getCreated](#), [getCreatedBy](#), [getId](#), [getUuid](#), [hasListeners](#), [removePropertyChangeListener](#), [removePropertyChangeListener](#), [setCreated](#), [setCreatedBy](#), [setId](#), [setUuid](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

typifiedNames

protected java.util.Set **typifiedNames**

typeDesignations

protected java.util.Set **typeDesignations**

Constructors

HomotypicalGroup

public **HomotypicalGroup**()

Methods

getTypifiedNames

```
public java.util.Set getTypifiedNames()
```

setTypifiedNames

```
protected void setTypifiedNames(java.util.Set typifiedNames)
```

addTypifiedName

```
public void addTypifiedName(TaxonNameBase typifiedName)
```

removeTypifiedName

```
public void removeTypifiedName(TaxonNameBase typifiedName)
```

getTypeDesignations

```
public java.util.Set getTypeDesignations()
```

setTypeDesignations

```
protected void setTypeDesignations(java.util.Set typeDesignations)
```

addTypeDesignation

```
public void addTypeDesignation(SpecimenTypeDesignation typeDesignation)
```

removeTypeDesignation

```
public void removeTypeDesignation(SpecimenTypeDesignation typeDesignation)
```

addTypeDesignation

```
public void addTypeDesignation(Specimen typeSpecimen,
        TypeDesignationStatus status,
        ReferenceBase citation,
        java.lang.String citationMicroReference,
        java.lang.String originalNameString)
```

getSynonymsInGroup

```
public java.util.List getSynonymsInGroup(ReferenceBase sec)
```

Retrieves the synonyms of reference sec that are part of this homotypical group. If other names are part of this group that are not considered synonyms in the respective sec-reference, then they will not be included in the resultset.

Parameters:
>   sec

Returns:

```
public void addTypeDesignation(Specimen typeSpecimen,
        TypeDesignationStatus status,
        ReferenceBase citation,
```

eu.etaxonomy.cdm.model.name
Class HybridRelationship

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.name.HybridRelationship
```
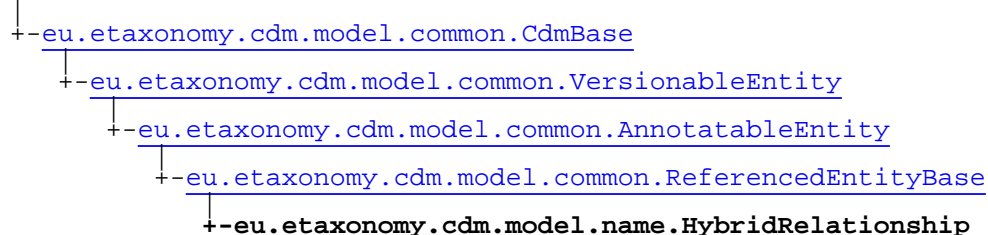
All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **HybridRelationship**
extends ReferencedEntityBase

http://rs.tdwg.org/ontology/voc/TaxonName.rdf#NomenclaturalNote

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	HybridRelationship()

Method Summary

BotanicalName	getHybridName()
BotanicalName	getParentName()
java.lang.String	getRuleConsidered()
HybridRelationshipType	getType()
void	setHybridName(BotanicalName hybridName)
void	setParentName(BotanicalName parentName)
void	setRuleConsidered(java.lang.String ruleConsidered)
void	setType(HybridRelationshipType type)

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

---

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

HybridRelationship

public **HybridRelationship**()

Methods

getType

public HybridRelationshipType **getType**()

setType

public void **setType**(HybridRelationshipType type)

getParentName

public [BotanicalName](#) **getParentName**()

setParentName

public void **setParentName**([BotanicalName](#) parentName)

getHybridName

public [BotanicalName](#) **getHybridName**()

setHybridName

public void **setHybridName**([BotanicalName](#) hybridName)

getRuleConsidered

public java.lang.String **getRuleConsidered**()

setRuleConsidered

public void **setRuleConsidered**(java.lang.String ruleConsidered)

eu.etaxonomy.cdm.model.name
Class HybridRelationshipType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.common.RelationshipTermBase
                            |
                            +-eu.etaxonomy.cdm.model.name.HybridRelationshipType
```
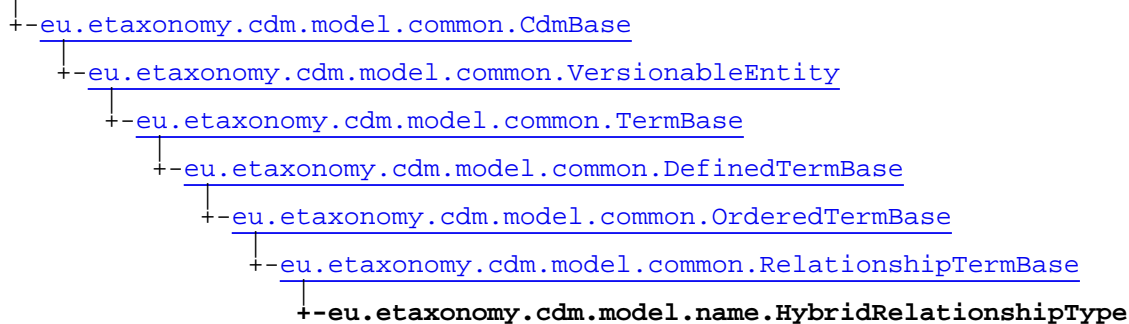
All Implemented Interfaces:
>   java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **HybridRelationshipType**
extends RelationshipTermBase

The list should be extensible at runtime through configuration. This needs to be investigated.

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	HybridRelationshipType()
public	HybridRelationshipType(java.lang.String term, java.lang.String label, boolean symmetric, boolean transitive)

Method Summary

static HybridRelationshipType	FEMALE_PARENT()
static HybridRelationshipType	FIRST_PARENT()
static HybridRelationshipType	MALE_PARENT()
static HybridRelationshipType	SECOND_PARENT()

Methods inherited from class eu.etaxonomy.cdm.model.common.RelationshipTermBase

addInverseRepresentation, addRepresentation, getInverseDescription, getInverseDescription, getInverseLabel, getInverseLabel, getInverseRepresentation, getInverseRepresentations, isSymmetric, isTransitive, readCsvLine, removeInverseRepresentation, setInverseRepresentations, setSymmetric, setTransitive, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

HybridRelationshipType

```
public HybridRelationshipType()
```

HybridRelationshipType

```
public HybridRelationshipType(java.lang.String term,
                              java.lang.String label,
                              boolean symmetric,
                              boolean transitive)
```

Methods

FIRST_PARENT

```
public final static HybridRelationshipType FIRST_PARENT()
```

SECOND_PARENT

```
public final static HybridRelationshipType SECOND_PARENT()
```

FEMALE_PARENT

```
public final static HybridRelationshipType FEMALE_PARENT()
```

MALE_PARENT

```
public final static HybridRelationshipType MALE_PARENT()
```

eu.etaxonomy.cdm.model.name
Class NameRelationship

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                │
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    │
                    +-eu.etaxonomy.cdm.model.name.NameRelationship
```

All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **NameRelationship**
extends ReferencedEntityBase

http://rs.tdwg.org/ontology/voc/TaxonName.rdf#NomenclaturalNote

---

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

protected	NameRelationship(TaxonNameBase toName, TaxonNameBase fromName, NameRelationshipType type, java.lang.String ruleConsidered)
	creates a relationship between 2 names and adds this relationship object to the respective name relation sets

Method Summary

TaxonNameBase	getFromName()
java.lang.String	getRuleConsidered()
TaxonNameBase	getToName()
NameRelationshipType	getType()

Methods inherited from class `eu.etaxonomy.cdm.model.common.ReferencedEntityBase`

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

---

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

NameRelationship

```
protected NameRelationship(TaxonNameBase toName,
                           TaxonNameBase fromName,
                           NameRelationshipType type,
                           java.lang.String ruleConsidered)
```

creates a relationship between 2 names and adds this relationship object to the respective name relation sets

Parameters:
    toName
    fromName
    type
    ruleConsidered

Methods

getFromName

public TaxonNameBase **getFromName**()

getType

public NameRelationshipType **getType**()

getToName

public TaxonNameBase **getToName**()

(continued from last page)

getRuleConsidered

```
public java.lang.String getRuleConsidered()
```

getRuleConsidered

```
public java.lang.String getRuleConsidered()
```

eu.etaxonomy.cdm.model.name
Class NameRelationshipType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.common.RelationshipTermBase
                            |
                            +-eu.etaxonomy.cdm.model.name.NameRelationshipType
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **NameRelationshipType**
extends RelationshipTermBase

http://rs.tdwg.org/ontology/voc/TaxonName.rdf#NomenclaturalNoteTypeTerm

---

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

vocabulary, vocabularyStore

Constructor Summary

public	NameRelationshipType()
public	NameRelationshipType(java.lang.String term, java.lang.String label, boolean symmetric, boolean transitive)

Method Summary

static NameRelationshipType	ALTERNATIVE_NAME()
static NameRelationshipType	BASIONYM()
static NameRelationshipType	BLOCKING_NAME_FOR()
static NameRelationshipType	CONSERVED_AGAINST()
boolean	isIllegitimateType()

boolean	`isInvalidType()`
boolean	`isLegitimateType()`
static `NameRelationshipType`	`LATER_HOMONYM()`
static `NameRelationshipType`	`LATER_VALIDATED_BY_NAME()`
static `NameRelationshipType`	`ORTHOGRAPHIC_VARIANT()`
static `NameRelationshipType`	`REPLACED_SYNONYM()`
static `NameRelationshipType`	`TREATED_AS_LATER_HOMONYM()`
static `NameRelationshipType`	`VALIDATED_BY_NAME()`

Methods inherited from class `eu.etaxonomy.cdm.model.common.RelationshipTermBase`

`addInverseRepresentation`, `addRepresentation`, `getInverseDescription`, `getInverseDescription`, `getInverseLabel`, `getInverseLabel`, `getInverseRepresentation`, `getInverseRepresentations`, `isSymmetric`, `isTransitive`, `readCsvLine`, `removeInverseRepresentation`, `setInverseRepresentations`, `setSymmetric`, `setTransitive`, `writeCsvLine`

Methods inherited from class `eu.etaxonomy.cdm.model.common.OrderedTermBase`

`compareTo`, `decreaseIndex`, `equals`, `incrementIndex`, `isHigher`, `isLower`, `setVocabulary`

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

`addIncludes`, `addMedia`, `findByUuid`, `getGeneralizationOf`, `getIncludes`, `getKindOf`, `getMedia`, `getPartOf`, `getPersistentVocabulary`, `getVocabulary`, `readCsvLine`, `readCsvLine`, `removeIncludes`, `removeMedia`, `setGeneralizationOf`, `setIncludes`, `setKindOf`, `setMedia`, `setPartOf`, `setPersistentVocabulary`, `setVocabulary`, `setVocabularyStore`, `writeCsvLine`

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

`addRepresentation`, `equals`, `getDescription`, `getDescription`, `getLabel`, `getLabel`, `getRepresentation`, `getRepresentations`, `getUri`, `removeRepresentation`, `setRepresentations`, `setUri`, `toString`

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

`getNextVersion`, `getPreviousVersion`, `getUpdated`, `getUpdatedBy`, `getValidFrom`, `getValidTo`, `setNextVersion`, `setPreviousVersion`, `setUpdated`, `setUpdatedBy`

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface `java.lang.Comparable`

```
compareTo
```

Constructors

NameRelationshipType

public **NameRelationshipType**()

NameRelationshipType

```
public NameRelationshipType(java.lang.String term,
                            java.lang.String label,
                            boolean symmetric,
                            boolean transitive)
```

Methods

isInvalidType

public boolean **isInvalidType**()

isLegitimateType

public boolean **isLegitimateType**()

isIllegitimateType

public boolean **isIllegitimateType**()

ORTHOGRAPHIC_VARIANT

public final static NameRelationshipType **ORTHOGRAPHIC_VARIANT**()

LATER_HOMONYM

public final static NameRelationshipType **LATER_HOMONYM**()

TREATED_AS_LATER_HOMONYM

public final static NameRelationshipType **TREATED_AS_LATER_HOMONYM**()

ALTERNATIVE_NAME

public final static NameRelationshipType **ALTERNATIVE_NAME**()

BASIONYM

public final static NameRelationshipType **BASIONYM**()

REPLACED_SYNONYM

public final static NameRelationshipType **REPLACED_SYNONYM**()

CONSERVED_AGAINST

public final static NameRelationshipType **CONSERVED_AGAINST**()

VALIDATED_BY_NAME

public final static NameRelationshipType **VALIDATED_BY_NAME**()

LATER_VALIDATED_BY_NAME

public final static NameRelationshipType **LATER_VALIDATED_BY_NAME**()

BLOCKING_NAME_FOR

public final static NameRelationshipType **BLOCKING_NAME_FOR**()

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eu.etaxonomy.cdm.model.name
Class NameTypeDesignation

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.name.NameTypeDesignation
```

All Implemented Interfaces:
> java.io.Serializable**,** IReferencedEntity

---
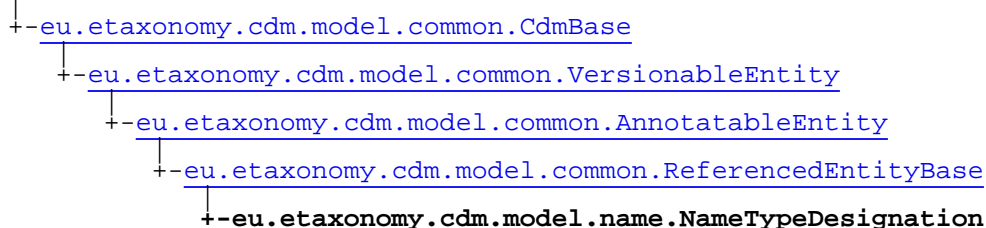
public class **NameTypeDesignation**
extends ReferencedEntityBase

{only for typified names which have a rank above "species", in this case the type has to be a "species" name}

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations,markers

Constructor Summary

protected	NameTypeDesignation(TaxonNameBase typifiedName, TaxonNameBase typeSpecies, ReferenceBase citation, java.lang.String citationMicroReference, java.lang.String originalNameString, boolean isRejectedType, boolean isConservedType)

Method Summary

TaxonNameBase	getTypeSpecies()
TaxonNameBase	getTypifiedName()
boolean	isConservedType()
boolean	isRejectedType()
void	setConservedType(boolean isConservedType)
void	setRejectedType(boolean isRejectedType)

Methods inherited from class `eu.etaxonomy.cdm.model.common.ReferencedEntityBase`

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

---

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

NameTypeDesignation

```
protected NameTypeDesignation(TaxonNameBase typifiedName,
                              TaxonNameBase typeSpecies,
                              ReferenceBase citation,
                              java.lang.String citationMicroReference,
                              java.lang.String originalNameString,
                              boolean isRejectedType,
                              boolean isConservedType)
```

Methods

getTypifiedName

public TaxonNameBase **getTypifiedName**()

getTypeSpecies

public TaxonNameBase **getTypeSpecies**()

isRejectedType

```
public boolean isRejectedType()
```

setRejectedType

```
public void setRejectedType(boolean isRejectedType)
```

isConservedType

```
public boolean isConservedType()
```

setConservedType

```
public void setConservedType(boolean isConservedType)
```

```
public boolean isRejectedType()
```

eu.etaxonomy.cdm.model.name
Class NomenclaturalStatus

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.name.NomenclaturalStatus
```
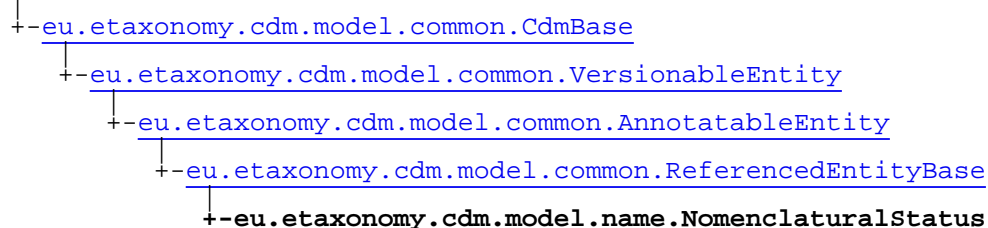
All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **NomenclaturalStatus**
extends ReferencedEntityBase

http://rs.tdwg.org/ontology/voc/TaxonName.rdf#PublicationStatus

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	NomenclaturalStatus()

Method Summary

java.lang.String	getRuleConsidered()
NomenclaturalStatusType	getType()
void	setRuleConsidered(java.lang.String ruleConsidered)
void	setType(NomenclaturalStatusType type)

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

NomenclaturalStatus

public **NomenclaturalStatus**()

Methods

getType

public NomenclaturalStatusType **getType**()

setType

public void **setType**(NomenclaturalStatusType type)

Parameters:
   type - type

getRuleConsidered

public java.lang.String **getRuleConsidered**()

setRuleConsidered

public void **setRuleConsidered**(java.lang.String ruleConsidered)

Parameters:
    `ruleConsidered` - ruleConsidered

eu.etaxonomy.cdm.model.name
Class NomenclaturalStatusType

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
       |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           |
           +-eu.etaxonomy.cdm.model.common.TermBase
               |
               +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                   |
                   +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                       |
                       +-eu.etaxonomy.cdm.model.name.NomenclaturalStatusType
```
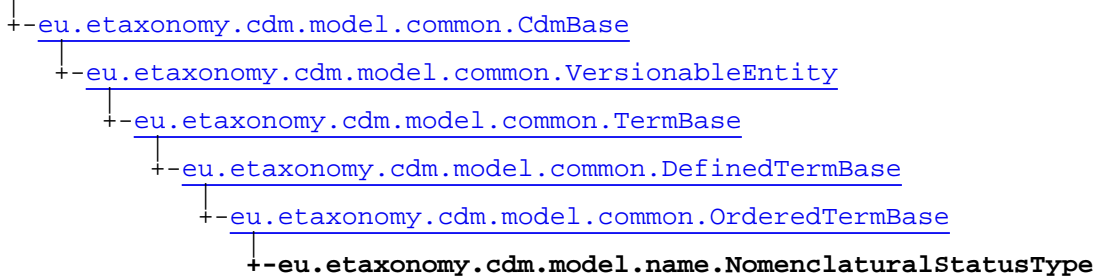
All Implemented Interfaces:
> java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **NomenclaturalStatusType**
extends OrderedTermBase

http://rs.tdwg.org/ontology/voc/TaxonName.rdf#PublicationStatus

---

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	NomenclaturalStatusType()
public	NomenclaturalStatusType(java.lang.String term, java.lang.String label)

Method Summary

static NomenclaturalStatusType	ALTERNATIVE()
static NomenclaturalStatusType	AMBIGUOUS()
static NomenclaturalStatusType	COMBINATION_INVALID()
static NomenclaturalStatusType	CONFUSUM()

static NomenclaturalStatusTy pe	CONSERVED_PROP()
static NomenclaturalStatusTy pe	CONSERVED()
static NomenclaturalStatusTy pe	DOUBTFUL()
static NomenclaturalStatusTy pe	ILLEGITIMATE()
static NomenclaturalStatusTy pe	INVALID()
boolean	isIllegitimateType()
boolean	isInvalidType()
boolean	isLegitimateType()
static NomenclaturalStatusTy pe	LEGITIMATE()
static NomenclaturalStatusTy pe	NOVUM()
static NomenclaturalStatusTy pe	NUDUM()
static NomenclaturalStatusTy pe	ORTHOGRAPHY_CONSERVED_PROP()
static NomenclaturalStatusTy pe	ORTHOGRAPHY_CONSERVED()
static NomenclaturalStatusTy pe	PROVISIONAL()
static NomenclaturalStatusTy pe	REJECTED_PROP()
static NomenclaturalStatusTy pe	REJECTED()
static NomenclaturalStatusTy pe	SANCTIONED()
static NomenclaturalStatusTy pe	SUPERFLUOUS()

static [NomenclaturalStatusType](#)	[UTIQUE_REJECTED_PROP](#)()
static [NomenclaturalStatusType](#)	[UTIQUE_REJECTED](#)()

Methods inherited from class [eu.etaxonomy.cdm.model.common.OrderedTermBase](#)

[compareTo](#), [decreaseIndex](#), [equals](#), [incrementIndex](#), [isHigher](#), [isLower](#), [setVocabulary](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.DefinedTermBase](#)

[addIncludes](#), [addMedia](#), [findByUuid](#), [getGeneralizationOf](#), [getIncludes](#), [getKindOf](#), [getMedia](#), [getPartOf](#), [getPersistentVocabulary](#), [getVocabulary](#), [readCsvLine](#), [readCsvLine](#), [removeIncludes](#), [removeMedia](#), [setGeneralizationOf](#), [setIncludes](#), [setKindOf](#), [setMedia](#), [setPartOf](#), [setPersistentVocabulary](#), [setVocabulary](#), [setVocabularyStore](#), [writeCsvLine](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.TermBase](#)

[addRepresentation](#), [equals](#), [getDescription](#), [getDescription](#), [getLabel](#), [getLabel](#), [getRepresentation](#), [getRepresentations](#), [getUri](#), [removeRepresentation](#), [setRepresentations](#), [setUri](#), [toString](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.VersionableEntity](#)

[getNextVersion](#), [getPreviousVersion](#), [getUpdated](#), [getUpdatedBy](#), [getValidFrom](#), [getValidTo](#), [setNextVersion](#), [setPreviousVersion](#), [setUpdated](#), [setUpdatedBy](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase](#)

[addPropertyChangeListener](#), [addPropertyChangeListener](#), [equals](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [getCreated](#), [getCreatedBy](#), [getId](#), [getUuid](#), [hasListeners](#), [removePropertyChangeListener](#), [removePropertyChangeListener](#), [setCreated](#), [setCreatedBy](#), [setId](#), [setUuid](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [eu.etaxonomy.cdm.model.common.IDefTerm](#)

[getVocabulary](#), [readCsvLine](#), [setVocabulary](#), [writeCsvLine](#)

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

(continued from last page)

NomenclaturalStatusType

public **NomenclaturalStatusType**()

NomenclaturalStatusType

public **NomenclaturalStatusType**(java.lang.String term,
                                   java.lang.String label)

Methods

isInvalidType

public boolean **isInvalidType**()

isLegitimateType

public boolean **isLegitimateType**()

isIllegitimateType

public boolean **isIllegitimateType**()

AMBIGUOUS

public final static [NomenclaturalStatusType](#) **AMBIGUOUS**()

DOUBTFUL

public final static [NomenclaturalStatusType](#) **DOUBTFUL**()

CONFUSUM

public final static [NomenclaturalStatusType](#) **CONFUSUM**()

ILLEGITIMATE

public final static [NomenclaturalStatusType](#) **ILLEGITIMATE**()

SUPERFLUOUS

`public final static` [NomenclaturalStatusType](#) **SUPERFLUOUS**()

REJECTED

`public final static` [NomenclaturalStatusType](#) **REJECTED**()

UTIQUE_REJECTED

`public final static` [NomenclaturalStatusType](#) **UTIQUE_REJECTED**()

CONSERVED_PROP

`public final static` [NomenclaturalStatusType](#) **CONSERVED_PROP**()

ORTHOGRAPHY_CONSERVED_PROP

`public final static` [NomenclaturalStatusType](#) **ORTHOGRAPHY_CONSERVED_PROP**()

LEGITIMATE

`public final static` [NomenclaturalStatusType](#) **LEGITIMATE**()

ALTERNATIVE

`public final static` [NomenclaturalStatusType](#) **ALTERNATIVE**()

NOVUM

`public final static` [NomenclaturalStatusType](#) **NOVUM**()

UTIQUE_REJECTED_PROP

`public final static` [NomenclaturalStatusType](#) **UTIQUE_REJECTED_PROP**()

ORTHOGRAPHY_CONSERVED

`public final static` [NomenclaturalStatusType](#) **ORTHOGRAPHY_CONSERVED**()

REJECTED_PROP

public final static NomenclaturalStatusType **REJECTED_PROP**()

CONSERVED

public final static NomenclaturalStatusType **CONSERVED**()

SANCTIONED

public final static NomenclaturalStatusType **SANCTIONED**()

INVALID

public final static NomenclaturalStatusType **INVALID**()

NUDUM

public final static NomenclaturalStatusType **NUDUM**()

COMBINATION_INVALID

public final static NomenclaturalStatusType **COMBINATION_INVALID**()

PROVISIONAL

public final static NomenclaturalStatusType **PROVISIONAL**()

eu.etaxonomy.cdm.model.name
Class NonViralName

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.name.TaxonNameBase
                        |
                        +-eu.etaxonomy.cdm.model.name.NonViralName
```

All Implemented Interfaces:
　　java.io.Serializable, IOriginalSource, IReferencedEntity

Direct Known Subclasses:
　　BacterialName, BotanicalName, ZoologicalName

---

public class **NonViralName**
extends TaxonNameBase

Taxon name class for all non viral taxa. Parentetical authorship is derived from basionym relationship.

Fields inherited from class eu.etaxonomy.cdm.model.name.TaxonNameBase
cacheStrategy, nameParser, nameTypeDesignations, protectedNameCache

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

protected	NonViralName()
public	NonViralName(Rank rank)
public	NonViralName(Rank rank, java.lang.String genusOrUninomial, java.lang.String specificEpithet, java.lang.String infraSpecificEpithet, Agent combinationAuthorTeam, INomenclaturalReference nomenclaturalReference, java.lang.String nomenclMicroRef)

Method Summary

java.lang.String	generateTitle()
java.lang.String	getAuthorshipCache() 　　returns concatenated und formated authorteams including basionym and combination authors

---

[Agent](#)	getBasionymAuthorTeam()	
[Agent](#)	getCombinationAuthorTeam()	
[Agent](#)	getExBasionymAuthorTeam()	
[Agent](#)	getExCombinationAuthorTeam()	
java.lang.String	getGenusOrUninomial()	
java.lang.String	getInfraGenericEpithet()	
java.lang.String	getInfraSpecificEpithet()	
java.lang.String	getSpecificEpithet()	
boolean	isCodeCompliant()	
void	setAuthorshipCache(java.lang.String authorshipCache)	
void	setBasionymAuthorTeam([Agent](#) basionymAuthorTeam)	
void	setCombinationAuthorTeam([Agent](#) combinationAuthorTeam)	
void	setExBasionymAuthorTeam([Agent](#) exBasionymAuthorTeam)	
void	setExCombinationAuthorTeam([Agent](#) exCombinationAuthorTeam)	
void	setGenusOrUninomial(java.lang.String genusOrUninomial)	
void	setInfraGenericEpithet(java.lang.String infraGenericEpithet)	
void	setInfraSpecificEpithet(java.lang.String infraSpecificEpithet)	
void	setSpecificEpithet(java.lang.String specificEpithet)	

Methods inherited from class [eu.etaxonomy.cdm.model.name.TaxonNameBase](#)

[addNameRelationship](#), [addRelationshipFromName](#), [addRelationshipToName](#), [addStatus](#), [addTypeDesignation](#), [addTypeDesignation](#), [generateNameCache](#), [getAppendedPhrase](#), [getBasionym](#), [getCacheStrategy](#), [getCitation](#), [getCitationString](#), [getHasProblem](#), [getHomotypicalGroup](#), [getNameCache](#), [getNameRelations](#), [getNameTypeDesignations](#), [getNomenclaturalMicroReference](#), [getNomenclaturalReference](#), [getProblems](#), [getRank](#), [getRelationsFromThisName](#), [getRelationsToThisName](#), [getSpecimenTypeDesignations](#), [getStatus](#), [getSynonyms](#), [getTaxa](#), [getYear](#), [isCodeCompliant](#), [isGenus](#), [isInfraGeneric](#), [isInfraSpecific](#), [isSpecies](#), [isSupraGeneric](#), [isSupraGeneric](#), [removeNameRelationship](#), [removeStatus](#), [removeTypeDesignation](#), [removeTypeDesignation](#), [setAppendedPhrase](#), [setBasionym](#), [setBasionym](#), [setCacheStrategy](#), [setHasProblem](#), [setHomotypicalGroup](#), [setNameCache](#), [setNameTypeDesignations](#), [setNomenclaturalMicroReference](#), [setNomenclaturalReference](#), [setRank](#), [setStatus](#)

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

NonViralName

protected **NonViralName**()

NonViralName

public **NonViralName**(Rank rank)

NonViralName

```
public NonViralName(Rank rank,
                    java.lang.String genusOrUninomial,
                    java.lang.String specificEpithet,
                    java.lang.String infraSpecificEpithet,
                    Agent combinationAuthorTeam,
                    INomenclaturalReference nomenclaturalReference,
                    java.lang.String nomenclMicroRef)
```

Methods

getCombinationAuthorTeam

```
public Agent getCombinationAuthorTeam()
```

setCombinationAuthorTeam

```
public void setCombinationAuthorTeam(Agent combinationAuthorTeam)
```

getExCombinationAuthorTeam

```
public Agent getExCombinationAuthorTeam()
```

setExCombinationAuthorTeam

```
public void setExCombinationAuthorTeam(Agent exCombinationAuthorTeam)
```

getBasionymAuthorTeam

```
public Agent getBasionymAuthorTeam()
```

setBasionymAuthorTeam

```
public void setBasionymAuthorTeam(Agent basionymAuthorTeam)
```

getExBasionymAuthorTeam

```
public Agent getExBasionymAuthorTeam()
```

setExBasionymAuthorTeam

```
public void setExBasionymAuthorTeam(Agent exBasionymAuthorTeam)
```

getGenusOrUninomial

```
public java.lang.String getGenusOrUninomial()
```

setGenusOrUninomial

```
public void setGenusOrUninomial(java.lang.String genusOrUninomial)
```

getInfraGenericEpithet

```
public java.lang.String getInfraGenericEpithet()
```

setInfraGenericEpithet

```
public void setInfraGenericEpithet(java.lang.String infraGenericEpithet)
```

Parameters:
    infraGenericEpithet - infraGenericEpithet

getSpecificEpithet

```
public java.lang.String getSpecificEpithet()
```

setSpecificEpithet

```
public void setSpecificEpithet(java.lang.String specificEpithet)
```

Parameters:
    specificEpithet - specificEpithet

getInfraSpecificEpithet

```
public java.lang.String getInfraSpecificEpithet()
```

setInfraSpecificEpithet

```
public void setInfraSpecificEpithet(java.lang.String infraSpecificEpithet)
```

Parameters:
    infraSpecificEpithet - infraSpecificEpithet

generateTitle

`public java.lang.String` **`generateTitle`**`()`

getAuthorshipCache

`public java.lang.String` **`getAuthorshipCache`**`()`

> returns concatenated und formated authorteams including basionym and combination authors

setAuthorshipCache

`public void` **`setAuthorshipCache`**`(java.lang.String authorshipCache)`

isCodeCompliant

`public boolean` **`isCodeCompliant`**`()`

eu.etaxonomy.cdm.model.name
Class Rank

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.name.Rank
```

All Implemented Interfaces:
    java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **Rank**
extends OrderedTermBase

http://rs.tdwg.org/ontology/voc/TaxonRank#TaxonRankTerm

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	Rank()
public	Rank(java.lang.String term, java.lang.String label)

Method Summary

static Rank	BIOVARIETY()
static Rank	CANDIDATE()
static Rank	CLASS()
static Rank	CONVAR()
static Rank	CULTIVAR()
static Rank	CULTIVARGROUP()

static	[Rank](#)	[DENOMINATIONCLASS](#)()
static	[Rank](#)	[DIVISION](#)()
static	[Rank](#)	[DOMAIN](#)()
static	[Rank](#)	[EMPIRE](#)()
static	[Rank](#)	[FAMILY](#)()
static	[Rank](#)	[FORM](#)()
static	[Rank](#)	[GENUS](#)()
	java.lang.String	[getAbbreviation](#)()
static	[Rank](#)	[getRankByAbbreviation](#)(java.lang.String abbrev) TODO preliminary implementation for BotanicalNameParser * not yet complete
static	[Rank](#)	[getRankByName](#)(java.lang.String rankName) TODO preliminary implementation for BotanicalNameParser not yet complete
static	[Rank](#)	[getRankByNameOrAbbreviation](#)(java.lang.String strRank) NOT YET COMPLETE !!
static	[Rank](#)	[GRAFTCHIMAERA](#)()
static	[Rank](#)	[GREX](#)()
static	[Rank](#)	[INFRACLASS](#)()
static	[Rank](#)	[INFRADIVISION](#)()
static	[Rank](#)	[INFRAFAMILY](#)()
static	[Rank](#)	[INFRAGENERICTAXON](#)()
static	[Rank](#)	[INFRAGENUS](#)()
static	[Rank](#)	[INFRAKINGDOM](#)()
static	[Rank](#)	[INFRAORDER](#)()
static	[Rank](#)	[INFRAPHYLUM](#)()
static	[Rank](#)	[INFRASPECIES](#)()
static	[Rank](#)	[INFRASPECIFICTAXON](#)()

static [Rank]	[INFRATRIBE]()	
boolean	[isGenus]() True, if this Rank equals GENUS, else false.	
boolean	[isInfraGeneric]() True, if this Rank is lower than GENUS and higher than SPECIES, else false.	
boolean	[isInfraSpecific]() True, if this Rank is lower than SPECIES, else false.	
boolean	[isSpecies]() True, if this Rank equals SPECIES, else false.	
boolean	[isSupraGeneric]() True, if this Rank is higher than GENUS, else false.	
static [Rank]	[KINGDOM]()	
static [Rank]	[ORDER]()	
static [Rank]	[PATHOVARIETY]()	
static [Rank]	[PHYLUM]()	
static [Rank]	[SECTION]()	
static [Rank]	[SERIES]()	
static [Rank]	[SPECIALFORM]()	
static [Rank]	[SPECIES]()	
static [Rank]	[SPECIESAGGREGATE]()	
static [Rank]	[SUBCLASS]()	
static [Rank]	[SUBDIVISION]()	
static [Rank]	[SUBFAMILY]()	
static [Rank]	[SUBFORM]()	
static [Rank]	[SUBGENUS]()	
static [Rank]	[SUBKINGDOM]()	
static [Rank]	[SUBORDER]()	
static [Rank]	[SUBPHYLUM]()	

static [Rank]	[SUBSECTION]()
static [Rank]	[SUBSERIES]()
static [Rank]	[SUBSPECIES]()
static [Rank]	[SUBSPECIFICAGGREGATE]()
static [Rank]	[SUBSUBFORM]()
static [Rank]	[SUBSUBVARIETY]()
static [Rank]	[SUBTRIBE]()
static [Rank]	[SUBVARIETY]()
static [Rank]	[SUPERCLASS]()
static [Rank]	[SUPERDIVISION]()
static [Rank]	[SUPERFAMILY]()
static [Rank]	[SUPERKINGDOM]()
static [Rank]	[SUPERORDER]()
static [Rank]	[SUPERPHYLUM]()
static [Rank]	[SUPERTRIBE]()
static [Rank]	[SUPRAGENERICTAXON]()
static [Rank]	[TRIBE]()
static [Rank]	[VARIETY]()

Methods inherited from class [eu.etaxonomy.cdm.model.common.OrderedTermBase]

[compareTo], [decreaseIndex], [equals], [incrementIndex], [isHigher], [isLower], [setVocabulary]

Methods inherited from class [eu.etaxonomy.cdm.model.common.DefinedTermBase]

[addIncludes], [addMedia], [findByUuid], [getGeneralizationOf], [getIncludes], [getKindOf], [getMedia], [getPartOf], [getPersistentVocabulary], [getVocabulary], [readCsvLine], [readCsvLine], [removeIncludes], [removeMedia], [setGeneralizationOf], [setIncludes], [setKindOf], [setMedia], [setPartOf], [setPersistentVocabulary], [setVocabulary], [setVocabularyStore], [writeCsvLine]

Methods inherited from class [eu.etaxonomy.cdm.model.common.TermBase]

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

Rank

public **Rank**()

Rank

public **Rank**(java.lang.String term,
          java.lang.String label)

Methods

EMPIRE

public final static Rank **EMPIRE**()

DOMAIN

```
public final static Rank DOMAIN()
```

SUPERKINGDOM

```
public final static Rank SUPERKINGDOM()
```

KINGDOM

```
public final static Rank KINGDOM()
```

SUBKINGDOM

```
public final static Rank SUBKINGDOM()
```

INFRAKINGDOM

```
public final static Rank INFRAKINGDOM()
```

SUPERPHYLUM

```
public final static Rank SUPERPHYLUM()
```

PHYLUM

```
public final static Rank PHYLUM()
```

SUBPHYLUM

```
public final static Rank SUBPHYLUM()
```

INFRAPHYLUM

```
public final static Rank INFRAPHYLUM()
```

SUPERDIVISION

```
public final static Rank SUPERDIVISION()
```

(continued from last page)

DIVISION

```
public final static Rank DIVISION()
```

SUBDIVISION

```
public final static Rank SUBDIVISION()
```

INFRADIVISION

```
public final static Rank INFRADIVISION()
```

SUPERCLASS

```
public final static Rank SUPERCLASS()
```

CLASS

```
public final static Rank CLASS()
```

SUBCLASS

```
public final static Rank SUBCLASS()
```

INFRACLASS

```
public final static Rank INFRACLASS()
```

SUPERORDER

```
public final static Rank SUPERORDER()
```

ORDER

```
public final static Rank ORDER()
```

SUBORDER

```
public final static Rank SUBORDER()
```

INFRAORDER

```
public final static Rank INFRAORDER()
```

SUPERFAMILY

```
public final static Rank SUPERFAMILY()
```

FAMILY

```
public final static Rank FAMILY()
```

SUBFAMILY

```
public final static Rank SUBFAMILY()
```

INFRAFAMILY

```
public final static Rank INFRAFAMILY()
```

SUPERTRIBE

```
public final static Rank SUPERTRIBE()
```

TRIBE

```
public final static Rank TRIBE()
```

SUBTRIBE

```
public final static Rank SUBTRIBE()
```

INFRATRIBE

```
public final static Rank INFRATRIBE()
```

SUPRAGENERICTAXON

public final static [Rank](#) **SUPRAGENERICTAXON**()

GENUS

public final static [Rank](#) **GENUS**()

SUBGENUS

public final static [Rank](#) **SUBGENUS**()

INFRAGENUS

public final static [Rank](#) **INFRAGENUS**()

SECTION

public final static [Rank](#) **SECTION**()

SUBSECTION

public final static [Rank](#) **SUBSECTION**()

SERIES

public final static [Rank](#) **SERIES**()

SUBSERIES

public final static [Rank](#) **SUBSERIES**()

SPECIESAGGREGATE

public final static [Rank](#) **SPECIESAGGREGATE**()

INFRAGENERICTAXON

```
public final static Rank INFRAGENERICTAXON()
```

SPECIES

```
public final static Rank SPECIES()
```

SUBSPECIFICAGGREGATE

```
public final static Rank SUBSPECIFICAGGREGATE()
```

SUBSPECIES

```
public final static Rank SUBSPECIES()
```

INFRASPECIES

```
public final static Rank INFRASPECIES()
```

VARIETY

```
public final static Rank VARIETY()
```

BIOVARIETY

```
public final static Rank BIOVARIETY()
```

PATHOVARIETY

```
public final static Rank PATHOVARIETY()
```

SUBVARIETY

```
public final static Rank SUBVARIETY()
```

SUBSUBVARIETY

```
public final static Rank SUBSUBVARIETY()
```

CONVAR

public final static [Rank](#) **CONVAR**()

FORM

public final static [Rank](#) **FORM**()

SPECIALFORM

public final static [Rank](#) **SPECIALFORM**()

SUBFORM

public final static [Rank](#) **SUBFORM**()

SUBSUBFORM

public final static [Rank](#) **SUBSUBFORM**()

INFRASPECIFICTAXON

public final static [Rank](#) **INFRASPECIFICTAXON**()

CANDIDATE

public final static [Rank](#) **CANDIDATE**()

DENOMINATIONCLASS

public final static [Rank](#) **DENOMINATIONCLASS**()

GREX

public final static [Rank](#) **GREX**()

GRAFTCHIMAERA

`public final static` [Rank](#) **GRAFTCHIMAERA**`()`

CULTIVARGROUP

`public final static` [Rank](#) **CULTIVARGROUP**`()`

CULTIVAR

`public final static` [Rank](#) **CULTIVAR**`()`

---

isSupraGeneric

`public boolean` **isSupraGeneric**`()`

> True, if this Rank is higher than GENUS, else false.

> **Returns:**

---

isGenus

`public boolean` **isGenus**`()`

> True, if this Rank equals GENUS, else false.

> **Returns:**

---

isInfraGeneric

`public boolean` **isInfraGeneric**`()`

> True, if this Rank is lower than GENUS and higher than SPECIES, else false.

> **Returns:**

---

isSpecies

`public boolean` **isSpecies**`()`

> True, if this Rank equals SPECIES, else false.

> **Returns:**

---

isInfraSpecific

`public boolean` **isInfraSpecific**`()`

True, if this Rank is lower than SPECIES, else false.

Returns:

---

getRankByNameOrAbbreviation

```
public static Rank getRankByNameOrAbbreviation(java.lang.String strRank)
  throws eu.etaxonomy.cdm.strategy.exceptions.UnknownRankException
```

NOT YET COMPLETE !!

Parameters:
   strRank

Returns:
   Rank

Throws:
   UnknownRankException

---

getRankByAbbreviation

```
public static Rank getRankByAbbreviation(java.lang.String abbrev)
  throws eu.etaxonomy.cdm.strategy.exceptions.UnknownRankException
```

TODO preliminary implementation for BotanicalNameParser * not yet complete

---

getRankByName

```
public static Rank getRankByName(java.lang.String rankName)
  throws eu.etaxonomy.cdm.strategy.exceptions.UnknownRankException
```
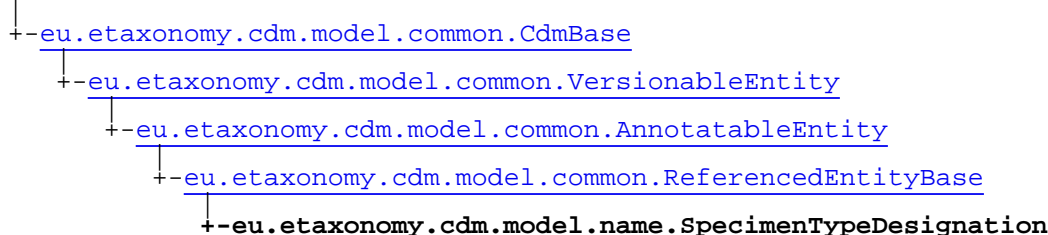
TODO preliminary implementation for BotanicalNameParser not yet complete

---

getAbbreviation

```
public java.lang.String getAbbreviation()
```

eu.etaxonomy.cdm.model.name
Class SpecimenTypeDesignation

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.name.SpecimenTypeDesignation
```

All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **SpecimenTypeDesignation**
extends ReferencedEntityBase

{only for typified names which have the "species" rank or below}

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	SpecimenTypeDesignation(HomotypicalGroup homotypicalGroup, DerivedUnit specimen, TypeDesignationStatus status, ReferenceBase citation, java.lang.String citationMicroReference, java.lang.String originalNameString)

Method Summary

HomotypicalGroup	getHomotypicalGroup()
DerivedUnit	getTypeSpecimen()
TypeDesignationStatus	getTypeStatus()
void	setHomotypicalGroup(HomotypicalGroup newHomotypicalGroup)
void	setTypeSpecimen(DerivedUnit typeSpecimen)
void	setTypeStatus(TypeDesignationStatus typeStatus)

Methods inherited from class eu.etaxonomy.cdm.model.common.ReferencedEntityBase

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

---

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

SpecimenTypeDesignation

public **SpecimenTypeDesignation**(HomotypicalGroup homotypicalGroup,
                                   DerivedUnit specimen,
                                   TypeDesignationStatus status,
                                   ReferenceBase citation,
                                   java.lang.String citationMicroReference,
                                   java.lang.String originalNameString)

Methods

getHomotypicalGroup

public HomotypicalGroup **getHomotypicalGroup**()

setHomotypicalGroup

public void **setHomotypicalGroup**(HomotypicalGroup newHomotypicalGroup)

getTypeSpecimen

public DerivedUnit **getTypeSpecimen**()

setTypeSpecimen

public void **setTypeSpecimen**(DerivedUnit typeSpecimen)

getTypeStatus

public TypeDesignationStatus **getTypeStatus**()

setTypeStatus

public void **setTypeStatus**(TypeDesignationStatus typeStatus)

eu.etaxonomy.cdm.model.name
Class TaxonNameBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.name.TaxonNameBase
```
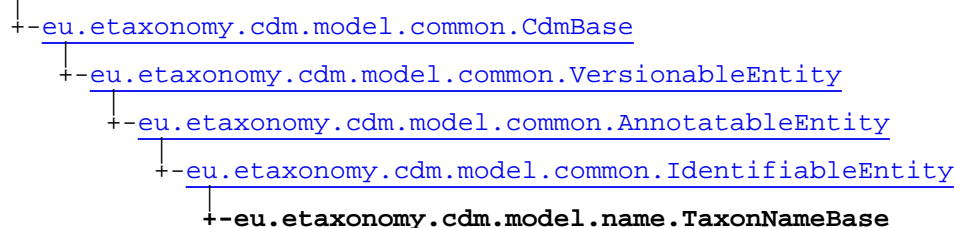
All Implemented Interfaces:
    IReferencedEntity, java.io.Serializable, IOriginalSource

Direct Known Subclasses:
    NonViralName, ViralName

---

public abstract class **TaxonNameBase**
extends IdentifiableEntity
implements IOriginalSource, java.io.Serializable, IReferencedEntity

The upmost (abstract) class for scientific taxon names regardless of the any particular nomenclatural code. The scientific name including author strings and maybe year is stored in IdentifiableEntity.titleCache

---

Field Summary

protected	cacheStrategy
protected static	nameParser
protected	nameTypeDesignations
protected	protectedNameCache

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	TaxonNameBase()
public	TaxonNameBase(Rank rank)

Method Summary

void	addNameRelationship(NameRelationship rel)

---

void	addRelationshipFromName(TaxonNameBase fromName, NameRelationshipType type, java.lang.String ruleConsidered)
void	addRelationshipToName(TaxonNameBase toName, NameRelationshipType type, java.lang.String ruleConsidered) Add a name relationship to both names involved
void	addStatus(NomenclaturalStatus status)
void	addTypeDesignation(Specimen typeSpecimen, TypeDesignationStatus status, ReferenceBase citation, java.lang.String citationMicroReference, java.lang.String originalNameString)
void	addTypeDesignation(TaxonNameBase typeSpecies, ReferenceBase citation, java.lang.String citationMicroReference, java.lang.String originalNameString, boolean isRejectedType, boolean isConservedType)
java.lang.String	generateNameCache()
java.lang.String	getAppendedPhrase()
TaxonNameBase	getBasionym()
eu.etaxonomy.cdm.strategy.INameCacheStrategy	getCacheStrategy()
StrictReferenceBase	getCitation()
java.lang.String	getCitationString()
boolean	getHasProblem()
HomotypicalGroup	getHomotypicalGroup()
java.lang.String	getNameCache()
java.util.Set	getNameRelations()
java.util.Set	getNameTypeDesignations()
java.lang.String	getNomenclaturalMicroReference()
ReferenceBase	getNomenclaturalReference()
java.lang.String[]	getProblems()
Rank	getRank()
java.util.Set	getRelationsFromThisName()
java.util.Set	getRelationsToThisName()

java.util.Set	getSpecimenTypeDesignations()	
java.util.Set	getStatus()	
java.util.Set	getSynonyms() Return a set of synonyms that use this name	
java.util.Set	getTaxa() Return a set of taxa that use this name	

java.lang.String	getYear()
	    returns year of according nomenclatural reference, null if nomenclatural reference does not
	    exist	

abstract boolean	isCodeCompliant()	
boolean	isGenus()	
boolean	isInfraGeneric()	
boolean	isInfraSpecific()	
boolean	isSpecies()	
boolean	isSupraGeneric()	
boolean	isSupraGeneric(Rank rank)	
void	removeNameRelationship(NameRelationship nameRelation)	
void	removeStatus(NomenclaturalStatus status)	
void	removeTypeDesignation(NameTypeDesignation typeDesignation)	
void	removeTypeDesignation(SpecimenTypeDesignation typeDesignation)	
void	setAppendedPhrase(java.lang.String appendedPhrase)	
void	setBasionym(TaxonNameBase basionym)	
void	setBasionym(TaxonNameBase basionym, java.lang.String ruleConsidered)	
void	setCacheStrategy(eu.etaxonomy.cdm.strategy.INameCacheStrategy cacheStrategy)	
void	setHasProblem(boolean hasProblem)	
void	setHomotypicalGroup(HomotypicalGroup newHomotypicalGroup)	
void	setNameCache(java.lang.String nameCache)	

void	setNameTypeDesignations(java.util.Set nameTypeDesignations)	
void	setNomenclaturalMicroReference(java.lang.String nomenclaturalMicroReference)	
void	setNomenclaturalReference(INomenclaturalReference nomenclaturalReference)	
void	setRank(Rank rank)	
void	setStatus(java.util.Set status)	

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Fields

nameTypeDesignations

`protected java.util.Set` **`nameTypeDesignations`**

protectedNameCache

`protected boolean` **`protectedNameCache`**

cacheStrategy

`protected eu.etaxonomy.cdm.strategy.INameCacheStrategy` **`cacheStrategy`**

nameParser

`protected static eu.etaxonomy.cdm.strategy.ITaxonNameParser` **`nameParser`**

Constructors

TaxonNameBase

`public` **`TaxonNameBase`**`()`

TaxonNameBase

`public` **`TaxonNameBase`**`(`[`Rank`]` rank)`

Methods

generateNameCache

`protected java.lang.String` **`generateNameCache`**`()`

getNameCache

`public java.lang.String` **`getNameCache`**`()`

setNameCache

`public void` **`setNameCache`**`(java.lang.String nameCache)`

isCodeCompliant

```
public abstract boolean isCodeCompliant()
```

getNameRelations

```
public java.util.Set getNameRelations()
```

addRelationshipToName

```
public void addRelationshipToName(TaxonNameBase toName,
        NameRelationshipType type,
        java.lang.String ruleConsidered)
```

Add a name relationship to both names involved

Parameters:
rel

addRelationshipFromName

```
public void addRelationshipFromName(TaxonNameBase fromName,
        NameRelationshipType type,
        java.lang.String ruleConsidered)
```

addNameRelationship

```
protected void addNameRelationship(NameRelationship rel)
```

removeNameRelationship

```
public void removeNameRelationship(NameRelationship nameRelation)
```

getRelationsFromThisName

```
public java.util.Set getRelationsFromThisName()
```

getRelationsToThisName

```
public java.util.Set getRelationsToThisName()
```

getStatus

```
public java.util.Set getStatus()
```

setStatus

```
protected void setStatus(java.util.Set status)
```

addStatus

```
public void addStatus(NomenclaturalStatus status)
```

removeStatus

```
public void removeStatus(NomenclaturalStatus status)
```

getBasionym

```
public TaxonNameBase getBasionym()
```

setBasionym

```
public void setBasionym(TaxonNameBase basionym)
```

setBasionym

```
public void setBasionym(TaxonNameBase basionym,
        java.lang.String ruleConsidered)
```

getCacheStrategy

```
public eu.etaxonomy.cdm.strategy.INameCacheStrategy getCacheStrategy()
```

setCacheStrategy

```
public void setCacheStrategy(eu.etaxonomy.cdm.strategy.INameCacheStrategy
cacheStrategy)
```

getRank

public [Rank](#) **getRank**()

setRank

public void **setRank**([Rank](#) rank)

getNomenclaturalReference

public [ReferenceBase](#) **getNomenclaturalReference**()

setNomenclaturalReference

public void **setNomenclaturalReference**([INomenclaturalReference](#) nomenclaturalReference)

getAppendedPhrase

public java.lang.String **getAppendedPhrase**()

setAppendedPhrase

public void **setAppendedPhrase**(java.lang.String appendedPhrase)

getNomenclaturalMicroReference

public java.lang.String **getNomenclaturalMicroReference**()

setNomenclaturalMicroReference

public void **setNomenclaturalMicroReference**(java.lang.String
nomenclaturalMicroReference)

getHasProblem

public boolean **getHasProblem**()

setHasProblem

public void **setHasProblem**(boolean hasProblem)

getNameTypeDesignations

```
public java.util.Set getNameTypeDesignations()
```

setNameTypeDesignations

```
protected void setNameTypeDesignations(java.util.Set nameTypeDesignations)
```

addTypeDesignation

```
public void addTypeDesignation(TaxonNameBase typeSpecies,
        ReferenceBase citation,
        java.lang.String citationMicroReference,
        java.lang.String originalNameString,
        boolean isRejectedType,
        boolean isConservedType)
```

addTypeDesignation

```
public void addTypeDesignation(Specimen typeSpecimen,
        TypeDesignationStatus status,
        ReferenceBase citation,
        java.lang.String citationMicroReference,
        java.lang.String originalNameString)
```

removeTypeDesignation

```
public void removeTypeDesignation(NameTypeDesignation typeDesignation)
```

removeTypeDesignation

```
public void removeTypeDesignation(SpecimenTypeDesignation typeDesignation)
```

getHomotypicalGroup

```
public HomotypicalGroup getHomotypicalGroup()
```

setHomotypicalGroup

```
public void setHomotypicalGroup(HomotypicalGroup newHomotypicalGroup)
```

getCitation

public [StrictReferenceBase](#) **getCitation**()

getCitationString

public java.lang.String **getCitationString**()

getProblems

public java.lang.String[] **getProblems**()

getYear

public java.lang.String **getYear**()

returns year of according nomenclatural reference, null if nomenclatural reference does not exist

getTaxa

public java.util.Set **getTaxa**()

Return a set of taxa that use this name

Returns:

getSynonyms

public java.util.Set **getSynonyms**()

Return a set of synonyms that use this name

Returns:

getSpecimenTypeDesignations

public java.util.Set **getSpecimenTypeDesignations**()

isSupraGeneric

public boolean **isSupraGeneric**()

isGenus

public boolean **isGenus**()

isInfraGeneric

```
public boolean isInfraGeneric()
```

isSpecies

```
public boolean isSpecies()
```

isInfraSpecific

```
public boolean isInfraSpecific()
```

isSupraGeneric

```
public boolean isSupraGeneric(Rank rank)
```

eu.etaxonomy.cdm.model.name
Class TypeDesignationStatus

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.name.TypeDesignationStatus
```

All Implemented Interfaces:
java.io.Serializable**,** IDefTerm**,** java.lang.Comparable

---

public class **TypeDesignationStatus**
extends OrderedTermBase

http://rs.tdwg.org/ontology/voc/TaxonName#NomencalturalTypeTypeTerm

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase
orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	TypeDesignationStatus()
public	TypeDesignationStatus(java.lang.String term, java.lang.String label)

Method Summary

static TypeDesignationStatus	EPITYPE()
static TypeDesignationStatus	HOLOTYPE()
static TypeDesignationStatus	ICONOTYPE()
static TypeDesignationStatus	ISOEPITYPE()
static TypeDesignationStatus	ISOLECTOTYPE()
static TypeDesignationStatus	ISONEOTYPE()

static TypeDesignationStatus	ISOTYPE()
static TypeDesignationStatus	LECTOTYPE()
static TypeDesignationStatus	NEOTYPE()
static TypeDesignationStatus	PARALECTOTYPE()
static TypeDesignationStatus	PARANEOTYPE()
static TypeDesignationStatus	PARATYPE()
static TypeDesignationStatus	PHOTOTYPE()
static TypeDesignationStatus	SECOND_STEP_LECTOTYPE()
static TypeDesignationStatus	SECOND_STEP_NEOTYPE()
static TypeDesignationStatus	SYNTYPE()

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface `java.lang.Comparable`

```
compareTo
```

Constructors

TypeDesignationStatus

public **TypeDesignationStatus**()

TypeDesignationStatus

public **TypeDesignationStatus**(java.lang.String term,
                                java.lang.String label)

Methods

HOLOTYPE

public final static TypeDesignationStatus **HOLOTYPE**()

LECTOTYPE

public final static TypeDesignationStatus **LECTOTYPE**()

NEOTYPE

public final static TypeDesignationStatus **NEOTYPE**()

EPITYPE

public final static TypeDesignationStatus **EPITYPE**()

ISOLECTOTYPE

public final static TypeDesignationStatus **ISOLECTOTYPE**()

ISONEOTYPE

public final static TypeDesignationStatus **ISONEOTYPE**()

ISOTYPE

public final static TypeDesignationStatus **ISOTYPE**()

PARANEOTYPE

public final static TypeDesignationStatus **PARANEOTYPE**()

PARATYPE

public final static TypeDesignationStatus **PARATYPE**()

SECOND_STEP_LECTOTYPE

public final static TypeDesignationStatus **SECOND_STEP_LECTOTYPE**()

SECOND_STEP_NEOTYPE

public final static TypeDesignationStatus **SECOND_STEP_NEOTYPE**()

SYNTYPE

public final static TypeDesignationStatus **SYNTYPE**()

PARALECTOTYPE

public final static TypeDesignationStatus **PARALECTOTYPE**()

ISOEPITYPE

public final static TypeDesignationStatus **ISOEPITYPE**()
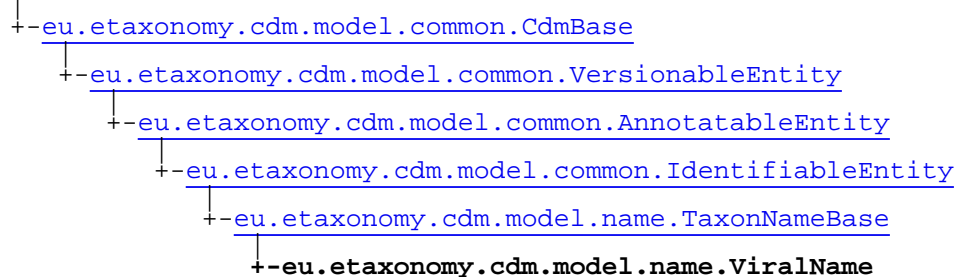
ICONOTYPE

```
public final static TypeDesignationStatus ICONOTYPE()
```

PHOTOTYPE

```
public final static TypeDesignationStatus PHOTOTYPE()
```

eu.etaxonomy.cdm.model.name
Class ViralName

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.name.TaxonNameBase
                        |
                        +-eu.etaxonomy.cdm.model.name.ViralName
```

All Implemented Interfaces:
        java.io.Serializable, IOriginalSource, IReferencedEntity

---

public class **ViralName**
extends TaxonNameBase

use name attribute for the entire virus name! examples see ICTVdb: http://www. ncbi.nlm.nih.gov/ICTVdb/Ictv/vn_indxA.htm

---

Fields inherited from class eu.etaxonomy.cdm.model.name.TaxonNameBase
cacheStrategy, nameParser, nameTypeDesignations, protectedNameCache

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	ViralName(Rank rank)

Method Summary

java.lang.String	generateTitle()
java.lang.String	getAcronym()
boolean	isCodeCompliant()
void	setAcronym(java.lang.String acronym)

Methods inherited from class eu.etaxonomy.cdm.model.name.TaxonNameBase

addNameRelationship, addRelationshipFromName, addRelationshipToName, addStatus, addTypeDesignation, addTypeDesignation, generateNameCache, getAppendedPhrase, getBasionym, getCacheStrategy, getCitation, getCitationString, getHasProblem, getHomotypicalGroup, getNameCache, getNameRelations, getNameTypeDesignations, getNomenclaturalMicroReference, getNomenclaturalReference, getProblems, getRank, getRelationsFromThisName, getRelationsToThisName, getSpecimenTypeDesignations, getStatus, getSynonyms, getTaxa, getYear, isCodeCompliant, isGenus, isInfraGeneric, isInfraSpecific, isSpecies, isSupraGeneric, isSupraGeneric, removeNameRelationship, removeStatus, removeTypeDesignation, removeTypeDesignation, setAppendedPhrase, setBasionym, setBasionym, setCacheStrategy, setHasProblem, setHomotypicalGroup, setNameCache, setNameTypeDesignations, setNomenclaturalMicroReference, setNomenclaturalReference, setRank, setStatus

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

ViralName

public **ViralName**([Rank](#) rank)

Methods

getAcronym

public java.lang.String **getAcronym**()

setAcronym

public void **setAcronym**(java.lang.String acronym)

generateTitle

public java.lang.String **generateTitle**()

isCodeCompliant

public boolean **isCodeCompliant**()

eu.etaxonomy.cdm.model.name
Class ZoologicalName

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.name.TaxonNameBase
                        |
                        +-eu.etaxonomy.cdm.model.name.NonViralName
                            |
                            +-eu.etaxonomy.cdm.model.name.ZoologicalName
```
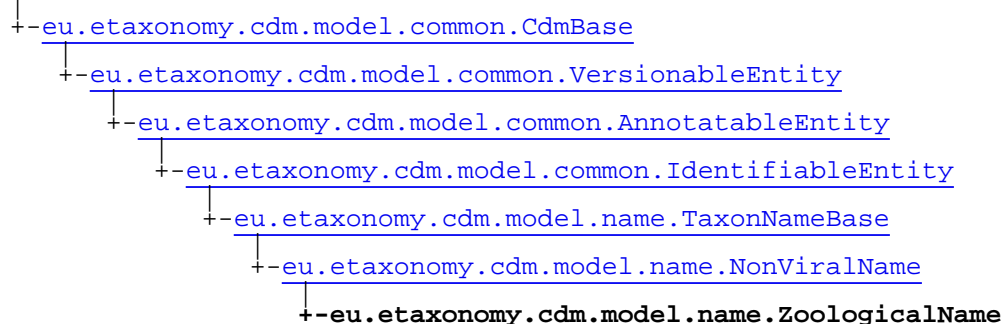
All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IReferencedEntity

---

public class **ZoologicalName**
extends NonViralName

Taxon name class for animals

Fields inherited from class eu.etaxonomy.cdm.model.name.TaxonNameBase

cacheStrategy, nameParser, nameTypeDesignations, protectedNameCache

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	ZoologicalName(Rank rank)
public	ZoologicalName(Rank rank, java.lang.String genusOrUninomial, java.lang.String specificEpithet, java.lang.String infraSpecificEpithet, Agent combinationAuthorTeam, INomenclaturalReference nomenclaturalReference, java.lang.String nomenclMicroRef)

Method Summary

java.lang.String	getBreed()
java.lang.Integer	getOriginalPublicationYear()
java.lang.Integer	getPublicationYear()
void	setBreed(java.lang.String breed)

---

void		setOriginalPublicationYear(java.lang.Integer originalPublicationYear)
void		setPublicationYear(java.lang.Integer publicationYear)

Methods inherited from class eu.etaxonomy.cdm.model.name.NonViralName

generateTitle, getAuthorshipCache, getBasionymAuthorTeam, getCombinationAuthorTeam, getExBasionymAuthorTeam, getExCombinationAuthorTeam, getGenusOrUninomial, getInfraGenericEpithet, getInfraSpecificEpithet, getSpecificEpithet, isCodeCompliant, setAuthorshipCache, setBasionymAuthorTeam, setCombinationAuthorTeam, setExBasionymAuthorTeam, setExCombinationAuthorTeam, setGenusOrUninomial, setInfraGenericEpithet, setInfraSpecificEpithet, setSpecificEpithet

Methods inherited from class eu.etaxonomy.cdm.model.name.TaxonNameBase

addNameRelationship, addRelationshipFromName, addRelationshipToName, addStatus, addTypeDesignation, addTypeDesignation, generateNameCache, getAppendedPhrase, getBasionym, getCacheStrategy, getCitation, getCitationString, getHasProblem, getHomotypicalGroup, getNameCache, getNameRelations, getNameTypeDesignations, getNomenclaturalMicroReference, getNomenclaturalReference, getProblems, getRank, getRelationsFromThisName, getRelationsToThisName, getSpecimenTypeDesignations, getStatus, getSynonyms, getTaxa, getYear, isCodeCompliant, isGenus, isInfraGeneric, isInfraSpecific, isSpecies, isSupraGeneric, isSupraGeneric, removeNameRelationship, removeStatus, removeTypeDesignation, removeTypeDesignation, setAppendedPhrase, setBasionym, setBasionym, setCacheStrategy, setHasProblem, setHomotypicalGroup, setNameCache, setNameTypeDesignations, setNomenclaturalMicroReference, setNomenclaturalReference, setRank, setStatus

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

ZoologicalName

public **ZoologicalName**(Rank rank)

ZoologicalName

```
public ZoologicalName(Rank rank,
                      java.lang.String genusOrUninomial,
                      java.lang.String specificEpithet,
                      java.lang.String infraSpecificEpithet,
                      Agent combinationAuthorTeam,
                      INomenclaturalReference nomenclaturalReference,
                      java.lang.String nomenclMicroRef)
```

Methods

getBreed

public java.lang.String **getBreed**()

setBreed

public void **setBreed**(java.lang.String breed)

getPublicationYear

public java.lang.Integer **getPublicationYear**()

setPublicationYear

public void **setPublicationYear**(java.lang.Integer publicationYear)

getOriginalPublicationYear

```
public java.lang.Integer getOriginalPublicationYear()
```

setOriginalPublicationYear
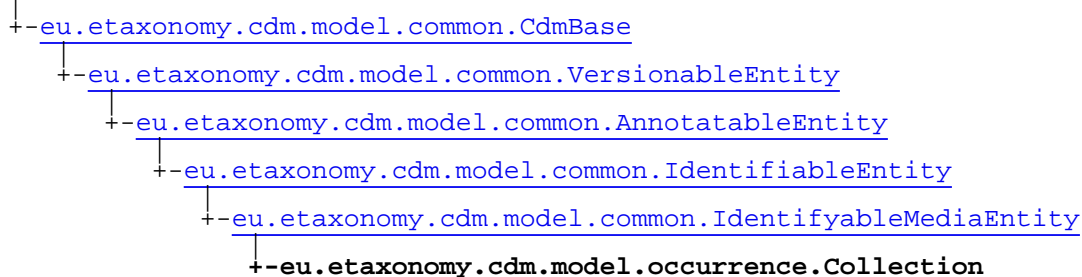
```
public void setOriginalPublicationYear(java.lang.Integer originalPublicationYear)
```

getOriginalPublicationYear

```
public java.lang.Integer getOriginalPublicationYear()
```

Package

eu.etaxonomy.cdm.model.occurrence

eu.etaxonomy.cdm.model.occurrence
Class Collection

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.occurrence.Collection
```

All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Collection**
extends IdentifyableMediaEntity

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	Collection()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getCode()
java.lang.String	getCodeStandard()
Institution	getInstitute()
java.lang.String	getName()
Collection	getSuperCollection()
java.lang.String	getTownOrLocation()
void	setCode(java.lang.String code)
void	setCodeStandard(java.lang.String codeStandard)

---

void	setInstitute(Institution institute)
void	setName(java.lang.String name)
void	setSuperCollection(Collection superCollection)
void	setTownOrLocation(java.lang.String townOrLocation)

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Collection

public **Collection**()

Methods

getInstitute

public [Institution](#) **getInstitute**()

setInstitute

public void **setInstitute**([Institution](#) institute)

> **Parameters:**
> institute - institute

getCode

public java.lang.String **getCode**()

setCode

public void **setCode**(java.lang.String code)

> **Parameters:**
> code - code

getCodeStandard

public java.lang.String **getCodeStandard**()

setCodeStandard

public void **setCodeStandard**(java.lang.String codeStandard)

> **Parameters:**
> codeStandard - codeStandard

getName

public java.lang.String **getName**()

setName

`public void ` **`setName`** `(java.lang.String name)`

Parameters:
    name - name

getTownOrLocation

`public java.lang.String ` **`getTownOrLocation`** `()`

setTownOrLocation

`public void ` **`setTownOrLocation`** `(java.lang.String townOrLocation)`

Parameters:
    townOrLocation - townOrLocation

generateTitle

`public java.lang.String ` **`generateTitle`** `()`

getSuperCollection

`public ` [Collection](#) **`getSuperCollection`** `()`

setSuperCollection

`public void ` **`setSuperCollection`** `(`[Collection](#)` superCollection)`

eu.etaxonomy.cdm.model.occurrence
Class DerivationEvent

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.EventBase
                    |
                    +-eu.etaxonomy.cdm.model.occurrence.DerivationEvent
```
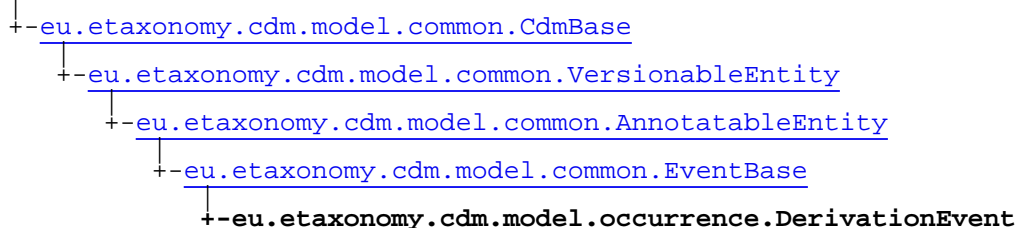
All Implemented Interfaces:
> java.io.Serializable, IEvent

---

public class **DerivationEvent**
extends EventBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	DerivationEvent()

Method Summary

void	addDerivative(DerivedUnit derivative)
void	addOriginal(SpecimenOrObservationBase original)
java.util.Set	getDerivatives()
java.util.Set	getOriginals()
DerivationEventType	getType()
void	removeDerivative(DerivedUnit derivative)
void	removeOriginal(SpecimenOrObservationBase original)
void	setDerivatives(java.util.Set derivatives)
void	setOriginals(java.util.Set originals)
void	setType(DerivationEventType type)

Methods inherited from class eu.etaxonomy.cdm.model.common.EventBase

getActor, getDescription, getTimeperiod, setActor, setDescription, setTimeperiod

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IEvent

getActor, getTimeperiod, setActor, setTimeperiod

Constructors

DerivationEvent

public **DerivationEvent**()

Methods

getOriginals

public java.util.Set **getOriginals**()

setOriginals

protected void **setOriginals**(java.util.Set originals)

addOriginal

```
public void addOriginal(SpecimenOrObservationBase original)
```

removeOriginal

```
public void removeOriginal(SpecimenOrObservationBase original)
```

getDerivatives

```
public java.util.Set getDerivatives()
```

setDerivatives

```
protected void setDerivatives(java.util.Set derivatives)
```

addDerivative

```
public void addDerivative(DerivedUnit derivative)
```

removeDerivative

```
public void removeDerivative(DerivedUnit derivative)
```

getType

```
public DerivationEventType getType()
```

setType

```
public void setType(DerivationEventType type)
```

eu.etaxonomy.cdm.model.occurrence
Class DerivationEventType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.occurrence.DerivationEventType
```
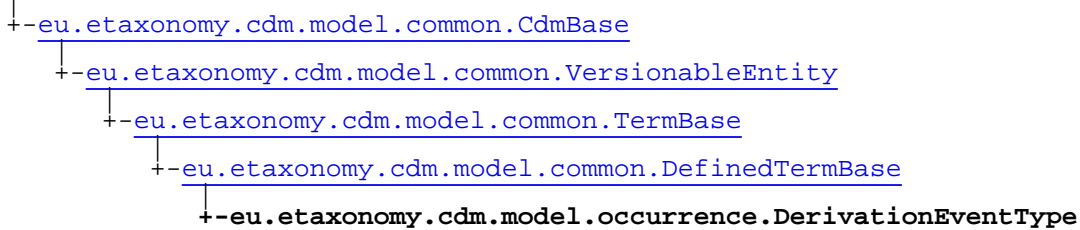
All Implemented Interfaces:
      java.io.Serializable, IDefTerm

---

public class **DerivationEventType**
extends DefinedTermBase

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
vocabulary, vocabularyStore

Constructor Summary

public	DerivationEventType()
public	DerivationEventType(java.lang.String term, java.lang.String label)

Method Summary

static DerivationEventType	DNA_EXTRACTION()
static DerivationEventType	DUPLICATE()
static DerivationEventType	GATHERING_IN_SITU()
static DerivationEventType	TISSUE_SAMPLING()

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase
addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

---

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

DerivationEventType

public **DerivationEventType**()

DerivationEventType

public **DerivationEventType**(java.lang.String term,
                              java.lang.String label)

Methods

DUPLICATE

public final static DerivationEventType **DUPLICATE**()

GATHERING_IN_SITU

public final static DerivationEventType **GATHERING_IN_SITU**()

TISSUE_SAMPLING

```
public final static DerivationEventType TISSUE_SAMPLING()
```

DNA_EXTRACTION

```
public final static DerivationEventType DNA_EXTRACTION()
```

```
public final static DerivationEventType TISSUE_SAMPLING()
```

eu.etaxonomy.cdm.model.occurrence
Class DerivedUnit

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase
                            |
                            +-eu.etaxonomy.cdm.model.occurrence.DerivedUnit
```
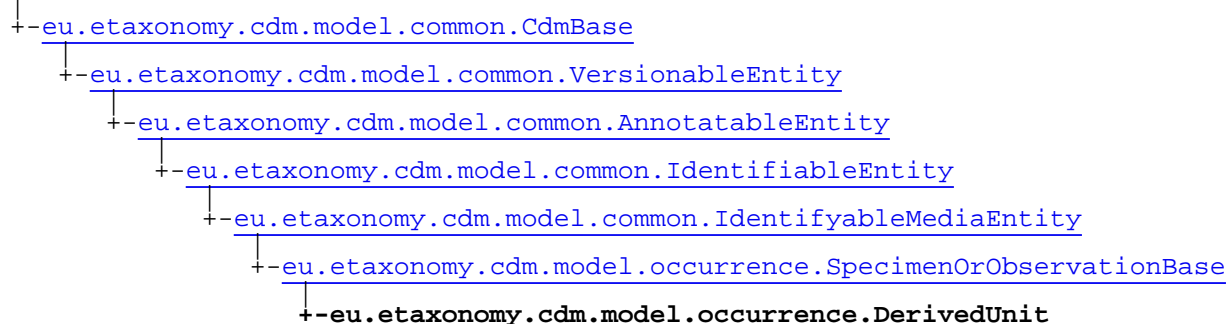
All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

Direct Known Subclasses:
> LivingBeing, Observation, Specimen

---

public abstract class **DerivedUnit**
extends SpecimenOrObservationBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	DerivedUnit()
public	DerivedUnit(FieldObservation fieldObservation) create new unit derived from an existing field observation
public	DerivedUnit(GatheringEvent gatheringEvent) create new unit derived from an existing gathering event, thereby creating a new empty field observation

Method Summary

java.lang.String	getCatalogNumber()
Collection	getCollection()
DerivationEvent	getDerivedFrom()
GatheringEvent	getGatheringEvent()
java.util.Set	getOriginals()

TaxonNameBase	getStoredUnder()
void	setCatalogNumber(java.lang.String catalogNumber)
void	setCollection(Collection collection)
void	setDerivedFrom(DerivationEvent derivedFrom)
void	setStoredUnder(TaxonNameBase storedUnder)

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase

addDefinition, addDefinition, addDerivationEvent, addDetermination, generateTitle, getDefinition, getDerivationEvents, getDeterminations, getGatheringEvent, getIndividualCount, getLifeStage, getOriginalUnit, getSex, removeDefinition, removeDerivationEvent, removeDetermination, setDerivationEvents, setDeterminations, setIndividualCount, setLifeStage, setSex

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

DerivedUnit

public **DerivedUnit**()

DerivedUnit

public **DerivedUnit**(FieldObservation fieldObservation)

create new unit derived from an existing field observation

Parameters:
fieldObservation - existing field observation from where this unit is derived

DerivedUnit

public **DerivedUnit**(GatheringEvent gatheringEvent)

create new unit derived from an existing gathering event, thereby creating a new empty field observation

Parameters:
gatheringEvent - the gathering event this unit was collected at

Methods

getDerivedFrom

public DerivationEvent **getDerivedFrom**()

setDerivedFrom

public void **setDerivedFrom**(DerivationEvent derivedFrom)

getOriginals

public java.util.Set **getOriginals**()

getGatheringEvent

public GatheringEvent **getGatheringEvent**()

getCollection

public [Collection](#) **getCollection**()

setCollection

public void **setCollection**([Collection](#) collection)

getCatalogNumber

public java.lang.String **getCatalogNumber**()

setCatalogNumber

public void **setCatalogNumber**(java.lang.String catalogNumber)

getStoredUnder

public [TaxonNameBase](#) **getStoredUnder**()

setStoredUnder

public void **setStoredUnder**([TaxonNameBase](#) storedUnder)

eu.etaxonomy.cdm.model.occurrence
Class DeterminationEvent

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.EventBase
                    |
                    +-eu.etaxonomy.cdm.model.occurrence.DeterminationEvent
```
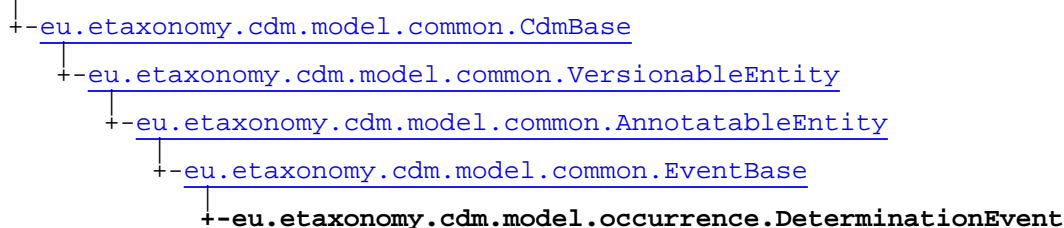
All Implemented Interfaces:
> java.io.Serializable, IEvent

---

public class **DeterminationEvent**
extends EventBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	DeterminationEvent()

Method Summary

Agent	getDeterminer()
java.util.Calendar	getIdentificationDate()
SpecimenOrObservationBase	getIdentifiedUnit()
DeterminationModifier	getModifier()
Taxon	getTaxon()
void	setDeterminer(Agent determiner)
void	setIdentificationDate(java.util.Calendar identificationDate)
void	setIdentifiedUnit(SpecimenOrObservationBase identifiedUnit)
void	setModifier(DeterminationModifier modifier)
void	setTaxon(Taxon taxon)

Methods inherited from class eu.etaxonomy.cdm.model.common.EventBase

getActor, getDescription, getTimeperiod, setActor, setDescription, setTimeperiod

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IEvent

getActor, getTimeperiod, setActor, setTimeperiod

Constructors

DeterminationEvent

public **DeterminationEvent**()

Methods

getModifier

public DeterminationModifier **getModifier**()

---

setModifier

public void **setModifier**(DeterminationModifier modifier)

---

getTaxon

public [Taxon](#) **getTaxon**()

setTaxon

public void **setTaxon**([Taxon](#) taxon)

Parameters:
    taxon - taxon

getIdentificationDate

public java.util.Calendar **getIdentificationDate**()

setIdentificationDate

public void **setIdentificationDate**(java.util.Calendar identificationDate)

Parameters:
    identificationDate - identificationDate

getDeterminer

public [Agent](#) **getDeterminer**()

setDeterminer

public void **setDeterminer**([Agent](#) determiner)

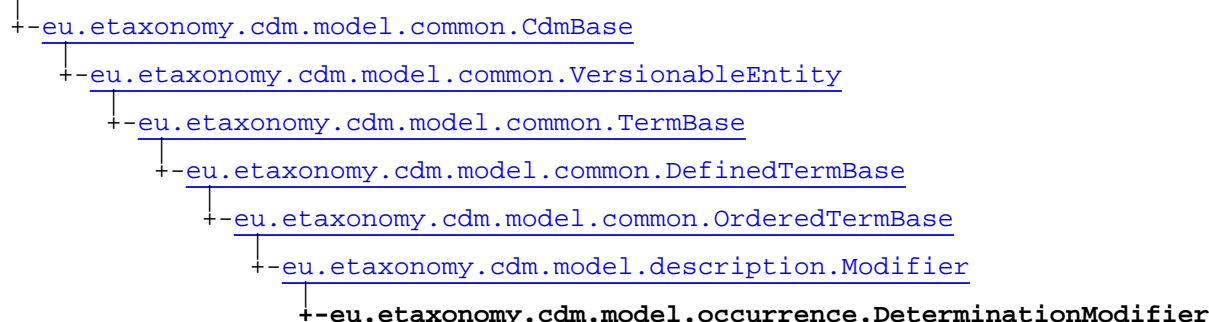## getIdentifiedUnit

public [SpecimenOrObservationBase](#) **getIdentifiedUnit**()

setIdentifiedUnit

public void **setIdentifiedUnit**([SpecimenOrObservationBase](#) identifiedUnit)

eu.etaxonomy.cdm.model.occurrence
Class DeterminationModifier

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.description.Modifier
                            |
                            +-eu.etaxonomy.cdm.model.occurrence.DeterminationModifier
```

All Implemented Interfaces:
> java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **DeterminationModifier**
extends Modifier

modifier for a determination. can be cf. det. rev. conf. for example

---

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

vocabulary, vocabularyStore

Constructor Summary

public	DeterminationModifier()
public	DeterminationModifier(java.lang.String term, java.lang.String label)

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

DeterminationModifier

public **DeterminationModifier**()

DeterminationModifier

public **DeterminationModifier**(java.lang.String term,
                                java.lang.String label)

eu.etaxonomy.cdm.model.occurrence
Class FieldObservation

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase
                            |
                            +-eu.etaxonomy.cdm.model.occurrence.FieldObservation
```

All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **FieldObservation**
extends SpecimenOrObservationBase

In situ observation of a taxon in the field. If a specimen exists, in most cases a parallel field observation object should be instantiated and the specimen then is "derived" from the field unit

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	FieldObservation()

Method Summary

java.lang.String	getFieldNotes()
java.lang.String	getFieldNumber()
GatheringEvent	getGatheringEvent()
void	setFieldNotes(java.lang.String fieldNotes)
void	setFieldNumber(java.lang.String fieldNumber)
void	setGatheringEvent(GatheringEvent gatheringEvent)

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase

addDefinition, addDefinition, addDerivationEvent, addDetermination, generateTitle, getDefinition, getDerivationEvents, getDeterminations, getGatheringEvent, getIndividualCount, getLifeStage, getOriginalUnit, getSex, removeDefinition, removeDerivationEvent, removeDetermination, setDerivationEvents, setDeterminations, setIndividualCount, setLifeStage, setSex

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

FieldObservation

public **FieldObservation**()

Methods

getGatheringEvent

public [GatheringEvent](#) **getGatheringEvent**()

setGatheringEvent

public void **setGatheringEvent**([GatheringEvent](#) gatheringEvent)

getFieldNumber

public java.lang.String **getFieldNumber**()

setFieldNumber

public void **setFieldNumber**(java.lang.String fieldNumber)

getFieldNotes

public java.lang.String **getFieldNotes**()

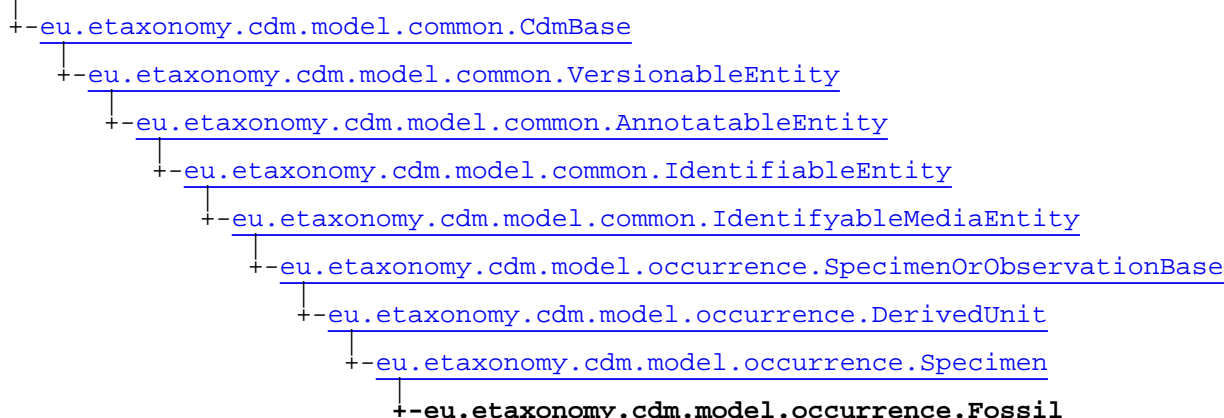## setFieldNotes

public void **setFieldNotes**(java.lang.String fieldNotes)

eu.etaxonomy.cdm.model.occurrence
Class Fossil

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase
                            |
                            +-eu.etaxonomy.cdm.model.occurrence.DerivedUnit
                                |
                                +-eu.etaxonomy.cdm.model.occurrence.Specimen
                                    |
                                    +-eu.etaxonomy.cdm.model.occurrence.Fossil
```

All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Fossil**
extends Specimen

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	Fossil()

Methods inherited from class `eu.etaxonomy.cdm.model.occurrence.Specimen`

getPreservation, setPreservation

Methods inherited from class `eu.etaxonomy.cdm.model.occurrence.DerivedUnit`

getCatalogNumber, getCollection, getDerivedFrom, getGatheringEvent, getOriginals, getStoredUnder, setCatalogNumber, setCollection, setDerivedFrom, setStoredUnder

Methods inherited from class `eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase`

addDefinition, addDefinition, addDerivationEvent, addDetermination, generateTitle, getDefinition, getDerivationEvents, getDeterminations, getGatheringEvent, getIndividualCount, getLifeStage, getOriginalUnit, getSex, removeDefinition, removeDerivationEvent, removeDetermination, setDerivationEvents, setDeterminations, setIndividualCount, setLifeStage, setSex

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity`

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Fossil

public **Fossil**()

eu.etaxonomy.cdm.model.occurrence
Class GatheringEvent

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.EventBase
                    |
                    +-eu.etaxonomy.cdm.model.occurrence.GatheringEvent
```

All Implemented Interfaces:
> java.io.Serializable**,** IEvent

---

public class **GatheringEvent**
extends EventBase

The event when gathering a specimen or recording a field observation only

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	GatheringEvent()

Method Summary

java.lang.Integer	getAbsoluteElevation()
java.lang.Integer	getAbsoluteElevationError()
NamedArea	getCollectingArea()
java.lang.String	getCollectingMethod()
Agent	getCollector()
java.lang.Integer	getDistanceToGround()
java.lang.Integer	getDistanceToWaterSurface()
Point	getExactLocation()
java.util.Calendar	getGatheringDate() EventBase managed attributes

---

java.lang.String	getLocality()
void	setAbsoluteElevation(java.lang.Integer absoluteElevation)
void	setAbsoluteElevationError(java.lang.Integer absoluteElevationError)
void	setCollectingArea(NamedArea area)
void	setCollectingMethod(java.lang.String collectingMethod)
void	setCollector(Agent collector)
void	setDistanceToGround(java.lang.Integer distanceToGround)
void	setDistanceToWaterSurface(java.lang.Integer distanceToWaterSurface)
void	setExactLocation(Point exactLocation)
void	setGatheringDate(java.util.Calendar gatheringDate)
void	setLocality(java.lang.String locality)

Methods inherited from class eu.etaxonomy.cdm.model.common.EventBase

getActor, getDescription, getTimeperiod, setActor, setDescription, setTimeperiod

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IEvent

getActor, getTimeperiod, setActor, setTimeperiod

Constructors

GatheringEvent

public **GatheringEvent**()

Methods

getExactLocation

public [Point](#) **getExactLocation**()

setExactLocation

public void **setExactLocation**([Point](#) exactLocation)

getCollectingArea

public [NamedArea](#) **getCollectingArea**()

setCollectingArea

public void **setCollectingArea**([NamedArea](#) area)

getLocality

public java.lang.String **getLocality**()

setLocality

public void **setLocality**(java.lang.String locality)

getGatheringDate

public java.util.Calendar **getGatheringDate**()

EventBase managed attributes

Returns:

setGatheringDate

```
public void setGatheringDate(java.util.Calendar gatheringDate)
```

getCollector

```
public Agent getCollector()
```

setCollector

```
public void setCollector(Agent collector)
```

getCollectingMethod

```
public java.lang.String getCollectingMethod()
```

setCollectingMethod

```
public void setCollectingMethod(java.lang.String collectingMethod)
```

getAbsoluteElevation

```
public java.lang.Integer getAbsoluteElevation()
```

setAbsoluteElevation

```
public void setAbsoluteElevation(java.lang.Integer absoluteElevation)
```

getAbsoluteElevationError

```
public java.lang.Integer getAbsoluteElevationError()
```

setAbsoluteElevationError

```
public void setAbsoluteElevationError(java.lang.Integer absoluteElevationError)
```

getDistanceToGround

```
public java.lang.Integer getDistanceToGround()
```

setDistanceToGround

```
public void setDistanceToGround(java.lang.Integer distanceToGround)
```

getDistanceToWaterSurface

```
public java.lang.Integer getDistanceToWaterSurface()
```

setDistanceToWaterSurface

```
public void setDistanceToWaterSurface(java.lang.Integer distanceToWaterSurface)
```

eu.etaxonomy.cdm.model.occurrence
Class LivingBeing

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase
                            |
                            +-eu.etaxonomy.cdm.model.occurrence.DerivedUnit
                                |
                                +-eu.etaxonomy.cdm.model.occurrence.LivingBeing
```
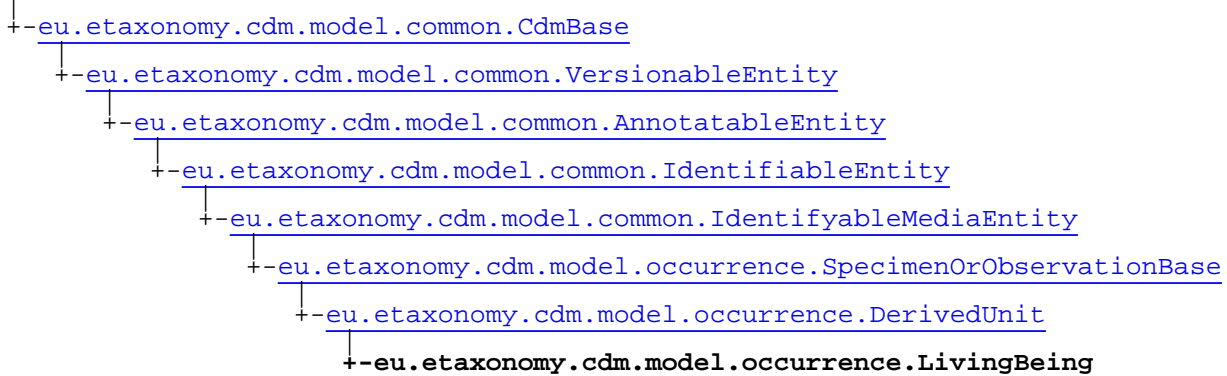
All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **LivingBeing**
extends DerivedUnit

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	LivingBeing()

Methods inherited from class `eu.etaxonomy.cdm.model.occurrence.DerivedUnit`

getCatalogNumber, getCollection, getDerivedFrom, getGatheringEvent, getOriginals, getStoredUnder, setCatalogNumber, setCollection, setDerivedFrom, setStoredUnder

Methods inherited from class `eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase`

addDefinition, addDefinition, addDerivationEvent, addDetermination, generateTitle, getDefinition, getDerivationEvents, getDeterminations, getGatheringEvent, getIndividualCount, getLifeStage, getOriginalUnit, getSex, removeDefinition, removeDerivationEvent, removeDetermination, setDerivationEvents, setDeterminations, setIndividualCount, setLifeStage, setSex

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity`

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifiableEntity`

---

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

## LivingBeing

public **LivingBeing**()

eu.etaxonomy.cdm.model.occurrence
Class Observation

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase
                            |
                            +-eu.etaxonomy.cdm.model.occurrence.DerivedUnit
                                |
                                +-eu.etaxonomy.cdm.model.occurrence.Observation
```
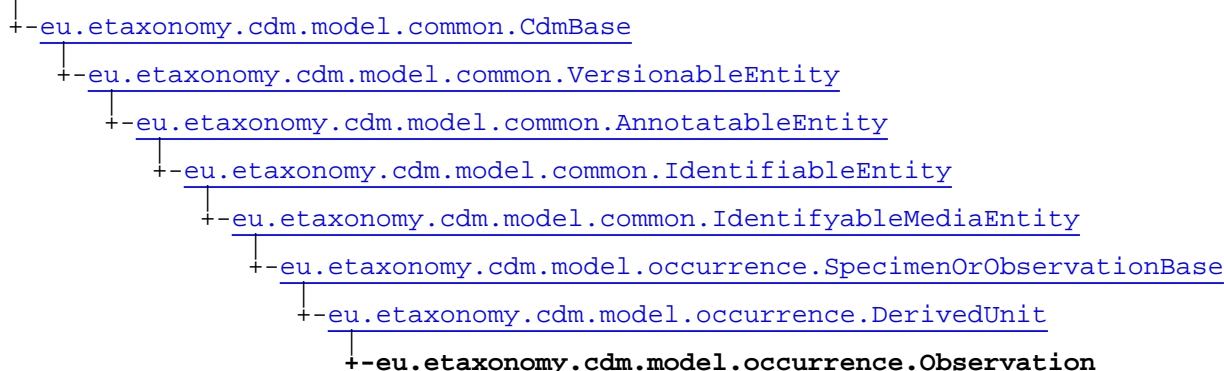
All Implemented Interfaces:
　　　　java.io.Serializable， IOriginalSource， IMediaDocumented

---

public class **Observation**
extends DerivedUnit

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	Observation()

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.DerivedUnit

getCatalogNumber, getCollection, getDerivedFrom, getGatheringEvent, getOriginals, getStoredUnder, setCatalogNumber, setCollection, setDerivedFrom, setStoredUnder

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase

addDefinition, addDefinition, addDerivationEvent, addDetermination, generateTitle, getDefinition, getDerivationEvents, getDeterminations, getGatheringEvent, getIndividualCount, getLifeStage, getOriginalUnit, getSex, removeDefinition, removeDerivationEvent, removeDetermination, setDerivationEvents, setDeterminations, setIndividualCount, setLifeStage, setSex

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

---

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

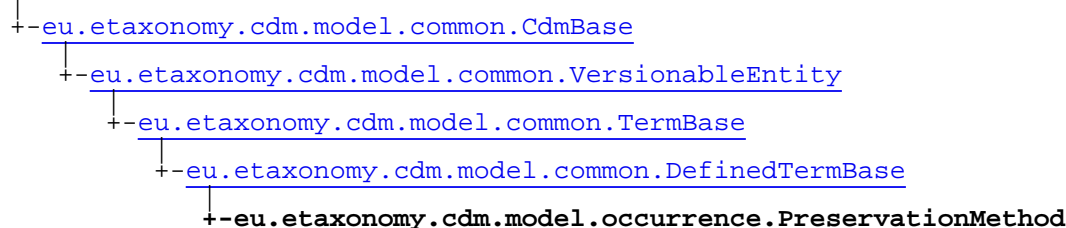## Observation

public **Observation**()

eu.etaxonomy.cdm.model.occurrence
Class PreservationMethod

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.occurrence.PreservationMethod
```

All Implemented Interfaces:
> java.io.Serializable**,** IDefTerm

---

public class **PreservationMethod**
extends DefinedTermBase

http://rs.tdwg.org/ontology/voc/Collection.rdf#SpecimenPreservationMethodTypeTerm

---

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

`vocabulary`, `vocabularyStore`

Constructor Summary

public	PreservationMethod(java.lang.String term, java.lang.String label)

Methods inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class `eu.etaxonomy.cdm.model.common.TermBase`

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Constructors

PreservationMethod

```
public PreservationMethod(java.lang.String term,
                          java.lang.String label)
```

eu.etaxonomy.cdm.model.occurrence
Class Specimen

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
         │
         +-eu.etaxonomy.cdm.model.common.VersionableEntity
              │
              +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                   │
                   +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                        │
                        +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                             │
                             +-eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase
                                  │
                                  +-eu.etaxonomy.cdm.model.occurrence.DerivedUnit
                                       │
                                       +-eu.etaxonomy.cdm.model.occurrence.Specimen
```

All Implemented Interfaces:
java.io.Serializable**,** IOriginalSource**,** IMediaDocumented

Direct Known Subclasses:
Fossil**,** DnaSample

---

public class **Specimen**
extends DerivedUnit

A specimen is regarded as derived from an field observation, so locality and gathering related information is captured as a separate FieldObservation object related to a specimen via a derivation event

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	Specimen()

Method Summary

PreservationMethod	getPreservation()
void	setPreservation(PreservationMethod preservation)

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.DerivedUnit
getCatalogNumber, getCollection, getDerivedFrom, getGatheringEvent, getOriginals, getStoredUnder, setCatalogNumber, setCollection, setDerivedFrom, setStoredUnder

Methods inherited from class eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase

addDefinition, addDefinition, addDerivationEvent, addDetermination, generateTitle, getDefinition, getDerivationEvents, getDeterminations, getGatheringEvent, getIndividualCount, getLifeStage, getOriginalUnit, getSex, removeDefinition, removeDerivationEvent, removeDetermination, setDerivationEvents, setDeterminations, setIndividualCount, setLifeStage, setSex

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Specimen

public **Specimen**()

Methods

getPreservation

public [PreservationMethod](#) **getPreservation**()

---

setPreservation

public void **setPreservation**([PreservationMethod](#) preservation)

eu.etaxonomy.cdm.model.occurrence
Class SpecimenOrObservationBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.occurrence.SpecimenOrObservationBase
```
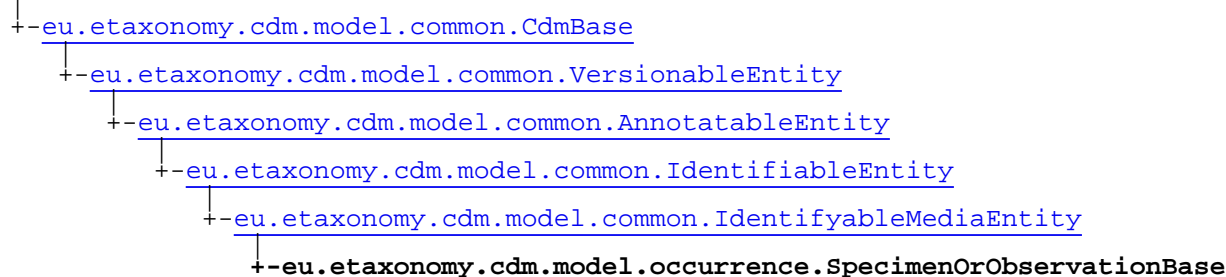
All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

Direct Known Subclasses:
> DerivedUnit, FieldObservation

---

public abstract class **SpecimenOrObservationBase**
extends IdentifyableMediaEntity

type figures are observations with at least a figure object in media

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	SpecimenOrObservationBase()

Method Summary

void	addDefinition(LanguageString description)
void	addDefinition(java.lang.String text, Language lang)
void	addDerivationEvent(DerivationEvent event)
void	addDetermination(DeterminationEvent determination)
java.lang.String	generateTitle()
MultilanguageSet	getDefinition()
java.util.Set	getDerivationEvents()
java.util.Set	getDeterminations()

---

abstract GatheringEvent	getGatheringEvent()
java.lang.Integer	getIndividualCount()
Stage	getLifeStage()
SpecimenOrObservation Base	getOriginalUnit() for derived units get the single next higher parental/original unit.
Sex	getSex()
void	removeDefinition(Language lang)
void	removeDerivationEvent(DerivationEvent event)
void	removeDetermination(DeterminationEvent determination)
void	setDerivationEvents(java.util.Set derivationEvents)
void	setDeterminations(java.util.Set determinations)
void	setIndividualCount(java.lang.Integer individualCount)
void	setLifeStage(Stage lifeStage)
void	setSex(Sex sex)

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IOriginalSource`

addSource, getSources, removeSource

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IMediaDocumented`

getMedia

Constructors

SpecimenOrObservationBase

public **SpecimenOrObservationBase**()

Methods

getDerivationEvents

public java.util.Set **getDerivationEvents**()

setDerivationEvents

protected void **setDerivationEvents**(java.util.Set derivationEvents)

addDerivationEvent

public void **addDerivationEvent**(DerivationEvent event)

removeDerivationEvent

public void **removeDerivationEvent**(DerivationEvent event)

getDeterminations

public java.util.Set **getDeterminations**()

setDeterminations

protected void **setDeterminations**(java.util.Set determinations)

addDetermination

public void **addDetermination**([DeterminationEvent](#) determination)

removeDetermination

public void **removeDetermination**([DeterminationEvent](#) determination)

getSex

public [Sex](#) **getSex**()

setSex

public void **setSex**([Sex](#) sex)

getLifeStage

public [Stage](#) **getLifeStage**()

setLifeStage

public void **setLifeStage**([Stage](#) lifeStage)

generateTitle

public java.lang.String **generateTitle**()

getIndividualCount

public java.lang.Integer **getIndividualCount**()

setIndividualCount

public void **setIndividualCount**(java.lang.Integer individualCount)

getDefinition

public MultilanguageSet **getDefinition**()

addDefinition

public void **addDefinition**(LanguageString description)

addDefinition

public void **addDefinition**(java.lang.String text,
        Language lang)

removeDefinition

public void **removeDefinition**(Language lang)

getOriginalUnit

public SpecimenOrObservationBase **getOriginalUnit**()

for derived units get the single next higher parental/original unit. If multiple original units exist throw error

Returns:

getGatheringEvent

public abstract GatheringEvent **getGatheringEvent**()

eu.etaxonomy.cdm.model.reference

eu.etaxonomy.cdm.model.reference
Class Article

```
java.lang.Object
    │
    +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            │
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                │
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    │
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        │
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            │
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                │
                                +-eu.etaxonomy.cdm.model.reference.Article
```
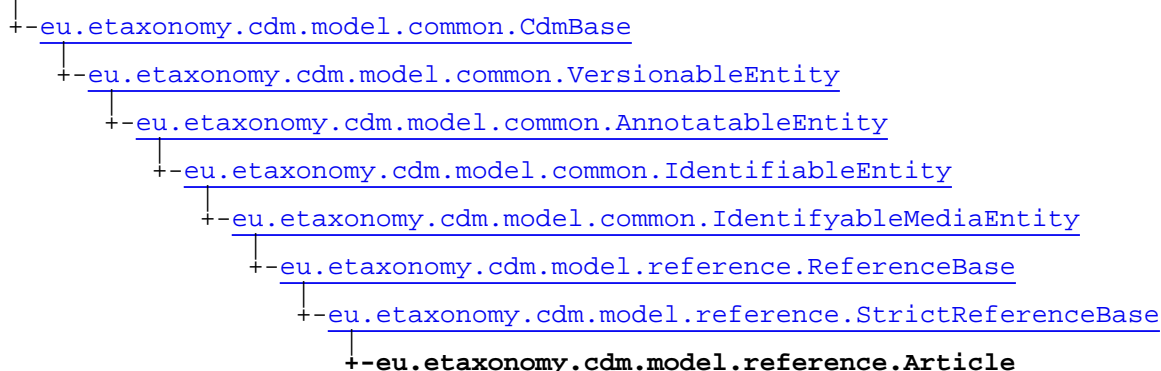
All Implemented Interfaces:
        INomenclaturalReference, java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Article**
extends StrictReferenceBase
implements IMediaDocumented, IOriginalSource, java.io.Serializable, INomenclaturalReference

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	Article()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getCitation() returns a formatted string containing the entire reference citation including authors
Journal	getInJournal()
java.lang.String	getNomenclaturalCitation() returns a formatted string containing the reference citation excluding authors as used in a taxon name
java.lang.String	getPages()
java.lang.String	getSeries()
java.lang.String	getVolume()

---

void		setInJournal(Journal inJournal)
void		setPages(java.lang.String pages)
void		setSeries(java.lang.String series)
void		setVolume(java.lang.String volume)

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Methods inherited from interface eu.etaxonomy.cdm.model.reference.INomenclaturalReference

getNomenclaturalCitation, getYear

Constructors

Article

public **Article**()

Methods

getInJournal

public Journal **getInJournal**()

setInJournal

public void **setInJournal**(Journal inJournal)

getSeries

public java.lang.String **getSeries**()

setSeries

public void **setSeries**(java.lang.String series)

>   **Parameters:**
>   series - series

getVolume

public java.lang.String **getVolume**()

setVolume

public void **setVolume**(java.lang.String volume)

Parameters:
volume - volume

getPages

`public java.lang.String getPages()`

setPages

`public void setPages(java.lang.String pages)`

Parameters:
pages - pages

getCitation

`public java.lang.String getCitation()`

returns a formatted string containing the entire reference citation including authors

getNomenclaturalCitation

`public java.lang.String getNomenclaturalCitation()`

returns a formatted string containing the reference citation excluding authors as used in a taxon name

generateTitle

`public java.lang.String generateTitle()`

eu.etaxonomy.cdm.model.reference
Class BibtexEntryType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.reference.BibtexEntryType
```

All Implemented Interfaces:
java.io.Serializable, IDefTerm

---

public class **BibtexEntryType**
extends DefinedTermBase

Bibtex bibliography entries are split by types

Fields inherited from class `eu.etaxonomy.cdm.model.common.DefinedTermBase`

`vocabulary`, `vocabularyStore`

Constructor Summary

public	BibtexEntryType()
public	BibtexEntryType(java.lang.String term, java.lang.String label)

Method Summary

static BibtexEntryType	ARTICLE() An article from a journal or magazine.
static BibtexEntryType	BOOK() A book with an explicit publisher.
static BibtexEntryType	BOOKLET() A work that is printed and bound, but without a named publisher or sponsoring institution.
static BibtexEntryType	CONFERENCE() The same as inproceedings.
static BibtexEntryType	INBOOK() A part of a book, which may be a chapter (or section or whatever) and/or a range of pages.
static BibtexEntryType	INCOLLECTION() A part of a book having its own title.
static BibtexEntryType	INPROCEEDINGS() An article in a conference proceedings.

static [BibtexEntryType](#)	[MANUAL](#)() Technical documentation.	
static [BibtexEntryType](#)	[MASTERTHESIS](#)() A Master's thesis.	
static [BibtexEntryType](#)	[MISC](#)() For use when nothing else fits.	
static [BibtexEntryType](#)	[PHDTHESIS](#)() A Ph.D.	
static [BibtexEntryType](#)	[PROCEEDINGS](#)() The proceedings of a conference.	
static [BibtexEntryType](#)	[TECHREPORT](#)() A report published by a school or other institution, usually numbered within a series.	
static [BibtexEntryType](#)	[UNPUBLISHED](#)() A document having an author and title, but not formally published.	

Methods inherited from class [eu.etaxonomy.cdm.model.common.DefinedTermBase](#)

[addIncludes](#), [addMedia](#), [findByUuid](#), [getGeneralizationOf](#), [getIncludes](#), [getKindOf](#), [getMedia](#), [getPartOf](#), [getPersistentVocabulary](#), [getVocabulary](#), [readCsvLine](#), [readCsvLine](#), [removeIncludes](#), [removeMedia](#), [setGeneralizationOf](#), [setIncludes](#), [setKindOf](#), [setMedia](#), [setPartOf](#), [setPersistentVocabulary](#), [setVocabulary](#), [setVocabularyStore](#), [writeCsvLine](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.TermBase](#)

[addRepresentation](#), [equals](#), [getDescription](#), [getDescription](#), [getLabel](#), [getLabel](#), [getRepresentation](#), [getRepresentations](#), [getUri](#), [removeRepresentation](#), [setRepresentations](#), [setUri](#), [toString](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.VersionableEntity](#)

[getNextVersion](#), [getPreviousVersion](#), [getUpdated](#), [getUpdatedBy](#), [getValidFrom](#), [getValidTo](#), [setNextVersion](#), [setPreviousVersion](#), [setUpdated](#), [setUpdatedBy](#)

Methods inherited from class [eu.etaxonomy.cdm.model.common.CdmBase](#)

[addPropertyChangeListener](#), [addPropertyChangeListener](#), [equals](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [firePropertyChange](#), [getCreated](#), [getCreatedBy](#), [getId](#), [getUuid](#), [hasListeners](#), [removePropertyChangeListener](#), [removePropertyChangeListener](#), [setCreated](#), [setCreatedBy](#), [setId](#), [setUuid](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [eu.etaxonomy.cdm.model.common.IDefTerm](#)

[getVocabulary](#), [readCsvLine](#), [setVocabulary](#), [writeCsvLine](#)

Constructors

BibtexEntryType

public **BibtexEntryType**()

BibtexEntryType

public **BibtexEntryType**(java.lang.String term,
                          java.lang.String label)

Methods

ARTICLE

public final static BibtexEntryType **ARTICLE**()

An article from a journal or magazine. Required fields: author, title, journal, year Optional fields: volume, number, pages, month, note

BOOK

public final static BibtexEntryType **BOOK**()

A book with an explicit publisher. Required fields: author/editor, title, publisher, year Optional fields: volume, series, address, edition, month, note

BOOKLET

public final static BibtexEntryType **BOOKLET**()

A work that is printed and bound, but without a named publisher or sponsoring institution. Required fields: title Optional fields: author, howpublished, address, month, year, note

INBOOK

public final static BibtexEntryType **INBOOK**()

A part of a book, which may be a chapter (or section or whatever) and/or a range of pages. Required fields: author/editor, title, chapter/pages, publisher, year Optional fields: volume, series, address, edition, month, note

INCOLLECTION

public final static BibtexEntryType **INCOLLECTION**()

A part of a book having its own title. Required fields: author, title, booktitle, year Optional fields: editor, pages, organization, publisher, address, month, note

PROCEEDINGS

public final static BibtexEntryType **PROCEEDINGS**()

The proceedings of a conference. Required fields: title, year Optional fields: editor, publisher, organization, address, month, note

INPROCEEDINGS

`public final static` [BibtexEntryType] **INPROCEEDINGS**`()`

An article in a conference proceedings. Required fields: author, title, booktitle, year Optional fields: editor, pages, organization, publisher, address, month, note

CONFERENCE

`public final static` [BibtexEntryType] **CONFERENCE**`()`

The same as inproceedings. Required fields: author, title, booktitle, year Optional fields: editor, pages, organization, publisher, address, month, note

MANUAL

`public final static` [BibtexEntryType] **MANUAL**`()`

Technical documentation. Required fields: title Optional fields: author, organization, address, edition, month, year, note

MASTERTHESIS

`public final static` [BibtexEntryType] **MASTERTHESIS**`()`

A Master's thesis. Required fields: author, title, school, year Optional fields: address, month, note

PHDTHESIS

`public final static` [BibtexEntryType] **PHDTHESIS**`()`

A Ph.D. thesis. Required fields: author, title, school, year Optional fields: address, month, note

TECHREPORT

`public final static` [BibtexEntryType] **TECHREPORT**`()`

A report published by a school or other institution, usually numbered within a series. Required fields: author, title, institution, year Optional fields: type, number, address, month, note

UNPUBLISHED

`public final static` [BibtexEntryType] **UNPUBLISHED**`()`

A document having an author and title, but not formally published. Required fields: author, title, note Optional fields: month, year

MISC

`public final static` [BibtexEntryType] **MISC**`()`

For use when nothing else fits. Required fields: none Optional fields: author, title, howpublished, month, year, note

eu.etaxonomy.cdm.model.reference
Class BibtexReference

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.BibtexReference
```
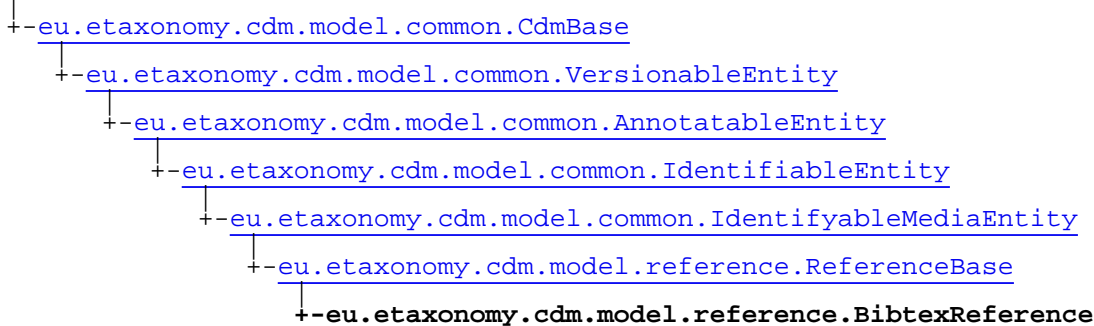
All Implemented Interfaces:
INomenclaturalReference, java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **BibtexReference**
extends ReferenceBase
implements IMediaDocumented, IOriginalSource, java.io.Serializable, INomenclaturalReference

---

Fields inherited from class **eu.etaxonomy.cdm.model.common.AnnotatableEntity**

annotations, markers

Constructor Summary

public	BibtexReference()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getAddress()
java.lang.String	getAnnote()
java.lang.String	getBooktitle()
java.lang.String	getChapter()
java.lang.String	getCitation() returns a formatted string containing the entire reference citation including authors
BibtexReference	getCrossref()
java.lang.String	getEdition()

java.lang.String	getEditor()	
java.lang.String	getEprint()	
java.lang.String	getHowpublished()	
java.lang.String	getInstitution()	
java.lang.String	getJournal()	
java.lang.String	getMonth()	
java.lang.String	getNomenclaturalCitation() returns a formatted string containing the reference citation excluding authors as used in a taxon name	
java.lang.String	getNote()	
java.lang.String	getNumber()	
java.lang.String	getOrganization()	
java.lang.String	getPages()	
java.lang.String	getPublisher()	
java.lang.String	getReportType()	
java.lang.String	getSchool()	
java.lang.String	getSeries()	
java.lang.String	getTitle()	
BibtexEntryType	getType()	
java.lang.String	getVolume()	
java.lang.String	getYear()	
void	setAddress(java.lang.String address)	
void	setAnnote(java.lang.String annote)	
void	setBooktitle(java.lang.String booktitle)	
void	setChapter(java.lang.String chapter)	
void	setCrossref(BibtexReference crossref)	

void		setEdition(java.lang.String edition)
void		setEditor(java.lang.String editor)
void		setEprint(java.lang.String eprint)
void		setHowpublished(java.lang.String howpublished)
void		setInstitution(java.lang.String institution)
void		setJournal(java.lang.String journal)
void		setMonth(java.lang.String month)
void		setNote(java.lang.String note)
void		setNumber(java.lang.String number)
void		setOrganization(java.lang.String organization)
void		setPages(java.lang.String pages)
void		setPublisher(java.lang.String publisher)
void		setReportType(java.lang.String type)
void		setSchool(java.lang.String school)
void		setSeries(java.lang.String series)
void		setTitle(java.lang.String title)
void		setType(BibtexEntryType type)
void		setVolume(java.lang.String volume)
void		setYear(java.lang.String year)

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Methods inherited from interface eu.etaxonomy.cdm.model.reference.INomenclaturalReference

getNomenclaturalCitation, getYear

Constructors

BibtexReference

public **BibtexReference**()

Methods

getCrossref

public BibtexReference **getCrossref**()

setCrossref

```
public void setCrossref(BibtexReference crossref)
```

getJournal

```
public java.lang.String getJournal()
```

setJournal

```
public void setJournal(java.lang.String journal)
```

> **Parameters:**
> `journal` - journal

getBooktitle

```
public java.lang.String getBooktitle()
```

setBooktitle

```
public void setBooktitle(java.lang.String booktitle)
```

> **Parameters:**
> `booktitle` - booktitle

getChapter

```
public java.lang.String getChapter()
```

setChapter

```
public void setChapter(java.lang.String chapter)
```

> **Parameters:**
> `chapter` - chapter

getTitle

```
public java.lang.String getTitle()
```

setTitle

public void **setTitle**(java.lang.String title)

Parameters:
title - title

getSeries

public java.lang.String **getSeries**()

setSeries

public void **setSeries**(java.lang.String series)

Parameters:
series - series

getEdition

public java.lang.String **getEdition**()

setEdition

public void **setEdition**(java.lang.String edition)

Parameters:
edition - edition

getVolume

public java.lang.String **getVolume**()

setVolume

public void **setVolume**(java.lang.String volume)

Parameters:
volume - volume

getNumber

public java.lang.String **getNumber**()

setNumber

public void **setNumber**(java.lang.String number)

Parameters:
number - number

getPages

public java.lang.String **getPages**()

setPages

public void **setPages**(java.lang.String pages)

Parameters:
pages - pages

getAnnote

public java.lang.String **getAnnote**()

setAnnote

public void **setAnnote**(java.lang.String annote)

Parameters:
annote - annote

getEditor

public java.lang.String **getEditor**()

setEditor

public void **setEditor**(java.lang.String editor)

Parameters:
editor - editor

getInstitution

```
public java.lang.String getInstitution()
```

setInstitution

```
public void setInstitution(java.lang.String institution)
```

Parameters:
institution - institution

getSchool

```
public java.lang.String getSchool()
```

setSchool

```
public void setSchool(java.lang.String school)
```

Parameters:
school - school

getOrganization

```
public java.lang.String getOrganization()
```

setOrganization

```
public void setOrganization(java.lang.String organization)
```

Parameters:
organization - organization

getPublisher

```
public java.lang.String getPublisher()
```

setPublisher

```
public void setPublisher(java.lang.String publisher)
```

Parameters:

`publisher` - publisher

getAddress

`public java.lang.String` **`getAddress`**`()`

setAddress

`public void` **`setAddress`**`(java.lang.String address)`

Parameters:
`address` - address

getHowpublished

`public java.lang.String` **`getHowpublished`**`()`

setHowpublished

`public void` **`setHowpublished`**`(java.lang.String howpublished)`

Parameters:
`howpublished` - howpublished

getReportType

`public java.lang.String` **`getReportType`**`()`

setReportType

`public void` **`setReportType`**`(java.lang.String type)`

Parameters:
`type` - type

getMonth

`public java.lang.String` **`getMonth`**`()`

setMonth

`public void` **`setMonth`**`(java.lang.String month)`

Parameters:
    `month` - month

getYear

`public java.lang.String` **`getYear`**`()`

setYear

`public void` **`setYear`**`(java.lang.String year)`

Parameters:
    `year` - year

getEprint

`public java.lang.String` **`getEprint`**`()`

setEprint

`public void` **`setEprint`**`(java.lang.String eprint)`

Parameters:
    `eprint` - eprint

getNote

`public java.lang.String` **`getNote`**`()`

setNote

`public void` **`setNote`**`(java.lang.String note)`

Parameters:
    `note` - note

getCitation

`public java.lang.String` **`getCitation`**`()`

returns a formatted string containing the entire reference citation including authors

getNomenclaturalCitation

`public java.lang.String` **`getNomenclaturalCitation`**`()`

returns a formatted string containing the reference citation excluding authors as used in a taxon name

generateTitle
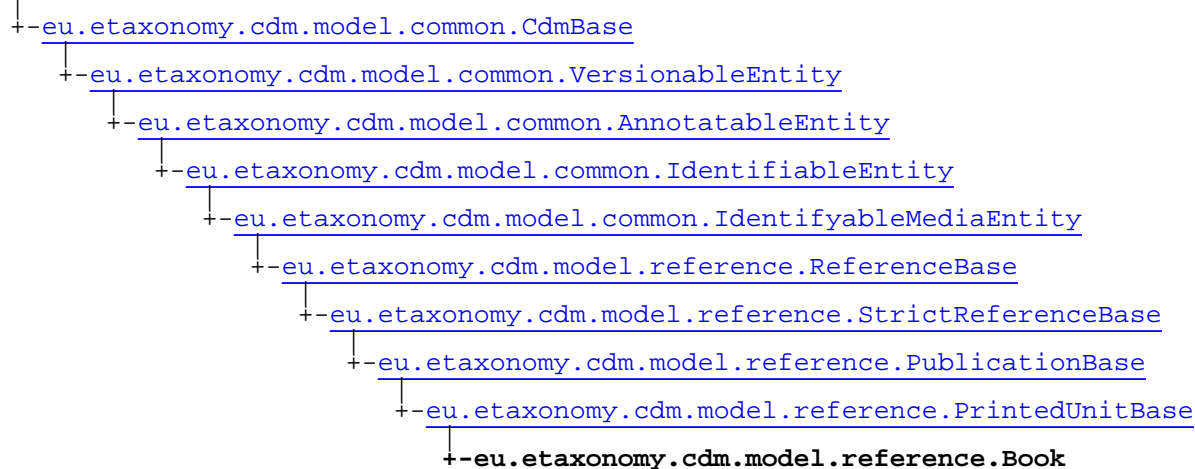
```
public java.lang.String generateTitle()
```

getType

```
public BibtexEntryType getType()
```

setType

```
public void setType(BibtexEntryType type)
```

generateTitle

```
public java.lang.String generateTitle()
```

eu.etaxonomy.cdm.model.reference
Class Book

```
java.lang.Object
   │
   +-eu.etaxonomy.cdm.model.common.CdmBase
        │
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
             │
             +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                  │
                  +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                       │
                       +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                            │
                            +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                                 │
                                 +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                      │
                                      +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                           │
                                           +-eu.etaxonomy.cdm.model.reference.PrintedUnitBase
                                                │
                                                +-eu.etaxonomy.cdm.model.reference.Book
```

All Implemented Interfaces:
  INomenclaturalReference**,** java.io.Serializable**,** IOriginalSource**,** IMediaDocumented

---

public class **Book**
extends PrintedUnitBase
implements IMediaDocumented， IOriginalSource， java.io.Serializable， INomenclaturalReference

---

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`
annotations，markers

Constructor Summary

public	Book()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getCitation() returns a formatted string containing the entire reference citation including authors
java.lang.String	getEdition()
java.lang.String	getIsbn()
java.lang.String	getNomenclaturalCitation()
void	setEdition(java.lang.String edition)

void	setIsbn(java.lang.String isbn)	

Methods inherited from class eu.etaxonomy.cdm.model.reference.PrintedUnitBase

getEditor, getInSeries, getPages, getVolume, setEditor, setInSeries, setPages, setVolume

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase

getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Methods inherited from interface eu.etaxonomy.cdm.model.reference.INomenclaturalReference

getNomenclaturalCitation, getYear

Constructors

Book

public **Book**()

Methods

getEdition

public java.lang.String **getEdition**()

setEdition

public void **setEdition**(java.lang.String edition)

getIsbn

public java.lang.String **getIsbn**()

setIsbn

public void **setIsbn**(java.lang.String isbn)

getCitation

public java.lang.String **getCitation**()

returns a formatted string containing the entire reference citation including authors

getNomenclaturalCitation

public java.lang.String **getNomenclaturalCitation**()

generateTitle
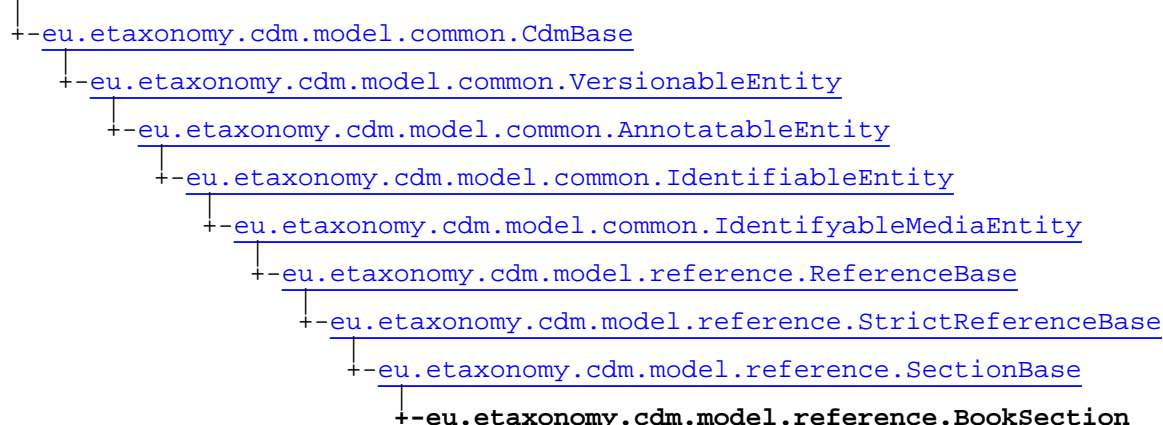
```
public java.lang.String generateTitle()
```

generateTitle

```
public java.lang.String generateTitle()
```

eu.etaxonomy.cdm.model.reference
Class BookSection

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
       |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           |
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               |
               +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                   |
                   +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                       |
                       +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                           |
                           +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                               |
                               +-eu.etaxonomy.cdm.model.reference.SectionBase
                                   |
                                   +-eu.etaxonomy.cdm.model.reference.BookSection
```

All Implemented Interfaces:
INomenclaturalReference**,** java.io.Serializable**,** IOriginalSource**,** IMediaDocumented

---

public class **BookSection**
extends SectionBase
implements IMediaDocumented， IOriginalSource， java.io.Serializable， INomenclaturalReference

---

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	BookSection()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getCitation() returns a formatted string containing the entire reference citation including authors
Book	getInBook()

java.lang.String	getNomenclaturalCitation()
	    returns a formatted string containing the reference citation excluding authors as used in a
	    taxon name

void	setInBook(Book inBook)

Methods inherited from class eu.etaxonomy.cdm.model.reference.SectionBase
getPages， getPrintedUnit， setPages

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Methods inherited from interface eu.etaxonomy.cdm.model.reference.INomenclaturalReference

getNomenclaturalCitation, getYear

(continued from last page)

Constructors

BookSection

public **BookSection**()

Methods

getInBook

public [Book] **getInBook**()

setInBook

public void **setInBook**([Book] inBook)

> **Parameters:**
> inBook - inBook

getCitation

public java.lang.String **getCitation**()

returns a formatted string containing the entire reference citation including authors

getNomenclaturalCitation

public java.lang.String **getNomenclaturalCitation**()

returns a formatted string containing the reference citation excluding authors as used in a taxon name
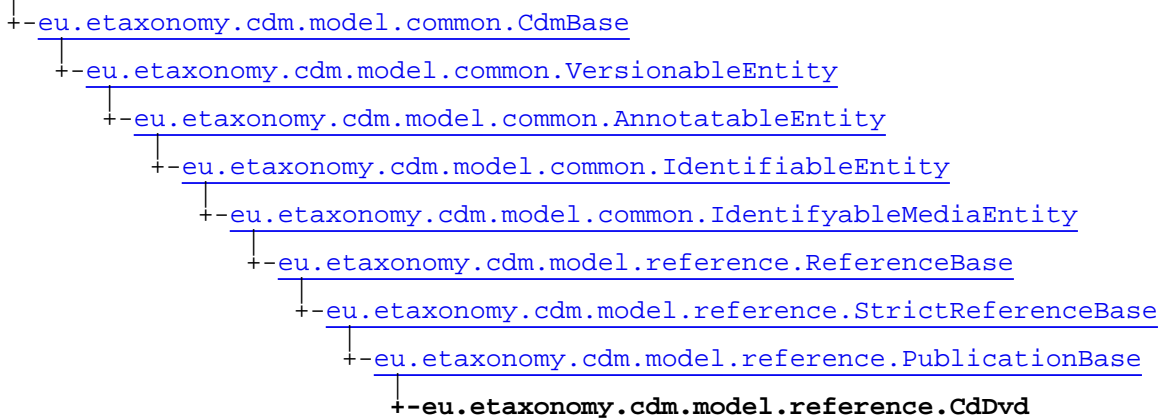
generateTitle

public java.lang.String **generateTitle**()

eu.etaxonomy.cdm.model.reference
Class CdDvd

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.CdDvd
```

All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **CdDvd**
extends PublicationBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	CdDvd()

Method Summary

java.lang.String	generateTitle()

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase

getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

CdDvd

public **CdDvd**()

Methods

generateTitle

public java.lang.String **generateTitle**()

eu.etaxonomy.cdm.model.reference
Class ConferenceProceedings

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
       |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           |
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               |
               +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                   |
                   +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                       |
                       +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                           |
                           +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                               |
                               +-eu.etaxonomy.cdm.model.reference.ConferenceProceedings
```

All Implemented Interfaces:
> java.io.Serializable**,** IOriginalSource**,** IMediaDocumented

---

public class **ConferenceProceedings**
extends StrictReferenceBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	ConferenceProceedings()

Method Summary

java.lang.String	generateTitle()

Methods inherited from class `eu.etaxonomy.cdm.model.reference.StrictReferenceBase`

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class `eu.etaxonomy.cdm.model.reference.ReferenceBase`

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity`

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifiableEntity`

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

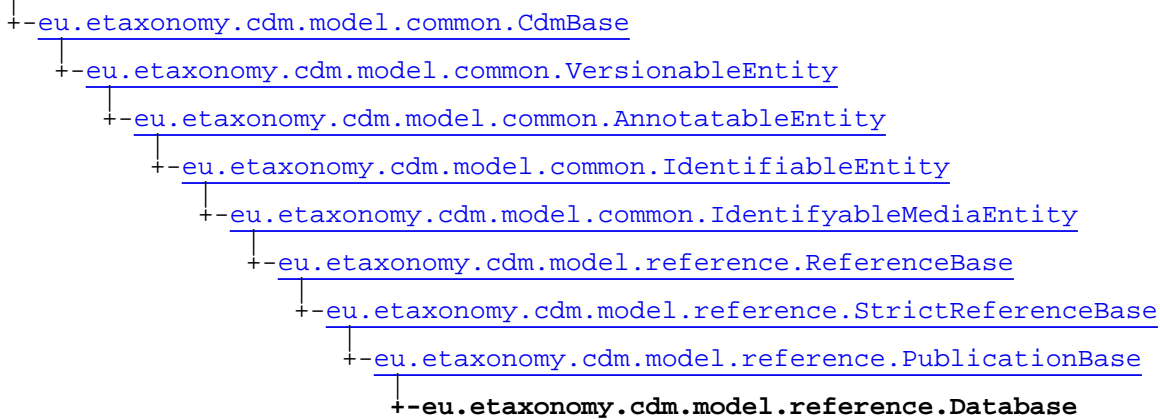## ConferenceProceedings

public **ConferenceProceedings**()

Methods

generateTitle

public java.lang.String **generateTitle**()

eu.etaxonomy.cdm.model.reference
Class Database

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.Database
```

All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Database**
extends PublicationBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	Database()

Method Summary

java.lang.String	generateTitle()

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase

getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

---

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented
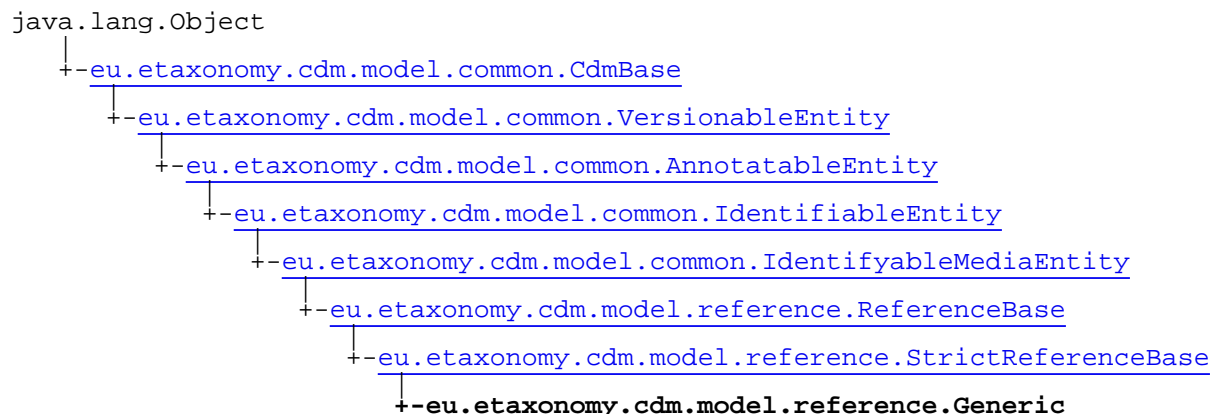
getMedia

Constructors

Database

public **Database**()

Methods

generateTitle

public java.lang.String **generateTitle**()

eu.etaxonomy.cdm.model.reference
Class Generic

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.Generic
```

All Implemented Interfaces:
    INomenclaturalReference, java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Generic**
extends StrictReferenceBase
implements IMediaDocumented, IOriginalSource, java.io.Serializable, INomenclaturalReference

This class is to represent all references which cannot be clearly assigned to a specific reference type. Therefore attributes which are only used by a unique reference type are not necessary here.

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	Generic()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getCitation() returns a formatted string containing the entire reference citation including authors
java.lang.String	getEditor()
java.lang.String	getNomenclaturalCitation() returns a formatted string containing the reference citation excluding authors as used in a taxon name
java.lang.String	getPages()
java.lang.String	getPlacePublished()

java.lang.String	getPublisher()
java.lang.String	getSeries()
java.lang.String	getVolume()
void	setEditor(java.lang.String editor)
void	setPages(java.lang.String pages)
void	setPlacePublished(java.lang.String placePublished)
void	setPublisher(java.lang.String publisher)
void	setSeries(java.lang.String series)
void	setVolume(java.lang.String volume)

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IOriginalSource`

addSource, getSources, removeSource

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IMediaDocumented`

getMedia

Methods inherited from interface `eu.etaxonomy.cdm.model.reference.INomenclaturalReference`

getNomenclaturalCitation, getYear

Constructors

Generic

public **Generic**()

Methods

getPublisher

public java.lang.String **getPublisher**()

setPublisher

public void **setPublisher**(java.lang.String publisher)

Parameters:
    publisher - publisher

getPlacePublished

public java.lang.String **getPlacePublished**()

setPlacePublished

public void **setPlacePublished**(java.lang.String placePublished)

> **Parameters:**
> placePublished - placePublished

getEditor

public java.lang.String **getEditor**()

setEditor

public void **setEditor**(java.lang.String editor)

> **Parameters:**
> editor - editor

getSeries

public java.lang.String **getSeries**()

setSeries

public void **setSeries**(java.lang.String series)

> **Parameters:**
> series - series

getVolume

public java.lang.String **getVolume**()

setVolume

public void **setVolume**(java.lang.String volume)

> **Parameters:**
> volume - volume

getPages

public java.lang.String **getPages**()

setPages

```
public void setPages(java.lang.String pages)
```

Parameters:
pages - pages

getCitation

```
public java.lang.String getCitation()
```

returns a formatted string containing the entire reference citation including authors

getNomenclaturalCitation

```
public java.lang.String getNomenclaturalCitation()
```

returns a formatted string containing the reference citation excluding authors as used in a taxon name

generateTitle

```
public java.lang.String generateTitle()
```

eu.etaxonomy.cdm.model.reference
Interface INomenclaturalReference

All Known Implementing Classes:
Article, BibtexReference, Book, BookSection, Generic

---

public interface **INomenclaturalReference**
extends

Method Summary

java.lang.String	getNomenclaturalCitation() returns a formatted string containing the reference citation excluding authors as used in a taxon name
java.lang.String	getYear()

Methods

getNomenclaturalCitation

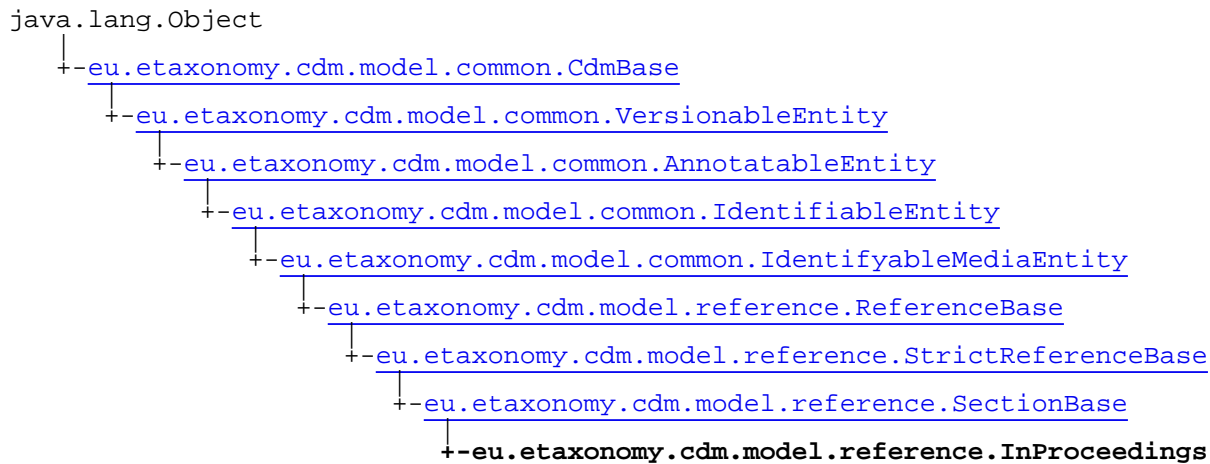public java.lang.String **getNomenclaturalCitation**()

returns a formatted string containing the reference citation excluding authors as used in a taxon name

---

getYear

public java.lang.String **getYear**()

---

eu.etaxonomy.cdm.model.reference
Class InProceedings

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.SectionBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.InProceedings
```

All Implemented Interfaces:
>   java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **InProceedings**
extends SectionBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	InProceedings()

Method Summary

java.lang.String	generateTitle()
Proceedings	getInProceedings()
void	setInProceedings(Proceedings inProceedings)

Methods inherited from class eu.etaxonomy.cdm.model.reference.SectionBase

getPages, getPrintedUnit, setPages

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

InProceedings

public **InProceedings**()

Methods

getInProceedings

public [Proceedings](#) **getInProceedings**()

setInProceedings

public void **setInProceedings**([Proceedings](#) inProceedings)

> **Parameters:**
> inProceedings - inProceedings

generateTitle

public java.lang.String **generateTitle**()

getInProceedings

public [Proceedings](#) **getInProceedings**()

eu.etaxonomy.cdm.model.reference
Class Journal

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.Journal
```

All Implemented Interfaces:
        java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Journal**
extends PublicationBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	Journal()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getIssn()
void	setIssn(java.lang.String issn)

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase

getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

---

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Journal

public **Journal**()

Methods

getIssn

```
public java.lang.String getIssn()
```

setIssn

```
public void setIssn(java.lang.String issn)
```

> **Parameters:**
> issn - issn

generateTitle

```
public java.lang.String generateTitle()
```

```
public java.lang.String getIssn()
```

eu.etaxonomy.cdm.model.reference
Class Map

```
java.lang.Object
   │
   +-eu.etaxonomy.cdm.model.common.CdmBase
      │
      +-eu.etaxonomy.cdm.model.common.VersionableEntity
         │
         +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
            │
            +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
               │
               +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                  │
                  +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                     │
                     +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                        │
                        +-eu.etaxonomy.cdm.model.reference.PublicationBase
                           │
                           +-eu.etaxonomy.cdm.model.reference.Map
```
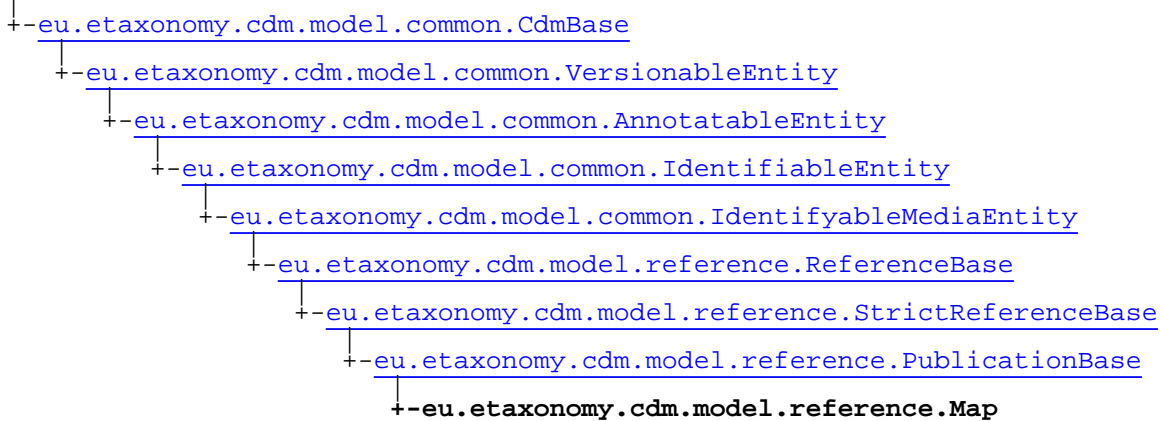
All Implemented Interfaces:
        java.io.Serializable **,** IOriginalSource **,** IMediaDocumented

---

public class **Map**
extends PublicationBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	Map()

Method Summary

java.lang.String	generateTitle()

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase

getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant,
setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

---

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Map

public **Map**()

Methods

generateTitle

public java.lang.String **generateTitle**()

eu.etaxonomy.cdm.model.reference
Class Patent

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.Patent
```

All Implemented Interfaces:
java.io.Serializable**,** IOriginalSource**,** IMediaDocumented

---

public class **Patent**
extends StrictReferenceBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	Patent()

Method Summary

java.lang.String	generateTitle()

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase
getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase
getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Patent

public **Patent**()

Methods

generateTitle

public java.lang.String **generateTitle**()

eu.etaxonomy.cdm.model.reference
Class PersonalCommunication

```
java.lang.Object
   │
   +-eu.etaxonomy.cdm.model.common.CdmBase
       │
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           │
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               │
               +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                   │
                   +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                       │
                       +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                           │
                           +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                               │
                               +-eu.etaxonomy.cdm.model.reference.PersonalCommunication
```

All Implemented Interfaces:
java.io.Serializable **,** IOriginalSource **,** IMediaDocumented

---

public class **PersonalCommunication**
extends StrictReferenceBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	PersonalCommunication()

Method Summary

java.lang.String	generateTitle()

Methods inherited from class `eu.etaxonomy.cdm.model.reference.StrictReferenceBase`

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class `eu.etaxonomy.cdm.model.reference.ReferenceBase`

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant,
setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity`

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class `eu.etaxonomy.cdm.model.common.IdentifiableEntity`

---

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

## PersonalCommunication

public **PersonalCommunication**()

Methods

generateTitle

public java.lang.String **generateTitle**()

eu.etaxonomy.cdm.model.reference
Class PrintedUnitBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.PrintedUnitBase
```
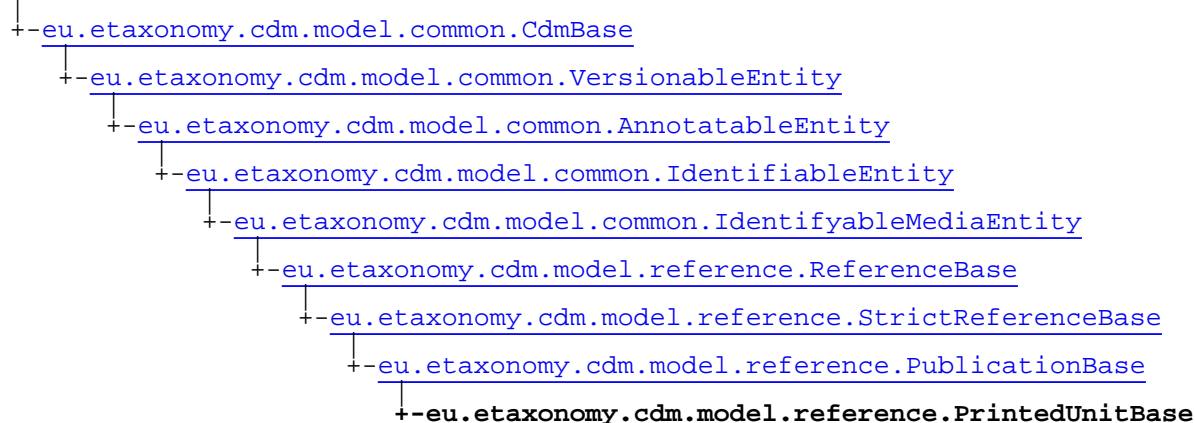
All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IMediaDocumented

Direct Known Subclasses:
Book, Proceedings

---

public abstract class **PrintedUnitBase**
extends PublicationBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	PrintedUnitBase()

Method Summary

java.lang.String	getEditor()
PrintSeries	getInSeries()
java.lang.String	getPages()
java.lang.String	getVolume()
void	setEditor(java.lang.String editor)
void	setInSeries(PrintSeries inSeries)

---

void	setPages(java.lang.String pages)
void	setVolume(java.lang.String volume)

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase

getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

PrintedUnitBase

public **PrintedUnitBase**()

Methods

getInSeries

public [PrintSeries](#) **getInSeries**()

setInSeries

public void **setInSeries**([PrintSeries](#) inSeries)

> **Parameters:**
>   inSeries - inSeries

getEditor

public java.lang.String **getEditor**()

setEditor

public void **setEditor**(java.lang.String editor)

> **Parameters:**
>   editor - editor

getVolume

public java.lang.String **getVolume**()

setVolume

public void **setVolume**(java.lang.String volume)

> **Parameters:**

> volume - volume

getPages

```
public java.lang.String getPages()
```

setPages
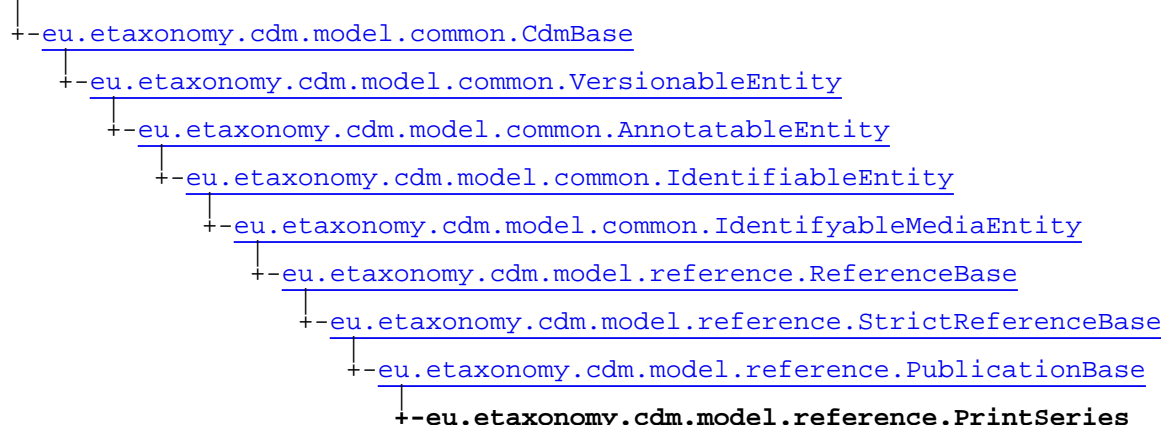
```
public void setPages(java.lang.String pages)
```

Parameters:
>   pages - pages

getPages

```
public java.lang.String getPages()
```

eu.etaxonomy.cdm.model.reference
Class PrintSeries

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.PrintSeries
```

All Implemented Interfaces:
        java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **PrintSeries**
extends PublicationBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	PrintSeries()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getSeries()
void	setSeries(java.lang.String series)

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase

getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

PrintSeries

public **PrintSeries**()

Methods

getSeries

```
public java.lang.String getSeries()
```

setSeries

```
public void setSeries(java.lang.String series)
```
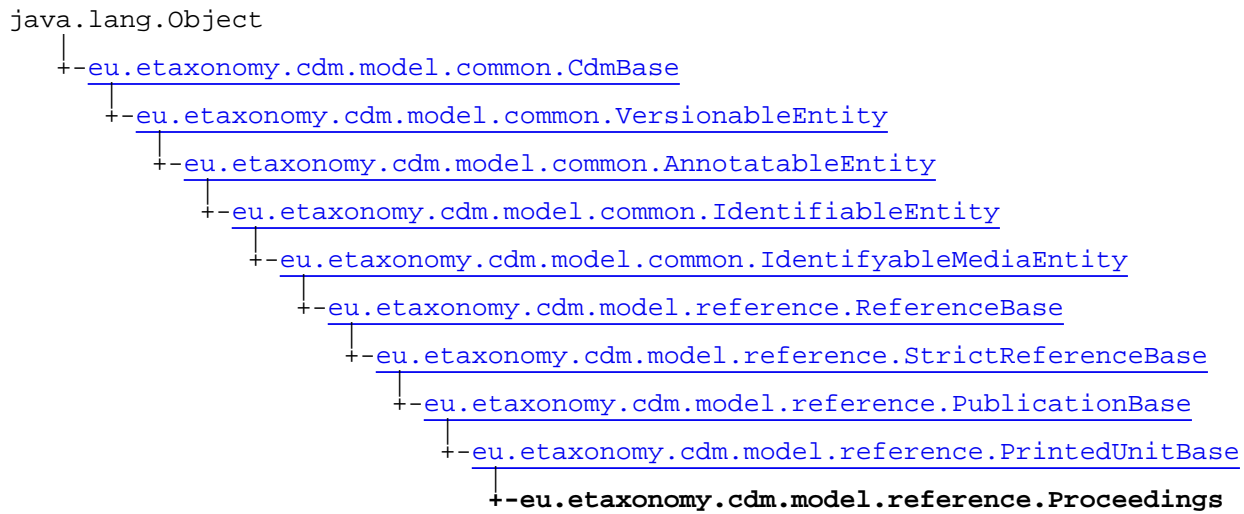
Parameters:
series - series

generateTitle

```
public java.lang.String generateTitle()
```

```
public java.lang.String getSeries()
```

eu.etaxonomy.cdm.model.reference
Class Proceedings

```
java.lang.Object
   |
   +-eu.etaxonomy.cdm.model.common.CdmBase
       |
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           |
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               |
               +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                   |
                   +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                       |
                       +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                           |
                           +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                               |
                               +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                   |
                                   +-eu.etaxonomy.cdm.model.reference.PrintedUnitBase
                                       |
                                       +-eu.etaxonomy.cdm.model.reference.Proceedings
```

All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Proceedings**
extends PrintedUnitBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity	
annotations, markers	

Constructor Summary

public	Proceedings()

Method Summary

java.lang.String	generateTitle()
java.lang.String	getOrganization()
void	setOrganization(java.lang.String organization)

Methods inherited from class eu.etaxonomy.cdm.model.reference.PrintedUnitBase
getEditor, getInSeries, getPages, getVolume, setEditor, setInSeries, setPages, setVolume

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase
getPlacePublished, getPublisher, setPlacePublished, setPublisher

---

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Proceedings

```
public Proceedings()
```

Methods

getOrganization

```
public java.lang.String getOrganization()
```

setOrganization

```
public void setOrganization(java.lang.String organization)
```

generateTitle

```
public java.lang.String generateTitle()
```

eu.etaxonomy.cdm.model.reference
Class PublicationBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
```
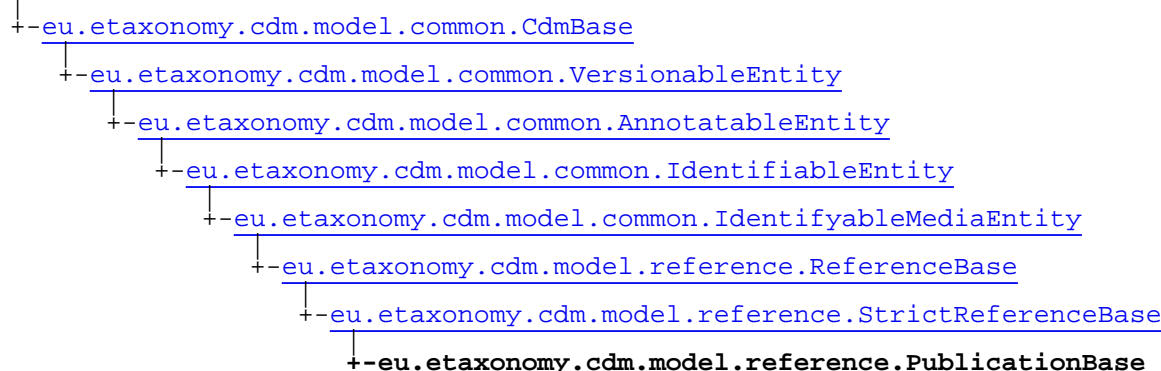
All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

Direct Known Subclasses:
> CdDvd, Database, Journal, Map, PrintedUnitBase, PrintSeries, Report, Thesis, WebPage

---

public abstract class **PublicationBase**
extends StrictReferenceBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity	
annotations, markers	

Constructor Summary

public	PublicationBase()

Method Summary

java.lang.String	getPlacePublished()
java.lang.String	getPublisher()
void	setPlacePublished(java.lang.String placePublished)
void	setPublisher(java.lang.String publisher)

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase	
getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle	

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase	

---

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

PublicationBase

public **PublicationBase**()

Methods

getPublisher

```
public java.lang.String getPublisher()
```

setPublisher

```
public void setPublisher(java.lang.String publisher)
```

getPlacePublished

```
public java.lang.String getPlacePublished()
```

setPlacePublished

```
public void setPlacePublished(java.lang.String placePublished)
```

getPublisher

```
public java.lang.String getPublisher()
```

eu.etaxonomy.cdm.model.reference
Class ReferenceBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
```
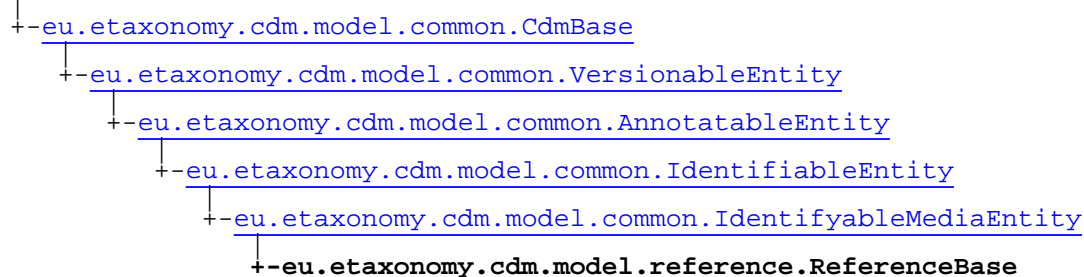
All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

Direct Known Subclasses:
> BibtexReference, StrictReferenceBase

---

public abstract class **ReferenceBase**
extends IdentifyableMediaEntity

A year() method is required to get the year of publication out of the datePublished field

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	ReferenceBase()

Method Summary

Agent	getAuthorTeam()
java.lang.String	getCitation() returns a formatted string containing the entire reference citation including authors
java.lang.String	getUri()
abstract java.lang.String	getYear()
boolean	isNomenclaturallyRelevant()
void	setAuthorTeam(Agent authorTeam)
void	setNomenclaturallyRelevant(boolean isNomenclaturallyRelevant)

---

void	setUri(java.lang.String uri)

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

ReferenceBase

public **ReferenceBase**()

Methods

getAuthorTeam

public [Agent](#) **getAuthorTeam**()

setAuthorTeam

public void **setAuthorTeam**([Agent](#) authorTeam)

getUri

public java.lang.String **getUri**()

setUri

public void **setUri**(java.lang.String uri)

isNomenclaturallyRelevant

public boolean **isNomenclaturallyRelevant**()

setNomenclaturallyRelevant

public void **setNomenclaturallyRelevant**(boolean isNomenclaturallyRelevant)

>   **Parameters:**
>   isNomenclaturallyRelevant - isNomenclaturallyRelevant

getCitation

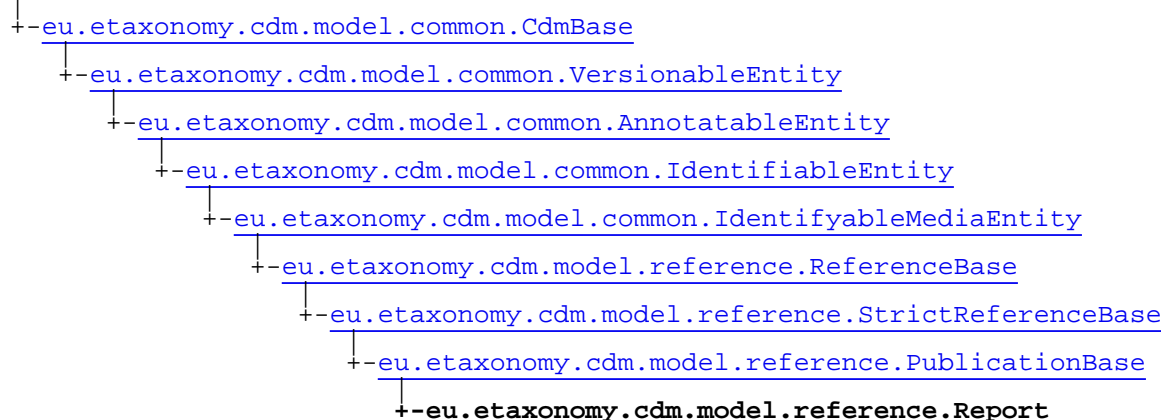public java.lang.String **getCitation**()

>   returns a formatted string containing the entire reference citation including authors

getYear

public abstract java.lang.String **getYear**()

eu.etaxonomy.cdm.model.reference
Class Report

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.Report
```

All Implemented Interfaces:
> java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Report**
extends PublicationBase

publisher is "institution" in BibTex ???

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	Report()

Method Summary

java.lang.String	generateTitle()
Institution	getInstitution()
void	setInstitution(Institution institution)

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase
getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase
getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

---

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Report

public **Report**()

Methods

getInstitution

public [Institution](#) **getInstitution**()

setInstitution

public void **setInstitution**([Institution](#) institution)

generateTitle

public java.lang.String **generateTitle**()

public [Institution](#) **getInstitution**()

eu.etaxonomy.cdm.model.reference
Class SectionBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.SectionBase
```
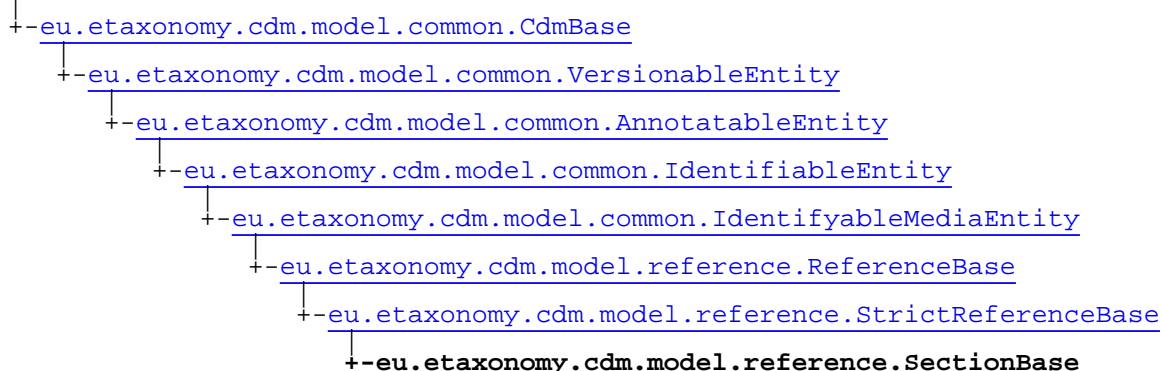
All Implemented Interfaces:
java.io.Serializable, IOriginalSource, IMediaDocumented

Direct Known Subclasses:
BookSection, InProceedings

---

public abstract class **SectionBase**
extends StrictReferenceBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	SectionBase()

Method Summary

java.lang.String	getPages()
PrintedUnitBase	getPrintedUnit()
void	setPages(java.lang.String pages)

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase
getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase
getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

---

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

SectionBase

public **SectionBase**()

Methods

getPages

public java.lang.String **getPages**()

setPages

`public void` **`setPages`**`(java.lang.String pages)`

Parameters:
> pages - pages

getPrintedUnit

`public` [PrintedUnitBase](#) **`getPrintedUnit`**`()`

eu.etaxonomy.cdm.model.reference
Class StrictReferenceBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
```
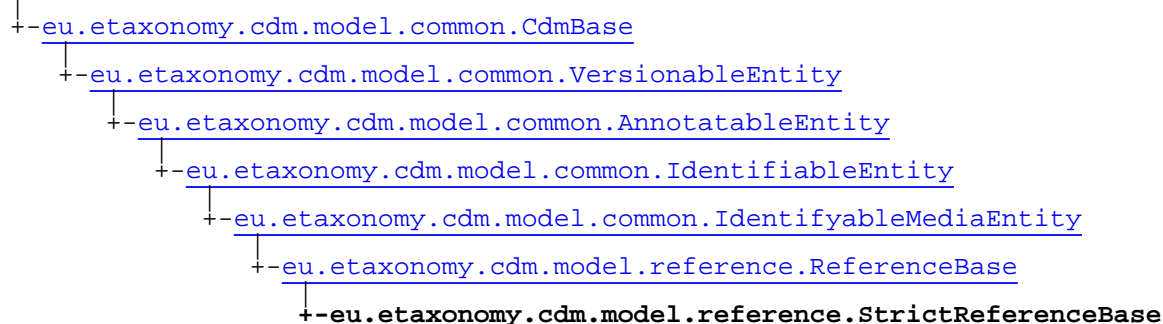
All Implemented Interfaces:
         java.io.Serializable, IOriginalSource, IMediaDocumented

Direct Known Subclasses:
        Article, ConferenceProceedings, Generic, Patent, PersonalCommunication, PublicationBase, SectionBase

---

public abstract class **StrictReferenceBase**
extends ReferenceBase

A year() method is required to get the year of publication out of the datePublished field

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	StrictReferenceBase()

Method Summary

java.lang.String	getCitation() returns a formatted string containing the entire reference citation including authors
TimePeriod	getDatePublished()
java.lang.String	getTitle()
java.lang.String	getYear() transform the datePublished into a string representation for a year
void	setDatePublished(TimePeriod datePublished)
void	setTitle(java.lang.String title)

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

---

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

StrictReferenceBase

public **StrictReferenceBase**()

Methods

getTitle

```
public java.lang.String getTitle()
```

setTitle

```
public void setTitle(java.lang.String title)
```

getDatePublished

```
public TimePeriod getDatePublished()
```

setDatePublished

```
public void setDatePublished(TimePeriod datePublished)
```

getCitation

```
public java.lang.String getCitation()
```

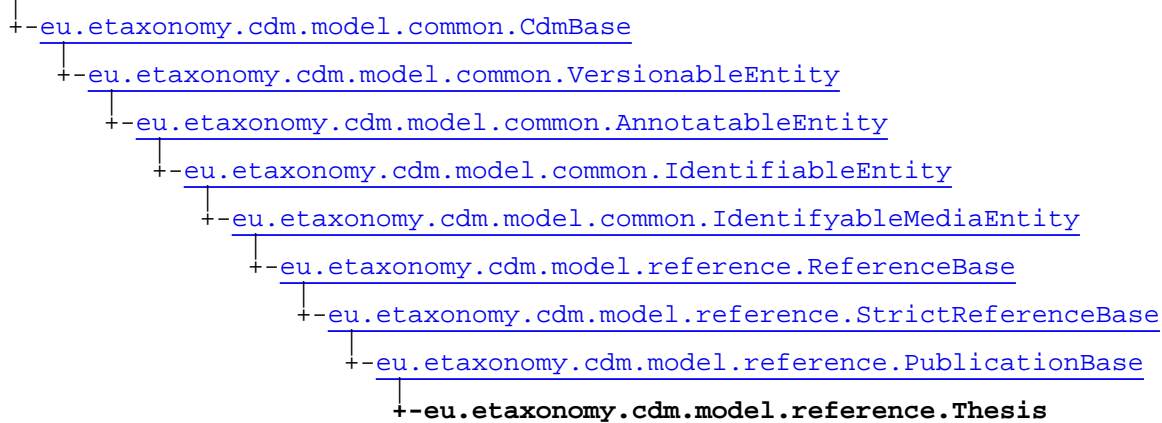> returns a formatted string containing the entire reference citation including authors

getYear

```
public java.lang.String getYear()
```

> transform the datePublished into a string representation for a year

eu.etaxonomy.cdm.model.reference
Class Thesis

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.Thesis
```

All Implemented Interfaces:
>   java.io.Serializable, IOriginalSource, IMediaDocumented

---

public class **Thesis**
extends PublicationBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity	
annotations, markers	

Constructor Summary

public	Thesis()

Method Summary

java.lang.String	generateTitle()
Institution	getSchool()
void	setSchool(Institution school)

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase
getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase
getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

Thesis

public **Thesis**()

Methods

getSchool

public [Institution] **getSchool**()

---

setSchool

public void **setSchool**([Institution] school)

Parameters:
    school - school

---

generateTitle

public java.lang.String **generateTitle**()

getSchool

public [Institution] **getSchool**()

eu.etaxonomy.cdm.model.reference
Class WebPage

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity
                        |
                        +-eu.etaxonomy.cdm.model.reference.ReferenceBase
                            |
                            +-eu.etaxonomy.cdm.model.reference.StrictReferenceBase
                                |
                                +-eu.etaxonomy.cdm.model.reference.PublicationBase
                                    |
                                    +-eu.etaxonomy.cdm.model.reference.WebPage
```

All Implemented Interfaces:
        java.io.Serializable**,** IOriginalSource**,** IMediaDocumented

---

public class **WebPage**
extends PublicationBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

annotations, markers

Constructor Summary

public	WebPage()

Method Summary

java.lang.String	generateTitle()

Methods inherited from class eu.etaxonomy.cdm.model.reference.PublicationBase

getPlacePublished, getPublisher, setPlacePublished, setPublisher

Methods inherited from class eu.etaxonomy.cdm.model.reference.StrictReferenceBase

getCitation, getDatePublished, getTitle, getYear, setDatePublished, setTitle

Methods inherited from class eu.etaxonomy.cdm.model.reference.ReferenceBase

getAuthorTeam, getCitation, getUri, getYear, isNomenclaturallyRelevant, setAuthorTeam, setNomenclaturallyRelevant, setUri

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifyableMediaEntity

addMedia, getMedia, removeMedia, setMedia

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface eu.etaxonomy.cdm.model.common.IMediaDocumented

getMedia

Constructors

WebPage
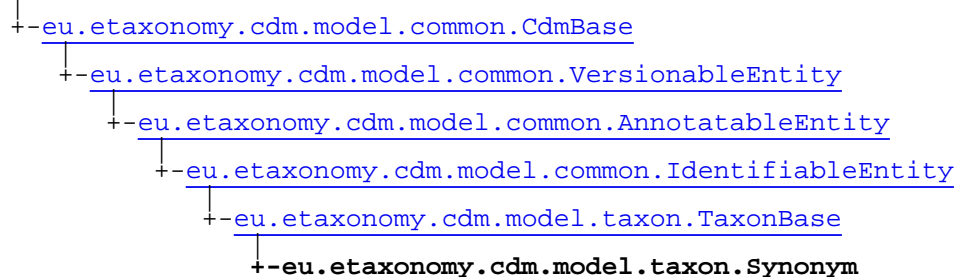
public **WebPage**()

Methods

generateTitle

public java.lang.String **generateTitle**()

Package
eu.etaxonomy.cdm.model.taxon

eu.etaxonomy.cdm.model.taxon
Class Synonym

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.taxon.TaxonBase
                        |
                        +-eu.etaxonomy.cdm.model.taxon.Synonym
```

All Implemented Interfaces:
java.io.Serializable, IOriginalSource

---

public class **Synonym**
extends TaxonBase

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	Synonym()

Method Summary

void	addSynonymRelation(SynonymRelationship synonymRelation)
java.util.Set	getAcceptedTaxa()
SynonymRelationshipType	getRelationType(Taxon t) Return the synonymy relationship type for the relation to a given accepted taxon.
java.util.Set	getSynonymRelations()
static Synonym	NewInstance(TaxonNameBase taxonName, ReferenceBase sec)
void	removeSynonymRelation(SynonymRelationship synonymRelation)
void	setSynonymRelations(java.util.Set synonymRelations)

Methods inherited from class eu.etaxonomy.cdm.model.taxon.TaxonBase
generateTitle, getName, getSec, isDoubtful, isSaveable, setDoubtful, setName, setSec

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Constructors

Synonym

public **Synonym**()

Methods

NewInstance

public static Synonym **NewInstance**(TaxonNameBase taxonName,
        ReferenceBase sec)

getSynonymRelations

public java.util.Set **getSynonymRelations**()

setSynonymRelations

```
protected void setSynonymRelations(java.util.Set synonymRelations)
```

addSynonymRelation

```
public void addSynonymRelation(SynonymRelationship synonymRelation)
```

removeSynonymRelation

```
public void removeSynonymRelation(SynonymRelationship synonymRelation)
```

getAcceptedTaxa

```
public java.util.Set getAcceptedTaxa()
```

getRelationType

```
public SynonymRelationshipType getRelationType(Taxon t)
```

Return the synonymy relationship type for the relation to a given accepted taxon. If no relation exists to that taxon return null.

Parameters:
t

Returns:

eu.etaxonomy.cdm.model.taxon
Class SynonymRelationship

```
java.lang.Object
   │
   +-eu.etaxonomy.cdm.model.common.CdmBase
       │
       +-eu.etaxonomy.cdm.model.common.VersionableEntity
           │
           +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
               │
               +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                   │
                   +-eu.etaxonomy.cdm.model.taxon.SynonymRelationship
```
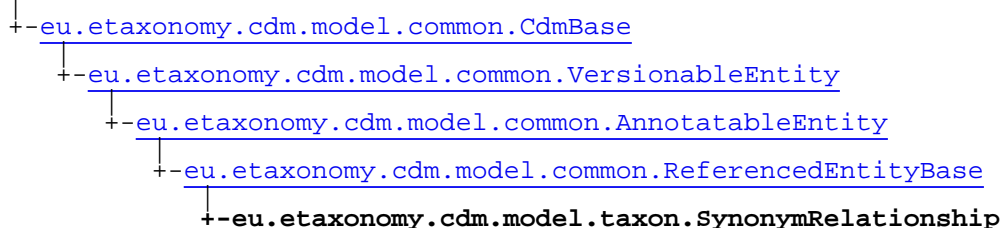
All Implemented Interfaces:
>   java.io.Serializable**,** IReferencedEntity

---

public class **SynonymRelationship**
extends ReferencedEntityBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

protected	SynonymRelationship(Synonym synoynm, Taxon taxon, SynonymRelationshipType type)

Method Summary

Taxon	getAcceptedTaxon()
Synonym	getSynonym()
SynonymRelationshipType	getType()

Methods inherited from class `eu.etaxonomy.cdm.model.common.ReferencedEntityBase`

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class `eu.etaxonomy.cdm.model.common.VersionableEntity`

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

---

Methods inherited from class `eu.etaxonomy.cdm.model.common.CdmBase`

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface `eu.etaxonomy.cdm.model.common.IReferencedEntity`

getCitation

Constructors

SynonymRelationship

protected **SynonymRelationship**(Synonym synoynm,
                                   Taxon taxon,
                                   SynonymRelationshipType type)

Methods

getAcceptedTaxon

public Taxon **getAcceptedTaxon**()

getType

public SynonymRelationshipType **getType**()

getSynonym

public Synonym **getSynonym**()

eu.etaxonomy.cdm.model.taxon
Class SynonymRelationshipType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.common.RelationshipTermBase
                            |
                            +-eu.etaxonomy.cdm.model.taxon.SynonymRelationshipType
```

All Implemented Interfaces:
>   java.io.Serializable, IDefTerm, java.lang.Comparable

---

public class **SynonymRelationshipType**
extends RelationshipTermBase

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

vocabulary, vocabularyStore

Constructor Summary

public	SynonymRelationshipType()
public	SynonymRelationshipType(java.lang.String term, java.lang.String label, boolean symmetric, boolean transitive)

Method Summary

static SynonymRelationshipType	HETEROTYPIC_SYNONYM_OF()
static SynonymRelationshipType	HOMOTYPIC_SYNONYM_OF()
static SynonymRelationshipType	PARTIAL_SYNONYM_OF()
static SynonymRelationshipType	PRO_PARTE_SYNONYM_OF()

---

static SynonymRelationshipType	SYNONYM_OF()

Methods inherited from class eu.etaxonomy.cdm.model.common.RelationshipTermBase

addInverseRepresentation, addRepresentation, getInverseDescription, getInverseDescription, getInverseLabel, getInverseLabel, getInverseRepresentation, getInverseRepresentations, isSymmetric, isTransitive, readCsvLine, removeInverseRepresentation, setInverseRepresentations, setSymmetric, setTransitive, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf, getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine, readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes, setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary, setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel, getRepresentation, getRepresentations, getUri, removeRepresentation, setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface java.lang.Comparable

compareTo

Constructors

SynonymRelationshipType

public **SynonymRelationshipType**()

SynonymRelationshipType

public **SynonymRelationshipType**(java.lang.String term,
                                  java.lang.String label,
                                  boolean symmetric,
                                  boolean transitive)

Methods

SYNONYM_OF

public final static SynonymRelationshipType **SYNONYM_OF**()

PRO_PARTE_SYNONYM_OF

public final static SynonymRelationshipType **PRO_PARTE_SYNONYM_OF**()

PARTIAL_SYNONYM_OF

public final static SynonymRelationshipType **PARTIAL_SYNONYM_OF**()

HOMOTYPIC_SYNONYM_OF

public final static SynonymRelationshipType **HOMOTYPIC_SYNONYM_OF**()

HETEROTYPIC_SYNONYM_OF

public final static SynonymRelationshipType **HETEROTYPIC_SYNONYM_OF**()

eu.etaxonomy.cdm.model.taxon
Class Taxon

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.taxon.TaxonBase
                        |
                        +-eu.etaxonomy.cdm.model.taxon.Taxon
```
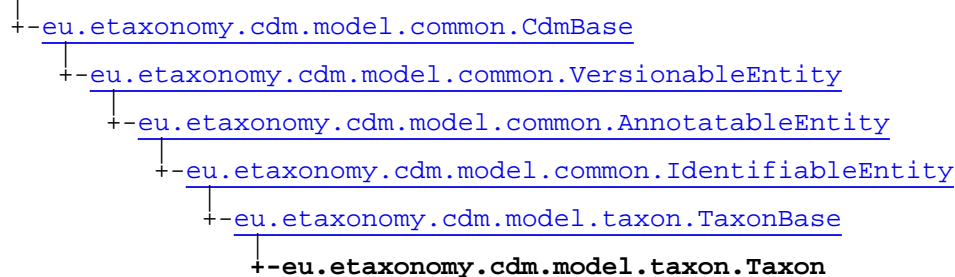
All Implemented Interfaces:
        java.lang.Iterable, java.io.Serializable, IOriginalSource

---

public class **Taxon**
extends TaxonBase
implements IOriginalSource, java.io.Serializable, java.lang.Iterable

An accepted potential taxon defined by the combination of a Name and a sec reference `java.lang.Iterable` interface is supported to iterate through taxonomic children

---

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	Taxon()

Method Summary

void	addDescriptions(TaxonDescription description)
void	addMisappliedName(Taxon toTaxon, ReferenceBase citation, java.lang.String microcitation)
void	addSynonym(Synonym synonym, SynonymRelationshipType synonymType) ass a synonym to this taxon (a taxon can have multiple synonyms that should be proparte synonyms then!) The SynonymRelationship constructor immediately adds a relationship instance to both the synonym and taxon instance!
void	addSynonymRelation(SynonymRelationship synonymRelation)
void	addTaxonomicChild(Taxon child, ReferenceBase citation, java.lang.String microcitation)
void	addTaxonRelation(TaxonRelationship rel)

void	addTaxonRelation(Taxon toTaxon, TaxonRelationshipType type, ReferenceBase citation, java.lang.String microcitation)
java.util.Set	getDescriptions()
java.util.List	getHeterotypicSynonymyGroups()
HomotypicalGroup	getHomotypicGroup()
java.util.List	getHomotypicSynonyms()
java.util.Set	getRelationsFromThisTaxon()
java.util.Set	getRelationsToThisTaxon()
java.util.Set	getSynonymNames()
java.util.Set	getSynonymRelations()
java.util.Set	getSynonyms()
java.util.Set	getSynonymsSortedByType()
java.util.Set	getTaxonomicChildren()
Taxon	getTaxonomicParent()
java.util.Set	getTaxonRelations()
boolean	hasTaxonomicChildren()
java.util.Iterator	iterator()
static Taxon	NewInstance(TaxonNameBase taxonName, ReferenceBase sec)
void	removeDescriptions(DescriptionBase description)
void	removeSynonymRelation(SynonymRelationship synonymRelation)
void	removeTaxonRelation(TaxonRelationship rel)
void	setDescriptions(java.util.Set descriptions)
void	setRelationsFromThisTaxon(java.util.Set relationsFromThisTaxon)
void	setRelationsToThisTaxon(java.util.Set relationsToThisTaxon)
void	setSynonymRelations(java.util.Set synonymRelations)

void	setTaxonomicParent(Taxon parent, ReferenceBase citation, java.lang.String microcitation)

Methods inherited from class eu.etaxonomy.cdm.model.taxon.TaxonBase

generateTitle, getName, getSec, isDoubtful, isSaveable, setDoubtful, setName, setSec

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Methods inherited from interface java.lang.Iterable

iterator

Constructors

Taxon

public **Taxon**()

Methods

NewInstance

```
public static Taxon NewInstance(TaxonNameBase taxonName,
        ReferenceBase sec)
```

getDescriptions

```
public java.util.Set getDescriptions()
```

setDescriptions

```
protected void setDescriptions(java.util.Set descriptions)
```

addDescriptions

```
public void addDescriptions(TaxonDescription description)
```

removeDescriptions

```
public void removeDescriptions(DescriptionBase description)
```

getSynonymRelations

```
public java.util.Set getSynonymRelations()
```

setSynonymRelations

```
protected void setSynonymRelations(java.util.Set synonymRelations)
```

addSynonymRelation

```
public void addSynonymRelation(SynonymRelationship synonymRelation)
```

removeSynonymRelation

```
public void removeSynonymRelation(SynonymRelationship synonymRelation)
```

getRelationsFromThisTaxon

`public java.util.Set` **`getRelationsFromThisTaxon`**`()`

setRelationsFromThisTaxon

`protected void` **`setRelationsFromThisTaxon`**`(java.util.Set relationsFromThisTaxon)`

getRelationsToThisTaxon

`public java.util.Set` **`getRelationsToThisTaxon`**`()`

setRelationsToThisTaxon

`protected void` **`setRelationsToThisTaxon`**`(java.util.Set relationsToThisTaxon)`

getTaxonRelations

`public java.util.Set` **`getTaxonRelations`**`()`

removeTaxonRelation

`public void` **`removeTaxonRelation`**`(TaxonRelationship rel)`

addTaxonRelation

`public void` **`addTaxonRelation`**`(TaxonRelationship rel)`

addTaxonRelation

```
public void addTaxonRelation(Taxon toTaxon,
        TaxonRelationshipType type,
        ReferenceBase citation,
        java.lang.String microcitation)
```

addMisappliedName

```
public void addMisappliedName(Taxon toTaxon,
        ReferenceBase citation,
        java.lang.String microcitation)
```

addTaxonomicChild

```
public void addTaxonomicChild(Taxon child,
        ReferenceBase citation,
        java.lang.String microcitation)
```

getTaxonomicParent

```
public Taxon getTaxonomicParent()
```

Returns:

setTaxonomicParent

```
public void setTaxonomicParent(Taxon parent,
        ReferenceBase citation,
        java.lang.String microcitation)
```

Parameters:
    parent
    citation
    microcitation

getTaxonomicChildren

```
public java.util.Set getTaxonomicChildren()
```

Returns:

hasTaxonomicChildren

```
public boolean hasTaxonomicChildren()
```

Returns:

getSynonyms

```
public java.util.Set getSynonyms()
```

getSynonymsSortedByType

```
public java.util.Set getSynonymsSortedByType()
```

getSynonymNames

```
public java.util.Set getSynonymNames()
```

addSynonym

```
public void addSynonym(Synonym synonym,
        SynonymRelationshipType synonymType)
```

ass a synonym to this taxon (a taxon can have multiple synonyms that should be proparte synonyms then!) The SynonymRelationship constructor immediately adds a relationship instance to both the synonym and taxon instance!

Parameters:
    synonym
    synonymType

iterator

```
public java.util.Iterator iterator()
```

getHomotypicGroup

```
public HomotypicalGroup getHomotypicGroup()
```
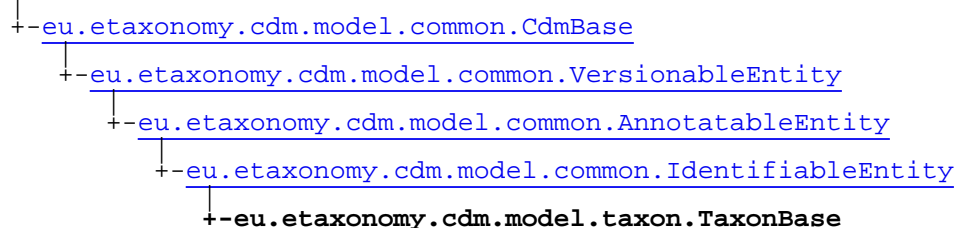
getHomotypicSynonyms

```
public java.util.List getHomotypicSynonyms()
```

getHeterotypicSynonymyGroups

```
public java.util.List getHeterotypicSynonymyGroups()
```

eu.etaxonomy.cdm.model.taxon
Class TaxonBase

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.IdentifiableEntity
                    |
                    +-eu.etaxonomy.cdm.model.taxon.TaxonBase
```

All Implemented Interfaces:
> java.io.Serializable, IOriginalSource

Direct Known Subclasses:
> Synonym, Taxon

---

public abstract class **TaxonBase**
extends IdentifiableEntity

{unique name within view/treatment}

Fields inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity
annotations, markers

Constructor Summary

public	TaxonBase()

Method Summary

java.lang.String	generateTitle()
TaxonNameBase	getName()
ReferenceBase	getSec()
boolean	isDoubtful()
boolean	isSaveable()
void	setDoubtful(boolean isDoubtful)
void	setName(TaxonNameBase name)
void	setSec(ReferenceBase sec)

Methods inherited from class eu.etaxonomy.cdm.model.common.IdentifiableEntity

---

addExtension, addRights, addSource, generateTitle, getExtensions, getLsid, getRights, getSources, getTitleCache, isProtectedTitleCache, removeExtension, removeRights, removeSource, setExtensions, setLsid, setProtectedTitleCache, setRights, setSources, setTitleCache, setTitleCache

Methods inherited from class eu.etaxonomy.cdm.model.common.AnnotatableEntity

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IOriginalSource

addSource, getSources, removeSource

Constructors

TaxonBase

public **TaxonBase**()

Methods

generateTitle

public java.lang.String **generateTitle**()

getName

public TaxonNameBase **getName**()

setName

public void **setName**([TaxonNameBase](#) name)

isDoubtful

public boolean **isDoubtful**()

setDoubtful

public void **setDoubtful**(boolean isDoubtful)

getSec

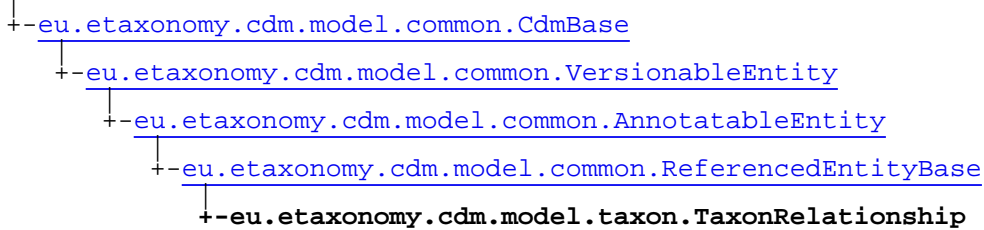public [ReferenceBase](#) **getSec**()

setSec

public void **setSec**([ReferenceBase](#) sec)

isSaveable

public boolean **isSaveable**()

eu.etaxonomy.cdm.model.taxon
Class TaxonRelationship

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.AnnotatableEntity
                |
                +-eu.etaxonomy.cdm.model.common.ReferencedEntityBase
                    |
                    +-eu.etaxonomy.cdm.model.taxon.TaxonRelationship
```

All Implemented Interfaces:
> java.io.Serializable, IReferencedEntity

---

public class **TaxonRelationship**
extends ReferencedEntityBase

Fields inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

annotations, markers

Constructor Summary

public	TaxonRelationship()

Method Summary

Taxon	getFromTaxon()
Taxon	getToTaxon()
TaxonRelationshipType	getType()
void	setFromTaxon(Taxon fromTaxon)
void	setToTaxon(Taxon toTaxon)
void	setType(TaxonRelationshipType type)

Methods inherited from class `eu.etaxonomy.cdm.model.common.ReferencedEntityBase`

getCitation, getCitationMicroReference, getOriginalNameString, setCitation, setCitationMicroReference, setOriginalNameString

Methods inherited from class `eu.etaxonomy.cdm.model.common.AnnotatableEntity`

addAnnotations, addMarker, getAnnotations, getMarkers, removeAnnotations, removeMarker, setAnnotations, setMarkers

---

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom, getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IReferencedEntity

getCitation

Constructors

TaxonRelationship

public **TaxonRelationship**()

Methods

getType

public TaxonRelationshipType **getType**()

setType

public void **setType**(TaxonRelationshipType type)

getFromTaxon

public Taxon **getFromTaxon**()

setFromTaxon

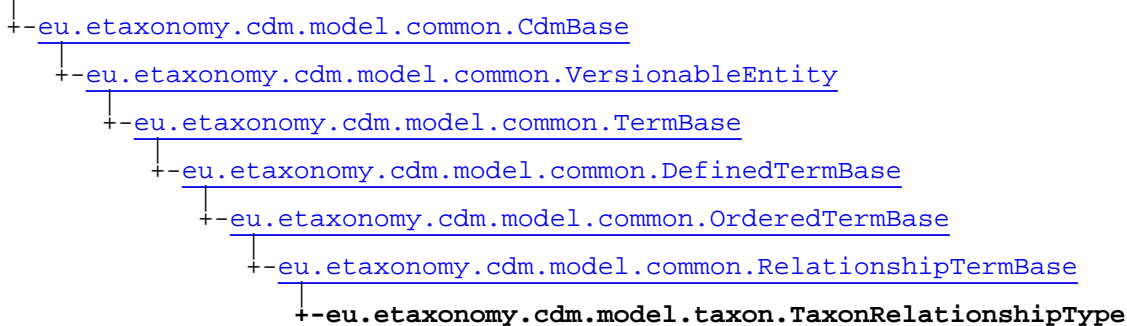public void **setFromTaxon**(Taxon fromTaxon)

getToTaxon

public [Taxon](#) **getToTaxon**()

setToTaxon

public void **setToTaxon**([Taxon](#) toTaxon)

getToTaxon

public [Taxon](#) **getToTaxon**()

eu.etaxonomy.cdm.model.taxon
Class TaxonRelationshipType

```
java.lang.Object
    |
    +-eu.etaxonomy.cdm.model.common.CdmBase
        |
        +-eu.etaxonomy.cdm.model.common.VersionableEntity
            |
            +-eu.etaxonomy.cdm.model.common.TermBase
                |
                +-eu.etaxonomy.cdm.model.common.DefinedTermBase
                    |
                    +-eu.etaxonomy.cdm.model.common.OrderedTermBase
                        |
                        +-eu.etaxonomy.cdm.model.common.RelationshipTermBase
                            |
                            +-eu.etaxonomy.cdm.model.taxon.TaxonRelationshipType
```

All Implemented Interfaces:
> java.io.Serializable**,** IDefTerm**,** java.lang.Comparable

---

public class **TaxonRelationshipType**
extends RelationshipTermBase

Fields inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

orderIndex

Fields inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

vocabulary, vocabularyStore

Constructor Summary

public	TaxonRelationshipType()
public	TaxonRelationshipType(java.lang.String term, java.lang.String label, boolean symmetric, boolean transitive)

Method Summary

static TaxonRelationshipType	CONGRUENTTO()
static TaxonRelationshipType	CONTRADICTION()
static TaxonRelationshipType	DOESNOTEXCLUDE()
static TaxonRelationshipType	DOESNOTOVERLAP()
static TaxonRelationshipType	EXCLUDES()

---

static TaxonRelationshipType	getUUID(java.util.UUID uuid)
static TaxonRelationshipType	INCLUDES()
static TaxonRelationshipType	INVALIDDESIGNATIONFOR()
static TaxonRelationshipType	MISAPPLIEDNAMEFOR()
static TaxonRelationshipType	NOTCONGRUENTTO()
static TaxonRelationshipType	NOTINCLUDEDIN()
static TaxonRelationshipType	OVERLAPS()
static TaxonRelationshipType	TAXONOMICALLY_INCLUDED_IN()

Methods inherited from class eu.etaxonomy.cdm.model.common.RelationshipTermBase

addInverseRepresentation, addRepresentation, getInverseDescription,
getInverseDescription, getInverseLabel, getInverseLabel, getInverseRepresentation,
getInverseRepresentations, isSymmetric, isTransitive, readCsvLine,
removeInverseRepresentation, setInverseRepresentations, setSymmetric, setTransitive,
writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.OrderedTermBase

compareTo, decreaseIndex, equals, incrementIndex, isHigher, isLower, setVocabulary

Methods inherited from class eu.etaxonomy.cdm.model.common.DefinedTermBase

addIncludes, addMedia, findByUuid, getGeneralizationOf, getIncludes, getKindOf,
getMedia, getPartOf, getPersistentVocabulary, getVocabulary, readCsvLine,
readCsvLine, removeIncludes, removeMedia, setGeneralizationOf, setIncludes,
setKindOf, setMedia, setPartOf, setPersistentVocabulary, setVocabulary,
setVocabularyStore, writeCsvLine

Methods inherited from class eu.etaxonomy.cdm.model.common.TermBase

addRepresentation, equals, getDescription, getDescription, getLabel, getLabel,
getRepresentation, getRepresentations, getUri, removeRepresentation,
setRepresentations, setUri, toString

Methods inherited from class eu.etaxonomy.cdm.model.common.VersionableEntity

getNextVersion, getPreviousVersion, getUpdated, getUpdatedBy, getValidFrom,
getValidTo, setNextVersion, setPreviousVersion, setUpdated, setUpdatedBy

Methods inherited from class eu.etaxonomy.cdm.model.common.CdmBase

addPropertyChangeListener, addPropertyChangeListener, equals, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, firePropertyChange, getCreated, getCreatedBy, getId, getUuid, hasListeners, removePropertyChangeListener, removePropertyChangeListener, setCreated, setCreatedBy, setId, setUuid, toString

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface eu.etaxonomy.cdm.model.common.IDefTerm

getVocabulary, readCsvLine, setVocabulary, writeCsvLine

Methods inherited from interface `java.lang.Comparable`

compareTo

Constructors

TaxonRelationshipType

public **TaxonRelationshipType**()

TaxonRelationshipType

public **TaxonRelationshipType**(java.lang.String term,
                          java.lang.String label,
                          boolean symmetric,
                          boolean transitive)

Methods

getUUID

public final static TaxonRelationshipType **getUUID**(java.util.UUID uuid)

TAXONOMICALLY_INCLUDED_IN

public final static TaxonRelationshipType **TAXONOMICALLY_INCLUDED_IN**()

MISAPPLIEDNAMEFOR

public final static TaxonRelationshipType **MISAPPLIEDNAMEFOR**()

INVALIDDESIGNATIONFOR

`public final static` [TaxonRelationshipType](#) **INVALIDDESIGNATIONFOR**()

CONTRADICTION

`public final static` [TaxonRelationshipType](#) **CONTRADICTION**()

CONGRUENTTO

`public final static` [TaxonRelationshipType](#) **CONGRUENTTO**()

INCLUDES

`public final static` [TaxonRelationshipType](#) **INCLUDES**()

OVERLAPS

`public final static` [TaxonRelationshipType](#) **OVERLAPS**()

EXCLUDES

`public final static` [TaxonRelationshipType](#) **EXCLUDES**()

DOESNOTEXCLUDE

`public final static` [TaxonRelationshipType](#) **DOESNOTEXCLUDE**()

DOESNOTOVERLAP

`public final static` [TaxonRelationshipType](#) **DOESNOTOVERLAP**()

NOTINCLUDEDIN

`public final static` [TaxonRelationshipType](#) **NOTINCLUDEDIN**()

NOTCONGRUENTTO

`public final static` [TaxonRelationshipType](#) **NOTCONGRUENTTO**()