# **IMiS/Storage Connector**

# **Imaging Systems Inc.**

Copyright© 2010-2019 Imaging Systems Inc

# Package com.imis.storageconnector

# com.imis.storageconnector Class ArchiveCapabilities

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ArchiveCapabilities** extends Enum

Defines the archive capabilities.

See Also:

IArchive

Field Summary	
public static final	Audit_Query Archive is authorized for audit log queries.
public static final	CONTENT_MANAGEMENT  Archive is authorized for content management operations.
public static final	DRAFT_MANAGEMENT  Archive is authorized for draft management operations.
public static final	IMPORT_EXPORT Archive is authorized for import/export operations.
public static final	REPORTS Archive is authorized for querying reports.

Method Summary	
static ArchiveCapabilities	<u>valueOf</u> (String name)
static ArchiveCapabilities[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# **AUDIT QUERY**

public static final com.imis.storageconnector.ArchiveCapabilities AUDIT\_QUERY

Archive is authorized for audit log queries.

# IMPORT\_EXPORT

public static final com.imis.storageconnector.ArchiveCapabilities IMPORT\_EXPORT
Archive is authorized for import/export operations.

# CONTENT\_MANAGEMENT

public static final com.imis.storageconnector.ArchiveCapabilities **CONTENT\_MANAGEMENT**Archive is authorized for content management operations.

# **REPORTS**

public static final com.imis.storageconnector.ArchiveCapabilities REPORTS

Archive is authorized for querying reports.

# DRAFT\_MANAGEMENT

public static final com.imis.storageconnector.ArchiveCapabilities DRAFT\_MANAGEMENT

Archive is authorized for draft management operations.

# Methods

#### values

public final static ArchiveCapabilities[] values()

#### valueOf

public static ArchiveCapabilities valueOf(String name)

# com.imis.storageconnector Class ArchiveType

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ArchiveType** extends Enum

Specifies an IMiS/Storage Connector supported archiving system.

Field Summary	
public static final	IMIS_ARCHIVE IMIS/ARChive Storage Server archive.
public static final	UNKNOWN Unknown archive type.

Method Summary	
static <u>ArchiveType</u>	<pre>valueOf(String name)</pre>
static ArchiveType[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

#### **UNKNOWN**

public static final com.imis.storageconnector.ArchiveType UNKNOWN

Unknown archive type.

This value defines an invalid archive type which should never be used.

# IMIS\_ARCHIVE

public static final com.imis.storageconnector.ArchiveType IMIS\_ARCHIVE

IMiS/ARChive Storage Server archive.

# Methods

# values

public final static ArchiveType[] values()

# valueOf

public static ArchiveType valueOf(String name)

# com.imis.storageconnector Class AuditLog

# public abstract class **AuditLog** extends Object

Represents a custom audit log message to write to IMiS/ARC Storage Server in operations that support audit log feature.

Custom audit log message is made up of either a regular string or C style message format string together with the list of arguments.

#### Audit log feature is supported by the following operations:

 ${\tt Storage.createObject, Storage.openObject, Storage.moveObject, Storage.deleteObject} \ and \ {\tt Document.save.}$ 

Note: Audit log feature requires IMiS/ARC Storage Server version 7 or higher.

# Constructor Summary public AuditLog()

Method Summary	
void	clear() Clears the audit log message and arguments.
abstract List	getArguments()  Gets the list of audit log message arguments.
abstract String	getMessage()  Gets the audit log message Audit log message can be either a regular string or C style message format string.
abstract void	Sets the list of audit log message arguments.
abstract void	Sets the audit log message.

#### Methods inherited from class java.lang.Object

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

# Constructors

# **AuditLog**

public AuditLog()

# Methods

# getMessage

```
public abstract String getMessage()
```

Gets the audit log message

Audit log message can be either a regular string or C style message format string.

#### **Returns:**

The audit log message.

#### See Also:

setMessage(String)

# setMessage

```
public abstract void setMessage(String value)
```

Sets the audit log message.

Audit log message can be either a regular string or C style message format string.

When C style message format string is used for audit log message, use <u>setArguments(List)</u> method to set the appropriate message arguments.

When a regular string is used make sure you invalidate previously set message arguments.

#### **Parameters:**

value - the audit log message.

#### See Also:

setArguments(List)

# getArguments

```
public abstract List getArguments()
```

Gets the list of audit log message arguments.

#### **Returns:**

The list of audit log message arguments.

#### See Also:

setMessage(String)

#### setArguments

```
public abstract void setArguments(List value)
```

Sets the list of audit log message arguments.

The null value sets the audit log message arguments to the empty list.

#### Parameters:

value - the list of audit log message arguments.

#### See Also:

# setMessage(String)

# clear

public void clear()

Clears the audit log message and arguments.

# com.imis.storageconnector Class AuditQuery

public class **AuditQuery** extends Object

Represents the audit log query.

Nested Class Summary	
class	AuditQuery.ObjectParamsScope AuditQuery.ObjectParamsScope
class	AuditQuery.QueryParamsType AuditQuery.QueryParamsType
class	AuditQuery.ResultFilter AuditQuery.ResultFilter
class	AuditQuery.ResultSortOrder AuditQuery.ResultSortOrder
class	AuditQuery.SessionParamsScope AuditQuery.SessionParamsScope

Constructor Summary	
public	AuditQuery() Initializes a new instance of the AuditQuery class.

Method Summary	y
List	getAddresses ( )  Gets the list of addresses representing session parameters.
String	Gets the starting address of the range of addresses representing session parameters.
String	getAddressTo()  Gets the ending address of the range of addresses representing session parameters.
String	getComputerNameFrom()  Gets the starting computer name of the range of computer names representing session parameters.
List	getComputerNames ( )  Gets the list of computer names representing session parameters.
String	getComputerNameTo ( )  Gets the ending computer name of the range of computer names representing session parameters.

Calendar	getDateFrom()  Gets the starting timestamp of the range of timestamps parameters.
Calendar	getDateTo()  Gets the ending timestamp of the range of timestamps parameters.
Integer	getEventIdFrom()  Gets the starting event identifier of the range of event identifiers representing object parameters.
AuditQuery.QueryParam sType	getEventIdQueryType()  Gets the query type used when event identifiers are used as object parameters.
List	getEventIds()  Gets the list of event identifiers representing object parameters.
Integer	getEventIdTo()  Gets the ending event identifier of the range of event identifiers representing object parameters.
Set	getFilter() Gets the filter for the audit query results.
List	getObjectIds()  Gets the list of object identifiers representing object parameters.
AuditQuery.ObjectPara msScope	getObjectScope()  Gets the object parameters scope.
AuditQuery.QueryParam sType	getSessionQueryType()  Gets the session parameters query type.
AuditQuery.SessionPar amsScope	getSessionScope()  Gets the session parameters scope.
AuditQuery.ResultSort Order	getSortOrder()  Gets the sort order of the audit query results.
String	getUserNameFrom()  Gets the starting user name of the range of user names representing session parameters.
List	getUserNames ( )  Gets the list of user names representing session parameters.
String	getUserNameTo()  Gets the ending user name of the range of user names representing session parameters.
boolean	isRecursive()  Gets the value indicating whether or not audit query should be performed recursively on selected object identifiers.
boolean	isValid()  Gets the value indicating whether or not this object has a valid set of parameters.
void	Sets the starting address of the range of addresses representing session parameters.
void	<u>setAddressTo</u> (String value)  Sets the ending address of the range of addresses representing session parameters.

void	Sets the starting computer name of the range of computer names representing session parameters.
void	Sets the ending computer name of the range of computer names representing session parameters.
void	Sets the starting timestamp of the range of timestamps parameters.
void	<pre>setDateTo(Calendar value) Sets the ending timestamp of the range of timestamps parameters.</pre>
void	<u>setEventIdFrom</u> (Integer value) Sets the starting event identifier of the range of event identifiers representing object parameters.
void	Sets the query type used when event identifiers are used as object parameters.
void	Sets the ending event identifier of the range of event identifiers representing object parameters.
void	<pre>setFilter(Set value) Sets the filter for the audit query results.</pre>
void	<pre>setObjectScope(AuditQuery.ObjectParamsScope value) Sets the object parameters scope.</pre>
void	<u>setRecursive</u> (boolean value) Sets the value indicating whether or not audit query should be performed recursively on selected object identifiers.
void	Sets the session parameters query type.
void	<u>setSessionScope</u> ( <u>AuditQuery.SessionParamsScope</u> value)  Sets the session parameters scope.
void	<u>setSortOrder(AuditQuery.ResultSortOrder</u> value)  Sets the sort order of the audit query results.
void	Sets the starting user name of the range of user names representing session parameters.
void	<pre>setUserNameTo(String value) Sets the ending user name of the range of user names representing session parameters.</pre>

# Methods inherited from class java.lang.Object

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

# Constructors

# **AuditQuery**

```
public AuditQuery()
```

Initializes a new instance of the AuditQuery class.

# **Methods**

# getSessionQueryType

```
public AuditQuery.QueryParamsType getSessionQueryType()
```

Gets the session parameters query type.

#### **Returns:**

The session parameters query type. Defaults to QueryParamsType.LIST.

# setSessionQueryType

```
public void setSessionQueryType(AuditQuery.QueryParamsType value)
```

Sets the session parameters query type.

#### **Parameters:**

value - the session parameters query type.

# getSessionScope

```
public AuditQuery.SessionParamsScope getSessionScope()
```

Gets the session parameters scope.

#### **Returns:**

The session parameters scope. Defaults to SessionParamsScope. Addresses.

# setSessionScope

```
public void setSessionScope(AuditQuery.SessionParamsScope value)
```

Sets the session parameters scope.

#### **Parameters:**

value - the session parameters scope.

# getAddresses

```
public List getAddresses()
```

Gets the list of addresses representing session parameters.

Address format is x.x.x.x/R, where x is a number from 0 to 255 and R is a number from 0 to 32 and represents a number of bits used in the audit query search.

#### **Returns:**

The list of addresses as String objects.

# getAddressFrom

```
public String getAddressFrom()
```

Gets the starting address of the range of addresses representing session parameters.

Address format is x.x.x.x/R, where x is a number from 0 to 255 and R is a number from 0 to 32 and represents a number of bits used in the audit query search.

#### **Returns:**

The address that starts the range of addresses or null if there is no lower limit. Defaults to null.

# setAddressFrom

```
public void setAddressFrom(String value)
```

Sets the starting address of the range of addresses representing session parameters.

Address format is X.X.X.X/R, where X is a number from 0 to 255 and R is a number from 0 to 32 and represents a number of bits used in the audit query search.

#### **Parameters:**

value - the address that starts the range of addresses or null if there is no lower limit.

# getAddressTo

```
public String getAddressTo()
```

Gets the ending address of the range of addresses representing session parameters.

Address format is x.x.x.x/R, where x is a number from 0 to 255 and R is a number from 0 to 32 and represents a number of bits used in the audit query search.

#### **Returns:**

The address that ends the range of addresses or null if there is no upper limit. Defaults to null.

#### setAddressTo

```
public void setAddressTo(String value)
```

Sets the ending address of the range of addresses representing session parameters.

Address format is X.X.X.X/R, where X is a number from 0 to 255 and R is a number from 0 to 32 and represents a number of bits used in the audit query search.

#### **Parameters:**

value - the address that ends the range of addresses or null if there is no upper limit.

# getUserNames

```
public List getUserNames()
```

Gets the list of user names representing session parameters.

#### **Returns:**

The list of user names as String objects.

# get User Name From

```
public String getUserNameFrom()
```

Gets the starting user name of the range of user names representing session parameters.

#### Returns

The user name that starts the range of user names or null if there is no lower limit. Defaults to null.

#### setUserNameFrom

```
public void setUserNameFrom(String value)
```

Sets the starting user name of the range of user names representing session parameters.

#### **Parameters:**

value - The user name that starts the range of user names or null if there is no lower limit.

# getUserNameTo

```
public String getUserNameTo()
```

Gets the ending user name of the range of user names representing session parameters.

#### **Returns:**

The user name that ends the range of user names or null if there is no upper limit. Defaults to null.

# setUserNameTo

```
public void setUserNameTo(String value)
```

Sets the ending user name of the range of user names representing session parameters.

#### **Parameters:**

value - The user name that ends the range of user names or null if there is no upper limit.

# getComputerNames

```
public List getComputerNames()
```

Gets the list of computer names representing session parameters.

#### **Returns:**

The list of computer names as String objects.

# getComputerNameFrom

```
public String getComputerNameFrom()
```

Gets the starting computer name of the range of computer names representing session parameters.

#### **Returns:**

The computer name that starts the range of computer names or null if there is no lower limit. Defaults to null.

# setComputerNameFrom

```
public void setComputerNameFrom(String value)
```

Sets the starting computer name of the range of computer names representing session parameters.

#### **Parameters:**

value - the computer name that starts the range of computer names or null if there is no lower limit.

# getComputerNameTo

public String getComputerNameTo()

Gets the ending computer name of the range of computer names representing session parameters.

#### **Returns:**

The computer name that ends the range of computer names or null if there is no upper limit. Defaults to null.

# setComputerNameTo

public void setComputerNameTo(String value)

Sets the ending computer name of the range of computer names representing session parameters.

#### **Parameters:**

value - the computer name that ends the range of computer names or null if there is no upper limit.

# getObjectScope

public AuditQuery.ObjectParamsScope getObjectScope()

Gets the object parameters scope.

#### **Returns:**

The object parameters scope. Defaults to ObjectParamsScope.OBJECT\_IDS.

# setObjectScope

public void setObjectScope(AuditQuery.ObjectParamsScope value)

Sets the object parameters scope.

#### **Parameters:**

value - the object parameters scope.

# getObjectIds

```
public List getObjectIds()
```

Gets the list of object identifiers representing object parameters.

#### Returns

The list of object identifiers as String objects.

# getEventIdQueryType

public AuditQuery.QueryParamsType getEventIdQueryType()

Gets the query type used when event identifiers are used as object parameters.

#### **Returns:**

The event identifiers parameters query type. Defaults to QueryParamsType.LIST.

# set Event Id Query Type

 $\verb"public void {\bf setEventIdQueryType}" ( \verb"AuditQuery.QueryParamsType" value")$ 

Sets the query type used when event identifiers are used as object parameters.

#### **Parameters:**

value - the event identifiers parameters query type.

# getEventIds

```
public List getEventIds()
```

Gets the list of event identifiers representing object parameters.

#### **Returns:**

The list of event identifiers as Integer values.

# getEventIdFrom

```
public Integer getEventIdFrom()
```

Gets the starting event identifier of the range of event identifiers representing object parameters.

#### **Returns:**

The event identifier that starts the range of event identifiers or null if there is no lower limit. Defaults to null.

# setEventIdFrom

```
public void setEventIdFrom(Integer value)
```

Sets the starting event identifier of the range of event identifiers representing object parameters.

#### Parameters:

value - the event identifier that starts the range of event identifiers or null if there is no lower limit.

# getEventIdTo

```
public Integer getEventIdTo()
```

Gets the ending event identifier of the range of event identifiers representing object parameters.

#### **Returns:**

The event identifier that ends the range of event identifiers or null if there is no upper limit. Defaults to null.

#### setEventIdTo

```
public void setEventIdTo(Integer value)
```

Sets the ending event identifier of the range of event identifiers representing object parameters.

#### **Parameters:**

value - the event identifier that ends the range of event identifiers or null if there is no upper limit.

# getDateFrom

```
public Calendar getDateFrom()
```

Gets the starting timestamp of the range of timestamps parameters.

#### **Returns:**

The timestamp that starts the range of timestamps parameters or null if there is no lower limit. Defaults to null.

#### setDateFrom

public void setDateFrom(Calendar value)

Sets the starting timestamp of the range of timestamps parameters.

#### **Parameters:**

value - the timestamp that starts the range of timestamps parameters or null if there is no lower limit.

# getDateTo

```
public Calendar getDateTo()
```

Gets the ending timestamp of the range of timestamps parameters.

#### **Returns:**

The timestamp that ends the range of timestamps parameters or null if there is no upper limit. Defaults to null.

#### setDateTo

```
public void setDateTo(Calendar value)
```

Sets the ending timestamp of the range of timestamps parameters.

#### **Parameters:**

value - the timestamp that ends the range of timestamps parameters or null if there is no upper limit.

# getSortOrder

```
public AuditQuery.ResultSortOrder getSortOrder()
```

Gets the sort order of the audit query results.

#### Returns:

The sort order of the audit query results. Defaults to ResultSortOrder.SESSION\_TIMESTAMP\_OBJECT.

#### setSortOrder

```
public void setSortOrder(AuditQuery.ResultSortOrder value)
```

Sets the sort order of the audit query results.

#### **Parameters:**

value - the sort order of the audit query results.

# getFilter

```
public Set getFilter()
```

Gets the filter for the audit query results.

This property has effect when getObjectScope() is equal to ObjectParamsScope.OBJECT\_IDS.

#### **Returns:**

The filter for the audit query object results. Default value is set to EnumSet.allof(ResultFilter.class).

# setFilter

```
public void setFilter(Set value)
```

Sets the filter for the audit query results.

#### **Parameters:**

value - the filter for the audit query object results.

#### isRecursive

```
public boolean isRecursive()
```

Gets the value indicating whether or not audit query should be performed recursively on selected object identifiers.

#### **Returns:**

true if audit query should be performed recursively on selected object identifiers; otherwise false. Default value is set to false.

#### See Also:

getObjectIds()

# setRecursive

```
public void setRecursive(boolean value)
```

Sets the value indicating whether or not audit query should be performed recursively on selected object identifiers.

#### **Parameters:**

value - true if audit query should be performed recursively on selected object identifiers; otherwise false.

#### See Also:

getObjectIds()

#### isValid

```
public boolean isValid()
```

Gets the value indicating whether or not this object has a valid set of parameters.

#### **Returns:**

true if AuditQuery has a valid set of parameters; otherwise false.

# com.imis.storageconnector Class AuditQuery.QueryParamsType

#### **All Implemented Interfaces:**

Serializable, Comparable

# public static final class **AuditQuery.QueryParamsType** extends Enum

Defines the audit log query parameters query types.

Field Summary	
public static final	LIST  Query parameters are organized as list.
public static final	RANGE  Query parameters are organized as range.

Method Summary	
static AuditQuery.QueryParam sType	<u>valueOf</u> (String name)
static AuditQuery.QueryParam sType[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# LIST

public static final com.imis.storageconnector.AuditQuery.QueryParamsType **LIST**Query parameters are organized as list.

# **RANGE**

public static final com.imis.storageconnector.AuditQuery.QueryParamsType RANGE

Query parameters are organized as range.

# Methods

# values

public final static AuditQuery.QueryParamsType[] values()

# valueOf

public static AuditQuery.QueryParamsType valueOf(String name)

# com.imis.storageconnector Class AuditQuery.SessionParamsScope

#### All Implemented Interfaces:

Serializable, Comparable

# public static final class **AuditQuery.SessionParamsScope** extends Enum

Defines the audit log query session parameters scope types.

Field Summary	
public static final	ADDRESSES Scope is limited with the list or range of IP addresses.
public static final	COMPUTER_NAMES Scope is limited with the list or range of computer names.
public static final	USER_NAMES Scope is limited with the list or range of user names.

Method Summar	y
static AuditQuery.SessionPar amsScope	valueOf(String name)
static AuditQuery.SessionPar amsScope[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# **ADDRESSES**

public static final com.imis.storageconnector.AuditQuery.SessionParamsScope **ADDRESSES**Scope is limited with the list or range of IP addresses.

# USER\_NAMES

public static final com.imis.storageconnector.AuditQuery.SessionParamsScope **USER\_NAMES**Scope is limited with the list or range of user names.

# **COMPUTER\_NAMES**

 $\verb|public| static| final com.imis.storage connector.AuditQuery.SessionParamsScope| \\ \verb|COMPUTER| NAMES| \\$ 

Scope is limited with the list or range of computer names.

# Methods

#### values

public final static AuditQuery.SessionParamsScope[] values()

#### valueOf

public static AuditQuery.SessionParamsScope valueOf(String name)

# com.imis.storageconnector Class AuditQuery.ObjectParamsScope

#### **All Implemented Interfaces:**

Serializable, Comparable

# public static final class **AuditQuery.ObjectParamsScope** extends Enum

Defines the audit log query object parameters scope types.

Field Summary	
public static final	EVENT_IDS Scope is limited with the list or range of event identifiers.
public static final	OBJECT_IDS Scope is limited with the list of object identifiers.

Method Summary	
static AuditQuery.ObjectPara msScope	<u>valueOf</u> (String name)
static AuditQuery.ObjectPara msScope[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# **OBJECT\_IDS**

public static final com.imis.storageconnector.AuditQuery.ObjectParamsScope OBJECT\_IDS

Scope is limited with the list of object identifiers.

Ranges are not supported with object identifiers.

# **EVENT\_IDS**

public static final com.imis.storageconnector.AuditQuery.ObjectParamsScope **EVENT\_IDS**Scope is limited with the list or range of event identifiers.

# Methods

#### values

public final static AuditQuery.ObjectParamsScope[] values()

# valueOf

public static AuditQuery.ObjectParamsScope valueOf(String name)

# com.imis.storageconnector Class AuditQuery.ResultSortOrder

#### **All Implemented Interfaces:**

Serializable, Comparable

# public static final class **AuditQuery.ResultSortOrder** extends Enum

Defines the audit query results sort order types.

Field Summary	
public static final	OBJECT_SESSION_TIMESTAMP Sort objects by sessions and timestamps.
public static final	OBJECT_TIMESTAMP_SESSION Sort object by timestamps and sessions.
public static final	Session_OBJECT_TIMESTAMP Sort sessions by objects and timestamps.
public static final	Session_timestamp_object Sort sessions by timestamps and objects.
public static final	TIMESTAMP_OBJECT_SESSION Sort timestamps by object and sessions.
public static final	TIMESTAMP_SESSION_OBJECT Sort timestamps by sessions and objects.

Method Summary	
static AuditQuery.ResultSort Order	<pre>valueOf(String name)</pre>
static AuditQuery.ResultSort Order[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# SESSION\_TIMESTAMP\_OBJECT

 $\verb|public static final com.imis.storage connector.AuditQuery.ResultSortOrder \\ \textit{session\_timestamp\_object}|$ 

Sort sessions by timestamps and objects.

# SESSION\_OBJECT\_TIMESTAMP

public static final com.imis.storageconnector.AuditQuery.ResultSortOrder SESSION\_OBJECT\_TIMESTAMP

Sort sessions by objects and timestamps.

# TIMESTAMP\_SESSION\_OBJECT

public static final com.imis.storageconnector.AuditQuery.ResultSortOrder TIMESTAMP\_SESSION\_OBJECT

Sort timestamps by sessions and objects.

#### TIMESTAMP OBJECT SESSION

 $\verb|public static final com.imis.storage connector.AuditQuery.ResultSortOrder \\ \verb|TIMESTAMP_OBJECT_SESSION| \\$ 

Sort timestamps by object and sessions.

# OBJECT\_SESSION\_TIMESTAMP

public static final com.imis.storageconnector.AuditQuery.ResultSortOrder
OBJECT SESSION TIMESTAMP

Sort objects by sessions and timestamps.

# OBJECT\_TIMESTAMP\_SESSION

 $\verb|public static final com.imis.storage connector.AuditQuery.ResultSortOrder \\| \textbf{OBJECT\_TIMESTAMP\_SESSION}|$ 

Sort object by timestamps and sessions.

# Methods

#### values

public final static AuditQuery.ResultSortOrder[] values()

public static AuditQuery.ResultSortOrder valueOf(String name)

# com.imis.storageconnector Class AuditQuery.ResultFilter

#### **All Implemented Interfaces:**

Serializable, Comparable

# public static final class **AuditQuery.ResultFilter** extends Enum

Defines enumeration for audit query results filtering.

Field Summary	
public static final	CLASSES Entities of type EntityType.CLASS should be included in audit query results.
public static final	DOCUMENTS Entities of type EntityType.DOCUMENT should be included in audit query results.
public static final	Entities of type EntityType.FOLDER should be included in audit query results.

Method Summary	
static AuditQuery.ResultFilt er	valueOf(String name)
static  AuditQuery.ResultFilt er[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# **CLASSES**

public static final com.imis.storageconnector.AuditQuery.ResultFilter **CLASSES**Entities of type EntityType.CLASS should be included in audit query results.

#### **FOLDERS**

public static final com.imis.storageconnector.AuditQuery.ResultFilter FOLDERS

Entities of type EntityType.FOLDER should be included in audit query results.

# **DOCUMENTS**

public static final com.imis.storageconnector.AuditQuery.ResultFilter **DOCUMENTS**Entities of type EntityType.DOCUMENT should be included in audit query results.

# Methods

#### values

public final static AuditQuery.ResultFilter[] values()

# valueOf

public static AuditQuery.ResultFilter valueOf(String name)

# com.imis.storageconnector Class AuthCryptoAlgorithm

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **AuthCryptoAlgorithm** extends Enum

Defines constants that represent the type of the cryptographic algorithm used when establishing a connection with IMiS/ARC Storage Server.

Constants are used as values for the <a href="StorageConnector.OPTION\_AUTH\_CRYPTO\_ALGORITHM">StorageConnector.OPTION\_AUTH\_CRYPTO\_ALGORITHM</a> IMIS\_ARC storage authentication cryptographic algorithm option.

#### See Also:

```
StorageConnector.openArchive(ArchiveType, String, Map),
StorageConnector.openArchive(ArchiveType, String, int, Map),
StorageConnector.openIMiSARCStorage(String, Map),
StorageConnector.openIMiSARCStorage(String, String, Map),
StorageConnector.openIMiSARCStorage(String, int, Map),
StorageConnector.openIMiSARCStorage(String, int, String, Map)
```

# Field Summary

public static final

AES

Advanced Encryption Standard

# Method Summary

static AuthCryptoAlgorithm	<pre>valueOf(String name)</pre>
static AuthCryptoAlgorithm[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# Fields

# **AES**

public static final com.imis.storageconnector.AuthCryptoAlgorithm AES

Advanced Encryption Standard

# Methods

# values

public final static AuthCryptoAlgorithm[] values()

# valueOf

public static AuthCryptoAlgorithm valueOf(String name)

# com.imis.storageconnector Class AuthCryptoCipherMode

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **AuthCryptoCipherMode** extends Enum

Defines constants that represent the block cipher mode of operation used when establishing a connection with IMiS/ARC Storage Server.

Constants are used as values for the <a href="StorageConnector.OPTION\_AUTH\_CRYPTO\_CIPHERMODE">StorageConnector.OPTION\_AUTH\_CRYPTO\_CIPHERMODE</a> IMIS\_ARC storage authentication block cipher mode option.

#### See Also:

```
StorageConnector.openArchive(ArchiveType, String, Map),
StorageConnector.openArchive(ArchiveType, String, int, Map),
StorageConnector.openIMiSARCStorage(String, Map),
StorageConnector.openIMiSARCStorage(String, String, Map),
StorageConnector.openIMiSARCStorage(String, int, Map),
StorageConnector.openIMiSARCStorage(String, int, String, Map)
```

Field Summary	
public static final	CBC Cipher-block chaining (CBC) mode
public static final	CFB Cipher Feedback (CFB) mode (128bit)
public static final	ECB Electronic codebook (EBC) mode
public static final	OFB Output feedback (OFB) mode (128bit)

Method Summary	y
static AuthCryptoCipherMode	valueOf(String name)
static AuthCryptoCipherMode[	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# **CBC**

public static final com.imis.storageconnector.AuthCryptoCipherMode CBC Cipher-block chaining (CBC) mode

#### **ECB**

public static final com.imis.storageconnector.AuthCryptoCipherMode **ECB**Electronic codebook (EBC) mode

#### **OFB**

public static final com.imis.storageconnector.AuthCryptoCipherMode **OFB**Output feedback (OFB) mode (128bit)

#### **CFB**

public static final com.imis.storageconnector.AuthCryptoCipherMode CFB

Cipher Feedback (CFB) mode (128bit)

# Methods

#### values

public final static AuthCryptoCipherMode[] values()

#### valueOf

public static AuthCryptoCipherMode valueOf(String name)

# com.imis.storageconnector Class AuthCryptoKeySize

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **AuthCryptoKeySize** extends Enum

Defines constants that represent the size, and hence the strength, of the cryptographic key used when establishing a connection with IMiS/ARC Storage Server.

Constants are used as values for the <a href="StorageConnector.OPTION\_AUTH\_CRYPTO\_KEYSIZE">Storage authentication</a> key size option.

#### See Also:

```
StorageConnector.openArchive(ArchiveType, String, Map),
StorageConnector.openArchive(ArchiveType, String, int, Map),
StorageConnector.openIMiSARCStorage(String, Map),
StorageConnector.openIMiSARCStorage(String, String, Map),
StorageConnector.openIMiSARCStorage(String, int, Map),
StorageConnector.openIMiSARCStorage(String, int, String, Map)
```

Field Summary	
public static final	KS128 Key strength: 128bit
public static final	KS192 Key strength: 192bit
public static final	KS256 Key strength: 256bit

Method Summary	
static AuthCryptoKeySize	<pre>valueOf(String name)</pre>
static AuthCryptoKeySize[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# Fields

# **KS128**

public static final com.imis.storageconnector.AuthCryptoKeySize KS128

Key strength: 128bit

# KS192

public static final com.imis.storageconnector.AuthCryptoKeySize KS192

Key strength: 192bit

# **KS256**

public static final com.imis.storageconnector.AuthCryptoKeySize KS256

Key strength: 256bit

# Methods

# values

public final static AuthCryptoKeySize[] values()

# valueOf

public static AuthCryptoKeySize valueOf(String name)

# com.imis.storageconnector Class AuthenticatingEvent

# **All Implemented Interfaces:**

Serializable

# public final class **AuthenticatingEvent** extends EventObject

Provides data for authenticating event.

Fields inherited from class java.util.EventObject
source

# **Constructor Summary**

public AuthenticatingEvent (Object source, AuthType type, Map options)

Initializes a new instance of the AuthenticatingEventArgs class.

Method Summary		
boolean	<u>cancel</u> ()  Gets the value indicating whether or not to cancel authentication.	
Мар	getOptions()  Gets the map of objects containing authentication data sorted by authentication options.	
AuthType	getType()  Gets the authentication type.	
void	setCancel (boolean value)  Sets the value indicating whether or not to cancel authentication.	

### Methods inherited from class java.util.EventObject

getSource, toString

### Methods inherited from class java.lang.Object

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

# Constructors

# **AuthenticatingEvent**

Initializes a new instance of the Authenticating Event Args class.

#### **Parameters:**

```
source - the source of the event.

type - the authentication type.

options - the map of objects containing authentication data sorted by authentication options.
```

# Methods

# getType

```
public AuthType getType()
```

Gets the authentication type.

### **Returns:**

The authentication type.

# getOptions

```
public Map getOptions()
```

Gets the map of objects containing authentication data sorted by authentication options.

### **Returns:**

The map of objects containing authentication data sorted by authentication options.

### cancel

```
public boolean cancel()
```

Gets the value indicating whether or not to cancel authentication.

### Returns

true to cancel authentication; otherwise false. Default value is false.

### setCancel

```
public void setCancel(boolean value)
```

Sets the value indicating whether or not to cancel authentication.

### **Parameters:**

value - true to cancel authentication; otherwise false.

# com.imis.storageconnector Class AuthType

### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **AuthType** extends Enum

Defines constants that represent the type of the authentication used when establishing a connection with IMiS/ARC Storage Server.

Constants are used as values for the authentication key type option on IMIS\_ARC <u>Storage</u> or IMIS\_ARCHIVE <u>IArchive</u>. **See Also:** 

```
StorageConnector.OPTION_AUTH_TYPE, StorageConnector.openIMiSARCStorage(String, Map), StorageConnector.openIMiSARCStorage(String, String, Map), StorageConnector.openIMiSARCStorage(String, int, Map), StorageConnector.openIMiSARCStorage(String, int, String, Map), StorageConnector.openArchive(ArchiveType, String, Map), StorageConnector.openArchive(ArchiveType, String, int, Map)
```

Field Summary	
public static final	KERBEROS5_SERVICE_TICKET  Kerberos 5 Ticket Granting Server (KRB5TGS) authentication (supported by IMiS/ARChive Storage Server v9.7 or later).
public static final	LIGHTURE LIGHTURE LIGHTURE LIGHTURE LIGHTURE Storage Server v9.7 or later).  LDAP_CREDENTIALS  Lightweight Directory Access Protocol (LDAP) credentials (supported by IMiS/ARChive Storage Server v9.7 or later).
public static final	LOCAL_CREDENTIALS  Credentials for users registered in IMiS/ARChive local database (supported by IMiS/ARChive Storage Server v9.0 or later).
public static final	PRE_AUTHENTICATE  Provides discovery of authentication methods (supported by IMiS/ARChive Storage Server v9.7 or later).
public static final	PRE_SHARED_KEY Pre shared key.

Method Summary	
static <u>AuthType</u>	<pre>valueOf(String name)</pre>
static AuthType[]	values()

### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

### PRE SHARED KEY

public static final com.imis.storageconnector.AuthType PRE\_SHARED\_KEY

Pre shared key.

# LOCAL\_CREDENTIALS

public static final com.imis.storageconnector.AuthType LOCAL\_CREDENTIALS

Credentials for users registered in IMiS/ARChive local database (supported by IMiS/ARChive Storage Server v9.0 or later).

# LDAP CREDENTIALS

public static final com.imis.storageconnector.AuthType LDAP\_CREDENTIALS

Lightweight Directory Access Protocol (LDAP) credentials (supported by IMiS/ARChive Storage Server v9.7 or later).

# KERBEROS5\_SERVICE\_TICKET

public static final com.imis.storageconnector.AuthType KERBEROS5\_SERVICE\_TICKET

Kerberos 5 Ticket Granting Server (KRB5TGS) authentication (supported by IMiS/ARChive Storage Server v9.7 or later).

### PRE\_AUTHENTICATE

public static final com.imis.storageconnector.AuthType PRE\_AUTHENTICATE

Provides discovery of authentication methods (supported by IMiS/ARChive Storage Server v9.7 or later).

# **Methods**

### values

public final static AuthType[] values()

### valueOf

public static AuthType valueOf(String name)

# com.imis.storageconnector Class ConnectingEvent

### **All Implemented Interfaces:**

Serializable

# public class **ConnectingEvent** extends EventObject

Provides data for connecting event.

Fields inherited from class java.util.EventObject
source

# **Constructor Summary**

public

ConnectingEvent(Object source, com.imis.imisarc.client.ConnectingEvental)

Initializes a new instance of the ConnectingEvent class for session initialization stage.

Method Summary		
boolean	<pre>cancel() Gets the value indicating whether or not to cancel connecting.</pre>	
<pre>java.security.Princip     al[]</pre>	getAcceptableIssuers ()  Gets the CA certificate issuers subject names acceptable to the remote party, used when authenticating the client side.	
String	<pre>getAuthenticationType()</pre> Gets the key exchange algorithm used to authenticate the remote party.	
String[]	<pre>getKeyTypes() Gets the key algorithm type name(s), ordered with the most-preferred key type first, used when authenticating the client side.</pre>	
java.security.cert.X5 09Certificate	<pre>getLocalCertificate() Gets the local certificate used for establishing an SSL connection in the local certificate selection stage.</pre>	
java.security.Private Key	getLocalCertificateKey()  Gets the local certificate private key used for establishing an SSL connection in the local certificate selection stage.	
java.net.SocketAddres s	getLocalSocketAddress()  Gets the local socket address.	

javax.security.auth.c allback.PasswordCallb ack	getPasswordCallback()  Gets the password callback used to provide the password for JRE default trusted CA certificates key store that is used to retrieve the trust anchors for remote certificate validation if they are not provided with setTrustAnchors(Set) method.
ConnectionProtocol	getProtocol()  Gets the session protocol.
java.security.cert.X5 09Certificate[]	Gets the certificate chain used to authenticate the remote party.
String	getRemoteHost()  Gets the remote host.
java.net.SocketAddres s	getRemoteSocketAddress()  Gets the remote socket address.
String[]	getSslProtocols ()  Gets the names of the enabled SSL protocols used by the session.
ConnectingStage	getStage()  Gets the connecting event stage.
Set	getTrustAnchors()  Gets the trust anchors used for remote certificate verification.
boolean	isRemoteCertificateAccepted()  Gets the value indicating whether or not the specified remote certificate chain is accepted for authentication in the remote certificate validation stage.
void	Sets the value indicating whether or not to cancel connecting.
void	<u>setLocalCertificate</u> (java.security.cert.X509Certificate value) Sets the local certificate used for establishing an SSL connection in the local certificate selection stage.
void	Sets the local certificate private key used for establishing an SSL connection in the local certificate selection stage.
void	Sets the value indicating whether or not the specified remote certificate is accepted for authentication in the remote certificate validation stage.
void	setSslProtocols (String[] value) Sets the names of the enabled SSL protocols used by the session.
void	Sets the trust anchors used for remote certificate verification that can be set in session initialization stage.

# Methods inherited from class java.util.EventObject

getSource, toString

# Methods inherited from class java.lang.Object

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

# Constructors

# **ConnectingEvent**

Initializes a new instance of the ConnectingEvent class for session initialization stage.

#### **Parameters:**

source - the source of the event.

e - an IMiS/ARC Client connecting event arguments.

# Methods

# getStage

```
public ConnectingStage getStage()
```

Gets the connecting event stage.

### **Returns:**

The connecting event stage.

# getProtocol

```
public ConnectionProtocol getProtocol()
```

Gets the session protocol.

### **Returns:**

The session protocol.

# getRemoteHost

```
public String getRemoteHost()
```

Gets the remote host.

### **Returns:**

The remote host.

# ${\bf getRemoteSocketAddress}$

```
public java.net.SocketAddress getRemoteSocketAddress()
```

Gets the remote socket address.

### **Returns:**

The SocketAddress of the server.

# getLocalSocketAddress

```
public java.net.SocketAddress getLocalSocketAddress()
```

Gets the local socket address.

The local socket address is a null reference only in unsecured session initialization stage when the session socket is not bound to the local socket address defined by the optional <a href="StorageConnector.OPTION\_OUTBOUND\_ADDRESS\_V6">StorageConnector.OPTION\_OUTBOUND\_ADDRESS\_V6</a> value.

#### **Returns:**

The SocketAddress of the client or a null reference.

# getSslProtocols

```
public String[] getSslProtocols()
```

Gets the names of the enabled SSL protocols used by the session.

#### **Returns:**

The array of strings representing enabled SSL protocols used by the session.

### setSslProtocols

```
public void setSslProtocols(String[] value)
```

Sets the names of the enabled SSL protocols used by the session.

#### **Parameters:**

value - the array of strings representing enabled SSL protocols used by the session.

#### **Throws:**

IllegalStateException - if used in connecting stage other than session initialization stage.

# getTrustAnchors

```
public Set getTrustAnchors()
```

Gets the trust anchors used for remote certificate verification.

### Returns:

The set of TrustAnchor objects used in remote certificate verification stage.

### setTrustAnchors

```
public void setTrustAnchors(Set value)
```

Sets the trust anchors used for remote certificate verification that can be set in session initialization stage.

### **Parameters:**

value - the set of TrustAnchor objects used for remote certificate verification.

### Throws:

IllegalStateException - if used in connecting stage other than session initialization stage.

# getPasswordCallback

```
public javax.security.auth.callback.PasswordCallback getPasswordCallback()
```

Gets the password callback used to provide the password for JRE default trusted CA certificates key store that is used to retrieve the trust anchors for remote certificate validation if they are not provided with <a href="mailto:setTrustAnchors(Set">setTrustAnchors(Set)</a> method. Password can be set in session initialization stage.

### **Returns:**

The password callback or null if the key store is protected with default password.

### Throws:

IllegalStateException - if used in connecting stage other than session initialization stage.

# getRemoteCertificateChain

```
public java.security.cert.X509Certificate[] getRemoteCertificateChain()
```

Gets the certificate chain used to authenticate the remote party.

### **Returns:**

The certificate chain used to authenticate the remote party.

# getAuthenticationType

```
public String getAuthenticationType()
```

Gets the key exchange algorithm used to authenticate the remote party.

#### **Returns:**

The key exchange algorithm used to authenticate the remote party.

# **isRemoteCertificateAccepted**

```
public boolean isRemoteCertificateAccepted()
```

Gets the value indicating whether or not the specified remote certificate chain is accepted for authentication in the remote certificate validation stage.

### **Returns:**

true if remote certificate is accepted for authentication; otherwise false.

# setRemoteCertificateAccepted

```
public void setRemoteCertificateAccepted(boolean value)
```

Sets the value indicating whether or not the specified remote certificate is accepted for authentication in the remote certificate validation stage.

### **Parameters:**

value - true if remote certificate is accepted for authentication; otherwise false.

### **Throws:**

IllegalStateException - if used in connecting stage other than remote certificate selection stage.

# getKeyTypes

```
public String[] getKeyTypes()
```

Gets the key algorithm type name(s), ordered with the most-preferred key type first, used when authenticating the client side.

### **Returns:**

The key algorithm type name(s), ordered with the most-preferred key type first.

# getAcceptableIssuers

```
public java.security.Principal[] getAcceptableIssuers()
```

Gets the CA certificate issuers subject names acceptable to the remote party, used when authenticating the client side.

#### **Returns:**

An array of Principal objects representing CA certificate issuers subject names acceptable to the remote party.

# getLocalCertificate

```
public java.security.cert.X509Certificate getLocalCertificate()
```

Gets the local certificate used for establishing an SSL connection in the local certificate selection stage.

### **Returns:**

The X509Certificate used for establishing an SSL connection.

# setLocalCertificate

```
public void setLocalCertificate(java.security.cert.X509Certificate value)
```

Sets the local certificate used for establishing an SSL connection in the local certificate selection stage.

#### **Parameters:**

value - the X509Certificate used for establishing an SSL connection.

### **Throws:**

IllegalStateException - if used in connecting stage other than local certificate selection stage.

# getLocalCertificateKey

```
public java.security.PrivateKey getLocalCertificateKey()
```

Gets the local certificate private key used for establishing an SSL connection in the local certificate selection stage.

### **Returns:**

The certificate PrivateKey used for establishing an SSL connection.

# setLocalCertificateKey

```
public void setLocalCertificateKey(java.security.PrivateKey value)
```

Sets the local certificate private key used for establishing an SSL connection in the local certificate selection stage.

### Parameters

value - the certificate PrivateKey used for establishing an SSL connection.

### Throws:

IllegalStateException - if used in connecting stage other than local certificate selection stage.

### cancel

```
public boolean cancel()
```

Gets the value indicating whether or not to cancel connecting.

### **Returns:**

true to cancel connecting; otherwise false. Default value is false.

# setCancel

public void setCancel(boolean value)

Sets the value indicating whether or not to cancel connecting.

### **Parameters:**

 ${\tt value - true} \ to \ cancel \ connecting; \ otherwise \ {\tt false}.$ 

# com.imis.storageconnector Class ConnectingStage

### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ConnectingStage** extends Enum

Defines stages of the connecting event.

Field Summary	
public static final	LOCAL_CERTIFICATE_SELECTION  Local certificate selection stage, where local certificate is provided.
public static final	REMOTE_CERTIFICATE_VALIDATION  Remote certificate validation stage, where remote certificate is accepted or not.
public static final	Session_INITIALIZATION  Session initialization stage, where enabled SSL protocols, local certificates store preference and/or a collection of local certificates are provided.

Method Summary	
static ConnectingStage	valueOf(String name)
static ConnectingStage[]	values()

### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# SESSION\_INITIALIZATION

public static final com.imis.storageconnector.ConnectingStage SESSION\_INITIALIZATION

Session initialization stage, where enabled SSL protocols, local certificates store preference and/or a collection of local certificates are provided.

# REMOTE\_CERTIFICATE\_VALIDATION

public static final com.imis.storageconnector.ConnectingStage
REMOTE\_CERTIFICATE\_VALIDATION

Remote certificate validation stage, where remote certificate is accepted or not.

# LOCAL\_CERTIFICATE\_SELECTION

public static final com.imis.storageconnector.ConnectingStage
LOCAL CERTIFICATE SELECTION

Local certificate selection stage, where local certificate is provided.

# Methods

### values

public final static ConnectingStage[] values()

### valueOf

public static ConnectingStage valueOf(String name)

# com.imis.storageconnector Class ConnectionProtocol

### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ConnectionProtocol** extends Enum

Represents the connection protocol.

Field Summary	
public static final	SECURED Secured.
public static final	UNKNOWN Unknown.
public static final	UNSECURED Unsecured.

Method Summary	
static ConnectionProtocol	<pre>valueOf(String name)</pre>
static ConnectionProtocol[]	values()

### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

# **UNKNOWN**

public static final com.imis.storageconnector.ConnectionProtocol **UNKNOWN**Unknown.

# **UNSECURED**

public static final com.imis.storageconnector.ConnectionProtocol UNSECURED Unsecured.

# **SECURED**

# Methods

### values

public final static ConnectionProtocol[] values()

# valueOf

public static ConnectionProtocol valueOf(String name)

# com.imis.storageconnector Class ContentTypeMapper

# public class **ContentTypeMapper** extends Object

Content type mapper from/to legacy content types.

# **Constructor Summary**

public

ContentTypeMapper()

# **Method Summary**

static String	<u>fromLegacyContentType</u> (String contentType)  Gets the content type from the input legacy content type.
static String	<u>toLegacyContentType</u> (String contentType)  Gets the legacy content type from the input content type.

### Methods inherited from class java.lang.Object

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

# Constructors

# ContentTypeMapper

public ContentTypeMapper()

# Methods

# fromLegacyContentType

public static String fromLegacyContentType(String contentType)

Gets the content type from the input legacy content type.

### **Parameters:**

contentType - the input legacy content type (case sensitive).

### **Returns:**

The legacy content type.

# to Legacy Content Type

public static String toLegacyContentType(String contentType)

Gets the legacy content type from the input content type.

### **Parameters:**

contentType - the input content type (case sensitive).

### **Returns:**

The legacy content type.

# com.imis.storageconnector Class Document

java.lang.Object

+-com.imis.storageconnector.Document

### **All Implemented Interfaces:**

com.imis.IAutoCloseable

public abstract class **Document** extends Object implements com.imis.IAutoCloseable

Abstract base class for documents in storages supported by IMiS/Storage Connector.

**Note:** Only IMIS\_ARC storage document is currently implemented by IMiS/Storage Connector. Use one Storage.createObject or Storage.openObject to get an instance of a document. **See Also:** 

 $\underline{\texttt{Storage.create0bject(String, String)}}, \underline{\texttt{Storage.open0bject(String, DocumentAccess)}}$ 

Constructor Summary	
prot	ed Document(Storage parent, DocumentAccess mode)
	Initializes a new instance of the Document class.

Method Summary		
abstract <u>Document</u>	clone(DocumentAccess mode) Creates a copy of a document.	
abstract void	close() Closes the document.	
abstract void	delete() Deletes the document.	
DocumentAccess	getAccessMode()  Gets a document access mode.	
boolean	getAutoSave()  Gets a value indicating whether the document autosave is enabled.	
abstract Date	getCreated()  Gets the creation date and time of the document.	
String	getDefaultExtension()  Gets the default extension for the document.	
String	getDefaultMime()  Gets the default MIME type for the document.	
String[]	getExtensions ()  Gets an array of available extensions for the document MIME type.	

abstract String	getId()  Gets the document identifier.
abstract InputStream	getInputDataStream()  Gets the document data input stream.
abstract Date	getLastAccessed()  Gets the date and time the document was last accessed.
String[]	getMimes ()  Gets an array of available MIME types for the document extension.
abstract Date	getModified()  Gets the date and time the document was modified.
abstract OutputStream	getOutputDataStream()  Gets the document data output stream.
abstract long	getSize()  Gets the size of the document.
Storage	getStore()  Gets the document storage.
boolean	isclosed()  Gets a value indicating whether the document is closed.
boolean	isModified()  Gets a value indicating whether the document is modified.
boolean	isNew()  Gets a value indicating whether the document is new.
abstract void	<pre>move(String profile) Moves the document to the storage profile.</pre>
abstract void	Saves the document.
void	Sets a value indicating whether the document autosave is enabled.
void	<pre>setExtensions(String[] extensions) Sets an array of available extensions for the document MIME type.</pre>
void	Sets a value indicating whether the document is closed.
void	<pre>setIsModified(boolean value) Sets a value indicating whether the document is modified.</pre>
void	<pre>setIsNew(boolean value) Sets a value indicating whether the document is new.</pre>
void	Sets an array of available MIME types for the document extension.

Methods inherited from class java.lang.Object

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

# Methods inherited from interface com.imis.IAutoCloseable

close

# Constructors

# **Document**

Initializes a new instance of the Document class.

### **Parameters:**

```
parent - a document storage. mode - document access mode.
```

#### Throws:

NullPointerException - if parent is a null reference. StorageConnectorException - if demo license expired.

# Methods

# getDefaultExtension

```
public String getDefaultExtension()
```

Gets the default extension for the document.

### **Returns:**

A string containing the default document extension or a null reference if none available.

# getExtensions

```
public String[] getExtensions()
```

Gets an array of available extensions for the document MIME type.

### **Returns:**

An array of extensions for the document MIME type.

### setExtensions

```
protected void setExtensions(String[] extensions)
```

Sets an array of available extensions for the document MIME type.

### **Parameters:**

extensions - an array of extensions for the document MIME type.

# getDefaultMime

```
public String getDefaultMime()
```

Gets the default MIME type for the document.

#### **Returns:**

A string containing default document MIME type or a null reference if none available.

# **getMimes**

```
public String[] getMimes()
```

Gets an array of available MIME types for the document extension.

### **Returns:**

An array of MIME types for the document extension.

# **setMimes**

```
protected void setMimes(String[] mimes)
```

Sets an array of available MIME types for the document extension.

### **Parameters:**

mimes - an array of MIME types for the document extension.

# getAccessMode

```
public DocumentAccess getAccessMode()
```

Gets a document access mode.

### **Returns:**

A document access mode.

# getStore

```
public Storage getStore()
```

Gets the document storage.

### **Returns:**

A Storage instance.

### isClosed

```
public boolean isClosed()
```

Gets a value indicating whether the document is closed.

### **Returns:**

true if the document is closed; otherwise, false.

# setIsClosed

protected void setIsClosed(boolean value)

Sets a value indicating whether the document is closed.

#### **Parameters:**

value - true if the document is closed; otherwise, false.

### isNew

```
public boolean isNew()
```

Gets a value indicating whether the document is new.

#### **Returns:**

true if the document is new; otherwise, false.

# setIsNew

```
protected void setIsNew(boolean value)
```

Sets a value indicating whether the document is new.

#### **Parameters:**

value - true if the document is new; otherwise, false.

### isModified

```
public boolean isModified()
```

Gets a value indicating whether the document is modified.

#### **Returns:**

true if the document is modified; otherwise, false.

### setIsModified

```
protected void setIsModified(boolean value)
```

Sets a value indicating whether the document is modified.

### **Parameters:**

value - true if the document is modified; otherwise, false.

# getAutoSave

```
public boolean getAutoSave()
```

Gets a value indicating whether the document autosave is enabled.

### Returns

true if the document autosave is enabled; otherwise, false.

### setAutoSave

```
public void setAutoSave(boolean value)
```

Sets a value indicating whether the document autosave is enabled.

### **Parameters:**

value - true to enable document autosave; otherwise, false.

# getId

```
public abstract String getId()
  throws StorageConnectorException
```

Gets the document identifier.

#### Returns:

A string that represents the document identifier.

#### **Throws:**

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs. IMIS\_ARC storage error:

• Object ID is not valid until new object is saved.

# getSize

```
\begin{array}{c} \text{public abstract long } \textbf{getSize()} \\ \text{throws} \quad & \underbrace{\textbf{StorageConnectorException}}_{\textbf{IOException}}, \end{array}
```

Gets the size of the document.

#### **Returns:**

The size of the document, in bytes.

#### **Throws:**

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs. IMIS\_ARC storage error:

• Operation on closed object is not allowed.

IOException - if an I/O error occurs.

# getCreated

```
\begin{array}{c} \text{public abstract Date } \textbf{getCreated()} \\ \text{throws } \underbrace{\textbf{StorageConnectorException}}_{\textbf{IOException}}, \end{array}
```

Gets the creation date and time of the document.

Note: This feature is currently not supported on IMIS\_ARC storage.

### **Returns:**

The Date of document creation.

### Throws:

```
\underline{ {\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs.} \\ \underline{ {\tt IOException - if an I/O error occurs.} } \\
```

# getModified

```
\begin{array}{c} \text{public abstract Date } \textbf{getModified()} \\ \text{throws} \quad & \underbrace{\textbf{StorageConnectorException}}_{\textbf{IOException}}, \end{array}
```

Gets the date and time the document was modified.

Note: This feature is currently not supported on IMIS\_ARC storage.

#### Returns

The Date the document was modified.

#### **Throws:**

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs. IOException - if an I/O error occurs.

# getLastAccessed

Gets the date and time the document was last accessed.

Note: This feature is currently not supported on IMIS\_ARC storage.

#### **Returns:**

The Date the document was last accessed.

#### **Throws:**

 $\underline{ {\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs.} \\ \underline{ {\tt IOException - if an I/O error occurs.} }$ 

# getInputDataStream

```
\begin{array}{c} \text{public abstract InputStream } \textbf{getInputDataStream()} \\ \text{throws} \quad & \underbrace{\textbf{StorageConnectorException}}_{\textbf{IOException}}, \end{array}
```

Gets the document data input stream.

### **Returns:**

The document data input stream.

### Throws:

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs. IMIS\_ARC storage errors:

- Operation on closed object is not allowed.
- Error getting object data input stream.

IOException - if an I/O error occurs.

# getOutputDataStream

```
\begin{array}{c} \text{public abstract OutputStream } \textbf{getOutputDataStream()} \\ \text{throws} \quad & \frac{\textbf{StorageConnectorException}}{\textbf{IOException}}, \end{array}
```

Gets the document data output stream.

### **Returns:**

The document data output stream.

#### Throws:

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs. IMIS\_ARC storage errors:

- Operation on closed object is not allowed.
- Error getting object data output stream.

IOException - if an I/O error occurs.

### clone

Creates a copy of a document.

Use isClosed() property to determine whether the current document is closed.

Use isNew() property to determine whether the current document is new.

Note: This feature is currently not supported on IMIS\_ARC storage.

#### **Parameters:**

mode - a document access mode.

### **Returns:**

A Document instance.

### Throws:

```
LoginException - if a login error occurs.

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs.

IOException - if an I/O error occurs.
```

### move

Moves the document to the storage profile.

Use isClosed() property to determine whether the current document is closed.

Use isNew() property to determine whether the current document is new.

### **Parameters:**

profile - a name of the profile on the storage.

### Throws

```
NullPointerException - if profile is a null reference.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
```

 ${\color{red} \underline{\tt StorageConnectorException}} \ - \ if \ an \ IMiS/Storage \ Connector \ error \ occurs.$   ${\color{red} \underline{\tt IMIS\_ARC \ storage \ errors:}}$ 

- Operation on closed object is not allowed.
- New objects cannot be moved until they are saved and closed.
- Error occurred while saving object.
- Error occurred while closing object.
- Error occurred while moving object.
- Error occurred while opening session.
- Error getting session from the session pool.
- Error occurred while opening object.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

### delete

Deletes the document.

Use isclosed() property to determine whether the current document is closed.

After this operation completes, the document is closed.

### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS\_ARC storage errors:

- Operation on closed object is not allowed.
- Error occurred while removing object.
- Error getting session from the session pool.
- Error occurred while saving object.
- Error occurred while closing object.

IOException - if an I/O error occurs.

### save

Saves the document.

Use isClosed() property to determine whether the current document is closed.

### Throws:

CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs. IMIS\_ARC storage errors:

- Operation on closed object is not allowed.
- Error occurred while committing new object or object changes.

IOException - if an I/O error occurs.

# close

Closes the document.

### **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS\_ARC storage errors:

- Error occurred while saving object.
- Error occurred while closing object.

IOException - if an I/O error occurs.

# com.imis.storageconnector Class DocumentAccess

### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **DocumentAccess** extends Enum

Defines constants for read, write, or read/write access to a document on the storage supported by IMiS/Storage Connector.

Field Summary	
public static final	Read access to the document.
public static final	Read and write access to the document.
public static final	WRITE Write access to the document.

Method Summary	
static DocumentAccess	<u>valueOf</u> (String name)
static DocumentAccess[]	values()

### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

# Fields

# **READ**

public static final com.imis.storageconnector.DocumentAccess READ

Read access to the document. Data can be read from the document.

# **WRITE**

public static final com.imis.storageconnector.DocumentAccess WRITE

Write access to the document. Data can be written to the document.

# **READ\_WRITE**

public static final com.imis.storageconnector.DocumentAccess READ\_WRITE

Read and write access to the document. Data can be written to and read from the document.

# Methods

### values

public final static DocumentAccess[] values()

# valueOf

public static DocumentAccess valueOf(String name)

# com.imis.storageconnector Class IACSession

### **All Implemented Interfaces:**

com.imis.IAutoCloseable

# public class IACSession

extends com.imis.imisarc.client.IASession

Represents the IMiS/ARC Client session that is handled by a user context session pool.

### Fields inherited from class com.imis.imisarc.client.IASession

MAX\_DATETIME, MIN\_DATETIME, PROPERTY\_AUDIT\_LOG\_REQUIRED, PROPERTY\_AUDIT\_LOG\_SUPPORTED, PROPERTY\_AUTHENTICATED\_USER\_ACCOUNT, PROPERTY\_CAPABILITIES, PROPERTY\_CLASS\_HIERARCHY\_DELIMITER, PROPERTY\_DOCUMENT\_HIERARCHY\_DELIMITER, PROPERTY\_FOLDER\_HIERARCHY\_DELIMITER, PROPERTY\_ROOT\_EFFECTIVE\_RIGHTS, PROPERTY\_SERVICE\_NAME, PROPERTY\_SERVICE\_VERSION, PROPERTY\_TRAFFIC\_ENCRYPTED

Constructor Summary	
public	Initializes a new instance of the IACSession class.
public	Initializes a new instance of the IACSession class.

Method Summary	
int	acquire() Acquires the reference to the session.
void	close() Closes a session to IMiS/ARC Storage Server.
com.imis.imisarc.clie nt.IASessionContext	getContext()  Gets the IMiS/ARC Client authenticated session context.
int	getId()  Gets the unique session identifier.
<u>IASessionPool</u>	getOwner()  Gets the owner session pool.
Date	getTimeStamp()  Gets the time of the session last usage.
void	lock() Locks the session by acquiring this session from the parent session pool.

int	release()  Releases the reference to the session.
void	Sets the owner session pool.
void	SetTimeStamp (Date value)  Gets the time of the session last usage.
void	Unlocks this session by releasing this session from the parent session pool.

#### Methods inherited from class com.imis.imisarc.client.IASession

addAuthenticatedListener, addAuthenticatingListener, addConnectingListener, auditLogQuery, auditLogQuery, authenticate, close, createBinaryValue, createFileValue, createFileValue, createStringMaxValue, directoryGetGroupMembers, directoryGetMembers, directoryGetUserProfile, entityCheckIn, entityCheckOut, entityCreate, entityCreate, entityGetInfo, entityGetInfo, entityMove, entityOpen, entityOpen, entityRemove, entityRemove, entitySetSecurityClass, entitySetStatus, finalize, getArchives, getAuditLog, getAuthenticationData, getProperties, getPublicClassificationCode, getPublicClassificationCode, getReport, getSubEntities, getTemplates, logAddHandler, logAddHandlers, logGetHandlers, logGetLevel, logRemoveHandler, logRemoveHandlers, logSetLevel, objectCreate, objectCreate, objectMove, objectMove, objectOpen, objectOpen, objectRemove, objectRemove, objectResolveExternalId, objectSetExternalId, objectTransfer, open, open, open, open, removeAuthenticatedListener, removeAuthenticatingListener, removeConnectingListener, reopen, search, setAuthenticationData

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface com.imis.IAutoCloseable

close

# Constructors

### **IACS**ession

public IACSession()

Initializes a new instance of the IACSession class.

This constructor creates anonymous session.

### Throws:

SecurityException - if the calling thread does not have permission to create an internal class loader.

### **IACS**ession

public IACSession(IASessionPool owner)

Initializes a new instance of the <a href="IACSession">IACSession</a> class.

This constructor creates session with unique identifier.

#### **Parameters:**

owner - an owner session pool.

#### Throws:

SecurityException - if the calling thread does not have permission to create an internal class loader.

# **Methods**

# getOwner

```
public IASessionPool getOwner()
```

Gets the owner session pool.

#### **Returns:**

The owner session pool.

### setOwner

```
public void setOwner( IASessionPool value)
```

Sets the owner session pool.

#### **Parameters:**

value - the owner session pool.

# getContext

```
public com.imis.imisarc.client.IASessionContext getContext()
```

Gets the IMiS/ARC Client authenticated session context.

### **Returns:**

The IMiS/ARC Client authenticated session context or a null reference if session is not authenticated.

# getId

```
public int getId()
```

Gets the unique session identifier.

### **Returns:**

The unique session identifier or -1 for anonymous session.

# getTimeStamp

```
public Date getTimeStamp()
```

Gets the time of the session last usage.

By design, the last usage is updated before the session is returned to the session pool.

### **Returns:**

The time of the session last usage.

# setTimeStamp

```
public void setTimeStamp(Date value)
```

Gets the time of the session last usage.

By design, the last usage is updated before the session is returned to the session pool.

### **Parameters:**

value - the time of the session last usage.

# acquire

```
public int acquire()
```

Acquires the reference to the session.

This method increments and returns the session reference count.

#### **Returns:**

The session reference count.

### release

```
public int release()
```

Releases the reference to the session.

This method decrements and returns the session reference count.

### **Returns:**

The session reference count.

### lock

```
public void lock()
```

Locks the session by acquiring this session from the parent session pool.

Use  $\underline{\mathtt{unlock()}}$  method to unlock the session. This method does nothing on anonymous session.

### See Also:

IASessionPool.acquire()

### unlock

```
public void unlock()
```

Unlocks this session by releasing this session from the parent session pool.

Use lock() method to lock the session. This method does nothing on anonymous session.

### See Also:

IASessionPool.release()

### close

```
public void close()
```

Closes a session to IMiS/ARC Storage Server.

# com.imis.storageconnector Interface IArchive

public interface **IArchive** extends com.imis.IAutoCloseable

Prescribes a way with which a client can communicate with an IMiS/Storage Connector compatible archive hosted on an archiving system.

IArchive interface provides methods and properties to access different archive services and functions such as directory services, entity information and lifecycle framework, etc.

**Note:** Only IMiS/ARChive Storage Server archive is currently supported by IMiS/Storage Connector. Use one of the StorageConnector.openArchive methods to access IMIS\_ARCHIVE archive. **See Also:** 

StorageConnector.openArchive(ArchiveType, String, Map),
StorageConnector.openArchive(ArchiveType, String, int, Map)

Method Summary	
void	<u>addAuthenticatingListener(IAuthenticatingListener</u> listener)  Adds an <u>IAuthenticatingListener</u> object.
void	<u>addConnectingListener(IConnectingListener</u> listener)  Adds an <u>IConnectingListener</u> object.
InputStream	auditLogQuery(AuditQuery parameters)  Gets the audit log query results data input stream.
void	authenticate() Authenticates user on archive.
<u>IEntity</u>	<pre>changeEntityTemplate(EntityIdKind idKind, String id, String templateId,</pre>
String	<pre>checkInDraft(String id, Short position, String comment) Checks in an entity draft.</pre>
String	<pre>checkOutEntity(EntityIdKind idKind, String id, Integer sequence) Checks out an IEntity.</pre>
void	close() Closes all active sessions to an archive.
IClass	CreateClass (String templateId)  Creates a new IClass entity on the first level of entity hierarchy based on the template identifier which defines its metadata scheme and default ACL state.
<u>IClass</u>	<pre>createClass parentId) Creates a new IClass or sub-class entity instance.</pre> EntityIdKind parentIdKind, String
IDocument	<pre>createDocument parentId) Creates a new IDocument entity instance.</pre> EntityIdKind parentIdKind, String

<u>IEntity</u>	<pre>createEntity(String templateId, EntityIdKind parentIdKind, String parentId)</pre>
	Creates a new IEntity or sub-entity entity instance.
<u>IEntityReference</u>	<pre>createEntityReference() Creates a new IEntityReference.</pre>
<u>IFolder</u>	<pre>createFolder(String templateId, EntityIdKind parentIdKind, String parentId)</pre>
	Creates a new IFolder or sub-folder entity instance.
IReview	<u>createReview(IEntityStub</u> scope, Collection policies)  Creates the review given the list of retention policies and scope entity.
IReview	<u>createReview(IEntityStub</u> scope, String queryExpression)  Creates the review given the query expression and scope entity.
void	deleteEntity(EntityIdKind idKind, String id)  Deletes the IEntity and associated resources.
void	deleteEntity(EntityIdKind idKind, String id, String description, Integer sequence)  Deletes the IEntity and associated resources.
void	discardDraft (String id) Discards an entity draft.
AuditLog	getAuditLog()  Gets the archive AuditLog object.
<u>IEntityCollection</u>	Returns the read-only collection of deleted entities using the specified sort keys and a collection of property names used for categorization.
<u>IDeletionStub</u>	getDeletedEntity(EntityIdKind idKind, String id)  Queries archiving server for deleted entity public properties.
IDirectory	getDirectory()  Gets the archive IDirectory.
com.imis.util.IReadOn lyMap	getDispositionHolds()  Gets the collection of disposition holds sorted by their internal identifiers.
<u>IDraftStub</u>	getDraftInfo(String id)  Queries archiving server for draft public properties (metadata attributes) and other specifics which can be accessed without opening a draft.
<u>IEntityCollection</u>	<u>getDrafts</u> (Collection sortKeys, Collection categorizationPropertyNames)  Returns the read-only collection of entity drafts using the specified sort keys and a collection of property names used for categorization.
IReadOnlyEntityRights	getEffectiveRights(EntityIdKind idKind, String id, IDirectoryEntity subject)  Gets the users effective rights.
int	getEntityCollectionPageCount()  Gets the entity collection page count.
int	getEntityCollectionPageSize()  Gets the entity collection page size.

Мар	<pre>getEntityInfo(EntityIdKind idKind, Collection ids) Queries archiving server for entities public properties (metadata attributes) and other specifics which can be accessed without opening entities.</pre>
Map	Queries archiving server for entities public properties (metadata attributes) and other specifics which can be accessed without opening entities.
Map	
	<pre>getEntityInfo(EntityIdKind idKind, Collection ids, Set scope)</pre>
	Queries archiving server in the context of the specified user for the entities public properties (metadata attributes) and other specifics which can be accessed without opening a collection of entities and are specified by entity query scope.
<u>  IEntityStub</u>	<pre>getEntityInfo(EntityIdKind idKind, String id)</pre>
	Queries archiving server for entity public properties (metadata attributes) and other specifics which can be accessed without opening an entity.
<u>IEntityStub</u>	<pre>getEntityInfo(EntityIdKind idKind, String id, Set scope)</pre>
	Queries archiving server in the context of the specified user for entity public properties (metadata attributes) and other specifics which can be accessed without opening an entity and are specified by entity query scope.
IReadOnlyEntityRefere	<pre>getEntityReference(String referenceId)</pre>
nce	Gets the entity reference using the specified entity reference identifier.
String	getHost()
	Gets the archive information as host name or IP address and port separated by colon (:).
String	<pre>getInternalId(String externalId)</pre>
	Resolves the specified external identifier to the entity identifier that external identifier is associated with.
<u>IEntityCollection</u>	<pre>getLogEntities(LogType type, Collection sortKeys, Collection categorizationPropertyNames)</pre>
	Returns the read-only collection of logged entities using the specified sort keys and a collection of property names used for categorization.
com.imis.util.IReadOn lyMap	getProperties ()  Gets the read-only map of archive properties.
String	<pre>getPublicClassificationCode(String classificationCode)</pre>
	Converts the specified classification code in canonical format to the public classification code.
InputStream	<pre>getReport(ReportType type)</pre>
	Gets the audit log query results data input stream.
com.imis.util.IReadOn	<pre>getRetentionPolicies()</pre>
lyMap	Gets the collection of retention policies sorted by their internal identifiers.
IReviewStub	<pre>getReviewInfo(EntityIdKind idKind, String id)</pre>
	Gets the review document info.
<u>IEntityCollection</u>	<pre>getReviews(Collection sortKeys, Collection categorizationPropertyNames)</pre>
	Gets the read-only collection of review folders using the specified sort keys and a collection of property names used for categorization.
<u>IEntityCollection</u>	<pre>getRootClasses(Collection sortKeys, Collection categorizationPropertyNames)</pre>
	Returns the read-only collection the first level archive classes using the specified sort keys and a collection of property names used for categorization.
<u>IEntityCollection</u>	<pre>getSubEntities(EntityIdKind idKind, String id, EntityFilter filter, Collection sortKeys, Collection categorizationPropertyNames)</pre>
	Gets the read-only collection of child entity stubs using the specified entity filter, sort keys and a collection of property names used for categorization.

String	<u>getSystemPropertyName(SystemProperty</u> systemProperty)  Gets the system property name.
EntitySortKey	getSystemPropertySortKey(SystemProperty systemProperty, EntitySortKeyDirection direction)  Gets the entity sort key for sorting entity collection by the specified system property.
com.imis.util.IReadOn lyMap	getTemplates()  Gets the collection of entity templates registered on the archive.
String	getUser()  Gets the user of the archive.
boolean	isclosed()  Gets a value indicating whether the archive is closed.
void	moveEntity(EntityIdKind idKind, String id, EntityIdKind parentIdKind, String parentId)  Moves an IEntity with the specified entity identifier under the specified parent entity.
IClass	openClass(EntityIdKind idKind, String id, AccessMode mode)  Opens a IClass entity from the archive given by the class identifier with the specified access mode.
IDocument	openDocument (EntityIdKind idKind, String id, Integer sequence, AccessMode mode)  Opens a IDocument entity from the archive given by the document identifier with the specified access mode.
IDraft	openDraft(String id, AccessMode mode)  Opens a IDraft from the archive given by the draft identifier with the specified access mode.
<u>IEntity</u>	openEntity(EntityIdKind idKind, String id, Integer sequence, AccessMode mode, IEntity syncEntity)  Opens a generic IEntity from the archive given by the entity identifier with the specified access mode.
IFolder	openFolder (EntityIdKind idKind, String id, AccessMode mode)  Opens a IFolder entity from the archive given by the folder identifier with the specified access mode.
IReview	openReview(EntityIdKind idKind, String id, AccessMode mode)  Opens the review.
void	removeAuthenticatingListener(IAuthenticatingListener listener)  Removes an IAuthenticatingListener object.
void	removeConnectingListener(IConnectingListener listener)  Removes an IConnectingListener object.
IEntityCollection	<pre>search(EntityFilter filter, Collection sortKeys, Set options, String searchExpression, Collection categorizationPropertyNames, Long maxElements)  Searches for child entity stubs of the archive using the specified entity search filter, sort keys, search options, expression string and a collection of property names used for categorization.</pre>

<u>IEntityCollection</u>	<pre>search(EntityIdKind idKind, String id, EntityFilter filter, Collection sortKeys, Set options, String searchExpression, Collection categorizationPropertyNames, Long maxElements)  Searches for child entity stubs of the archive using the specified entity search filter, sort keys, search options, expression string and a collection of property names used for categorization.</pre>
void	Sets the entity collection page count.
void	Sets the entity collection page size.
void	setEntitySecurityClass(EntityIdKind idKind, String id, String securityClass)  Sets the security class of the entity given by the entity identifier.
void	Sets the status of the entity given by the entity identifier.

Methods inherited from interface com.imis.IAutoCloseable

close

# Methods

## add Connecting Listener

public void addConnectingListener(IConnectingListener listener)

Adds an IConnectingListener object.

### **Parameters:**

listener - an IConnectingListener.

# removeConnectingListener

public void removeConnectingListener(IConnectingListener listener)

Removes an IConnectingListener object.

### **Parameters:**

listener - an IConnectingListener.

## addAuthenticatingListener

public void addAuthenticatingListener(IAuthenticatingListener listener)

Adds an IAuthenticatingListener object.

### **Parameters:**

listener - an IAuthenticatingListener.

# remove Authenticating Listener

public void removeAuthenticatingListener(IAuthenticatingListener listener)

Removes an IAuthenticatingListener object.

#### **Parameters:**

listener - an IAuthenticatingListener.

## **isClosed**

```
public boolean isClosed()
```

Gets a value indicating whether the archive is closed.

## **Returns:**

true if the archive is closed; otherwise false.

# getHost

```
public String getHost()
```

Gets the archive information as host name or IP address and port separated by colon (:).

## **Returns:**

An archive host name or IP address and port separated by colon (:).

## getUser

```
public String getUser()
```

Gets the user of the archive.

#### **Returns:**

The user of the archive.

# getProperties

Gets the read-only map of archive properties.

## **Returns:**

The read-only map of archive properties.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting archive properties.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

# getDirectory

```
public <u>IDirectory</u> getDirectory()
    throws <u>StorageConnectorException</u>
```

Gets the archive IDirectory.

This property gives the caller access to the archive IDirectory services.

#### **Returns:**

A IDirectory instance.

## getAuditLog

```
public AuditLog getAuditLog()
```

Gets the archive AuditLog object.

This property provides access to the AuditLog interface which provides a facility for notifying archiving system about the cause for operations on entities executed from this IArchive instance.

#### **Returns:**

An AuditLog instance.

## getEntityCollectionPageSize

```
public int getEntityCollectionPageSize()
```

Gets the entity collection page size.

#### **Returns:**

The entity collection page size.

## setEntityCollectionPageSize

```
public void setEntityCollectionPageSize(int value)
```

Sets the entity collection page size.

## **Parameters:**

value - the entity collection page size.

## Throws:

 ${\tt IllegalArgumentException-if\ value\ is\ less\ than\ or\ equal\ to\ 0.}$ 

## getEntityCollectionPageCount

```
public int getEntityCollectionPageCount()
```

Gets the entity collection page count.

## **Returns:**

The entity collection page count.

## setEntityCollectionPageCount

```
public void setEntityCollectionPageCount(int value)
```

Sets the entity collection page count.

#### **Parameters:**

value - the entity collection page count.

#### Throws:

 ${\tt IllegalArgumentException-if\ value\ is\ less\ than\ or\ equal\ to\ 0.}$ 

# getTemplates

```
public com.imis.util.IReadOnlyMap getTemplates()
    throws StorageConnectorException
```

Gets the collection of entity templates registered on the archive.

#### Returns

A read-only map of ITemplate objects sorted by their unique identifiers.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting templates on archive.

## getRetentionPolicies

```
public com.imis.util.IReadOnlyMap getRetentionPolicies()
    throws StorageConnectorException
```

Gets the collection of retention policies sorted by their internal identifiers.

### **Returns:**

A read-only map of IRetentionPolicy objects sorted by their identifiers.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred trying to access Policies class.
- Error occurred while getting entity child entities on archive.

## getDispositionHolds

```
public com.imis.util.IReadOnlyMap getDispositionHolds()
    throws StorageConnectorException
```

Gets the collection of disposition holds sorted by their internal identifiers.

## **Returns:**

A read-only map of IDispositionHold objects sorted by their identifiers.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed archive is not allowed.

## authenticate

Authenticates user on archive.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.

IOException - if an I/O error occurs.

## getEntityReference

Gets the entity reference using the specified entity reference identifier.

### **Parameters:**

referenceId - the entity reference identifier.

## **Returns:**

The IReadOnlyEntityReference object.

### Throws:

NullPointerException - if referenceId is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.

IOException - if an I/O error occurs.

# createEntityReference

Creates a new IEntityReference.

#### **Returns:**

The IEntityReference object.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

## createEntity

Creates a new IEntity or sub-entity entity instance.

Note: This operation allows user to pass a reason for creating entity. Reason can be passed through AuditLog message.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

#### **Parameters:**

```
templateId - the entity template identifier from the templates inventory. parentIdKind - the parent entity identifier kind. parentId - the parent identifier.
```

#### Returns:

A new IEntity instance.

### Throws:

```
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
NullPointerException - if templateId is a null reference.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

## createClass

Creates a new IClass entity on the first level of entity hierarchy based on the template identifier which defines its metadata scheme and default ACL state.

Note: This operation allows user to pass a reason for creating class. Reason can be passed through AuditLog message.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

#### **Parameters:**

templateId - the class template identifier from the templates inventory.

#### Returns

A new IClass instance.

### **Throws:**

```
NullPointerException - if templateId is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Operation on closed entity is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

## createClass

Creates a new IClass or sub-class entity instance.

Note: This operation allows user to pass a reason for creating class. Reason can be passed through AuditLog message.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

#### **Parameters:**

```
templateId - the class template identifier from the templates inventory. parentIdKind - the parent entity identifier kind. parentId - the parent identifier.
```

#### **Returns:**

A new IClass instance.

### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

NullPointerException - if templateId is a null reference.

StorageConnectorException - if an IMis/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

## createFolder

Creates a new IFolder or sub-folder entity instance.

Note: This operation allows user to pass a reason for creating folder. Reason can be passed through AuditLog message.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

### **Parameters:**

```
templateId - the folder template identifier from the templates inventory. parentIdKind - the parent identifier kind. parentId - the parent identifier.
```

### **Returns:**

A new IFolder instance.

#### **Throws**:

```
\label{lem:nullpointer} NullPointer \verb|Exception| - if templateId is a null reference. \\ Cancellation \verb|Exception| - if an operation was canceled by the user. \\ Login \verb|Exception| - if a login error occurs. \\
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

## createDocument

Creates a new IDocument entity instance.

**Note:** This operation allows user to pass a reason for creating document. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

#### **Parameters:**

```
templateId - the document template identifier from the templates inventory. parentIdKind - the parent identifier kind. parentId - the parent identifier.
```

### **Returns:**

A new IDocument instance.

### Throws:

```
NullPointerException - if templateId is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMis/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

## openEntity

Opens a generic IEntity from the archive given by the entity identifier with the specified access mode.

The entity identifier can be either internal identifier, externally assigned or classification code.

Note: This operation allows user to pass a reason for opening entity. Reason can be passed through AuditLog message.

#### **Parameters:**

```
idKind - the entity identifier kind.
id - the entity identifier.
sequence - the entity version sequence.
mode - the entity access mode.
syncEntity - the entity with which opened entity should be synchronized when used in sync dependent operations.
```

## **Returns:**

An IEntity instance.

#### **Throws:**

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

# openClass

Opens a IClass entity from the archive given by the class identifier with the specified access mode.

The class identifier can be either internal identifier, externally assigned or classification code.

Note: This operation allows user to pass a reason for opening class. Reason can be passed through AuditLog message.

## **Parameters:**

```
idKind - the class identifier kind.id - the class identifier.mode - the class access mode.
```

#### **Returns:**

A IClass instance.

#### Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.
- Entity identifier does not represent a IClass entity.

IOException - if an I/O error occurs.

## openFolder

Opens a IFolder entity from the archive given by the folder identifier with the specified access mode.

The folder identifier can be either internal identifier, externally assigned or classification code.

Note: This operation allows user to pass a reason for opening folder. Reason can be passed through AuditLog message.

## **Parameters:**

```
idKind - the folder identifier kind.id - the folder identifier.mode - the folder access mode.
```

### **Returns:**

A IFolder instance.

## Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.
- Entity identifier does not represent a IFolder entity.

IOException - if an I/O error occurs.

# openDocument

Opens a IDocument entity from the archive given by the document identifier with the specified access mode.

**Note:** This operation allows user to pass a reason for opening document. Reason can be passed through <a href="Multi-Log"><u>AuditLog</u></a> message.

The document identifier can be either internal identifier, externally assigned or classification code.

#### **Parameters:**

```
idKind - the document identifier kind.
id - the document identifier.
sequence - the document version sequence.
mode - the document access mode.
```

#### Returns:

A IDocument instance.

#### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.
- Entity identifier does not represent a IDocument entity.

IOException - if an I/O error occurs.

# changeEntityTemplate

Opens a generic IEntity from the archive given by the entity identifier in read-write mode and changes its template to the specified value. Entity needs to be saved in order for template switch to occur. Attribute values present in original and new template are preserved, others are cleared. All mutable entity operations are allowed on returned entity instances. **Note:** This operation is not supported on versioned entities, drafts or system entities (entities which are based on "sys:\*" templates). Using system templates ("sys:\*") as designated new templates is not permitted. **Note:** This operation allows user to pass a reason for opening entity. Reason can be passed through AuditLog message.

#### **Parameters:**

```
idKind - the entity identifier kind.id - the entity identifier.
```

templateId - the entity's new template identifier from the templates inventory.

syncEntity - the entity with which opened entity should be synchronized when used in sync dependent operations.

#### **Returns:**

An IEntity instance.

#### Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.

IOException - if an I/O error occurs.

## moveEntity

Moves an IEntity with the specified entity identifier under the specified parent entity.

The entity identifier can be either internal identifier, externally assigned or classification code.

Note: This operation requires user to pass a reason for moving entity. Reason must be passed through AuditLog message.

## **Parameters:**

```
idKind - the entity identifier kind.
id - the entity identifier of the entity to move.
parentIdKind - the parent entity identifier kind.
parentId - the entity identifier of the new parent entity.
```

#### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Parent entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while moving entity on archive.

IOException - if an I/O error occurs.

# deleteEntity

Deletes the IEntity and associated resources.

Use this method to remove all resources associated with the entity and the entity itself. Delete right is required for this operation to succeed.

Note: This operation requires user to pass reason for deleting entity. Reason must be passed through AuditLog message.

**Note:** This operation requires description for deleted entity. Use this method only if the entity has its own description that will be used as deleted entity description, otherwise this method will fail.

Note: This operation is irreversible. Entity will not be accessible after a successful call is completed.

#### **Parameters:**

```
idKind - the entity identifier kind.
id - the entity identifier.
```

#### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMis/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while removing entity on archive.

IOException - if an I/O error occurs.

# checkOutEntity

Checks out an IEntity.

Note: This operation allows user to pass reason for checking out entity. Reason can be passed through AuditLog message.

### **Parameters:**

```
idKind - the entity identifier kind.id - the entity identifier.sequence - the entity version sequence.
```

## **Returns:**

An IEntityStub instance of the entity private working copy.

## Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while checking out entity on archive.

IOException - if an I/O error occurs.

## checkInDraft

Checks in an entity draft.

**Note:** This operation allows user to pass reason for checking in entity draft. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

#### **Parameters:**

```
id - the entity draft identifier.position - the entity draft check in position in the versioning tree.comment - the entity draft check in comment recorded in version history or a null reference if not specified.
```

### **Returns:**

An IEntityStub instance of the checked in entity.

#### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while checking out entity on archive.

IOException - if an I/O error occurs.

## discardDraft

Discards an entity draft.

**Note:** This operation allows user to pass reason for discarding entity draft. Reason can be passed through <a href="Multilog"><u>AuditLog</u></a> message.

#### **Parameters:**

id - the entity draft identifier.

#### Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while checking out entity on archive.

IOException - if an I/O error occurs.

## deleteEntity

Deletes the IEntity and associated resources.

Use this method to remove all resources associated with the entity and the entity itself. Delete right is required for this operation to succeed.

Note: This operation requires user to pass reason for deleting entity. Reason must be passed through AuditLog message.

**Note:** This operation requires description for deleted entity. If one is not provided via description parameter, this method will fail if the entity does not have its own description.

Note: This operation is irreversible. Entity will not be accessible after a successful call is completed.

### **Parameters:**

```
idKind - the entity identifier kind.
```

id - the entity identifier.

description - a custom description for deleted entity in case delete agent wants to specify it or a null reference to use existing entity description.

sequence - the entity version sequence.

## Throws:

```
NullPointerException - if id is a null reference.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Entity description is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while removing entity on archive.

IOException - if an I/O error occurs.

## getEntityInfo

Queries archiving server for entity public properties (metadata attributes) and other specifics which can be accessed without opening an entity.

This method enables queries on single object, that is one entity identifier.

The entity identifier can be either internal identifier, externally assigned or classification code.

The returned IEntityStub object describe the public information about the entity which was queried.

#### **Parameters:**

```
idKind - the entity identifier kind.id - the entity identifier to be queried for their public information.
```

## **Returns:**

An IEntityStub object.

## **Throws:**

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Identifier does not represent an entity.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

# getEntityInfo

Queries archiving server in the context of the specified user for entity public properties (metadata attributes) and other specifics which can be accessed without opening an entity and are specified by entity query scope.

This method enables queries on single object, that is one entity identifier.

The entity identifier can be either internal identifier, externally assigned or classification code.

The returned IEntityStub object describe the public information about the entity which was queried.

## **Parameters:**

idKind - the entity identifier kind.id - the entity identifier to be queried for their public information.scope - the entity query scope.

#### **Returns:**

An IEntityStub object.

#### Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Identifier does not represent an entity.

IOException - if an I/O error occurs.

## getEntityInfo

Queries archiving server for entities public properties (metadata attributes) and other specifics which can be accessed without opening entities.

The entity identifier can be either internal identifier, externally assigned or classification code.

The returned IEntityStub objects describe the public information about each entity which was queried. The result is organized in a tree where the returning collection represents the collection of leaf stubs with their super stubs referenced as parent stubs.

#### **Parameters:**

idKind - the entity identifier kind.

ids - the collection of entity identifiers as String objects to be queried for their public information.

## **Returns:**

A map of IEntityStub objects sorted by their unique identifiers.

## Throws:

```
NullPointerException - if ids is a null reference or contains a null reference. CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Collection of entity identifiers is required and cannot be empty.
- Entity identifier is required and cannot be empty.
- Entity identifiers are not of the same format.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Identifier does not represent an entity.

IOException - if an I/O error occurs.

## See Also:

**IEntityStub** 

# getEntityInfo

Queries archiving server in the context of the specified user for the entities public properties (metadata attributes) and other specifics which can be accessed without opening a collection of entities and are specified by entity query scope.

The entity identifier can be either internal identifier, externally assigned or classification code.

The returned IEntityStub objects describe the public information about each entity which was queried. The result is organized in a tree where the returning collection represents the collection of leaf stubs with their super stubs referenced as parent stubs.

## **Parameters:**

```
idKind - the entity identifier kind.

ids - the collection of entity identifiers as String objects to be queried for their public information.

scope - the entity query scope.
```

#### Doturne

A map of IEntityStub objects sorted by their unique identifiers.

#### **Throws:**

```
NullPointerException - if ids is a null reference or contains a null reference. CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs. StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Collection of entity identifiers is required and cannot be empty.
- Entity identifier is required and cannot be empty.
- Entity identifiers are not of the same format.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Identifier does not represent an entity.

IOException - if an I/O error occurs.

#### See Also:

**IEntityStub** 

## setEntityStatus

Sets the status of the entity given by the entity identifier.

**Note:** This operation allows user to pass a reason for changing entity status. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

#### **Parameters:**

```
idKind - the entity identifier kind.
id - the entity identifier.
status - the entity status or a null reference to reset status to inherited value.
```

#### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while getting entities info on archive.
- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while setting status to value.

IOException - if an I/O error occurs.

# setEntitySecurityClass

Sets the security class of the entity given by the entity identifier.

**Note:** This operation requires user to pass a reason for changing entity security class. Reason must be passed through AuditLog message.

### **Parameters:**

```
idKind - the entity identifier kind.
id - the entity identifier.
securityClass - the entity security class or a null reference to reset security class to inherited value.
```

#### Throws

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while getting entities info on archive.
- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while setting security class to value.

IOException - if an I/O error occurs.

## getRootClasses

```
public IEntityCollection getRootClasses(Collection sortKeys,
         Collection categorizationPropertyNames)
  throws javax.security.auth.login.LoginException,
         StorageConnectorException,
         IOException
```

Returns the read-only collection the first level archive classes using the specified sort keys and a collection of property names used for categorization.

#### **Parameters:**

sortKeys - the collection of EntitySortKey to be used for sorting the resulting entity collection or null if the collection does not need to be sorted.

categorizationPropertyNames - the collection of property names used for categorization.

## **Returns:**

The read-only collection of IEntityStub objects representing the first level archive classes.

CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting root classes on archive.

IOException - if an I/O error occurs.

### See Also:

**IEntityStub** EntitySortKey

## getSubEntities

Gets the read-only collection of child entity stubs using the specified entity filter, sort keys and a collection of property names used for categorization.

#### **Parameters:**

```
idKind - the entity identifier kind.
id - the entity identifier.
filter - the entity filter or a null reference.
sortKeys - the collection of EntitySortKey objects.
categorizationPropertyNames - the collection of property names used for categorization.
```

#### **Returns:**

The read-only collection of IEntityStub objects representing the entity children.

#### **Throws:**

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting root classes on archive.

IOException - if an I/O error occurs.

### See Also:

```
IEntityStub
EntitySortKey
```

## getDeletedEntity

Queries archiving server for deleted entity public properties.

This method enables queries on single object, that is one deleted entity identifier.

The returned IDeletionStub object describe the public information about the deleted entity which was queried.

## **Parameters:**

```
idKind - the entity identifier kind.id - the deleted entity identifier to be queried for their public information.
```

### **Returns:**

An IDeletionStub object.

#### Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Identifier does not represent a deleted entity.

IOException - if an I/O error occurs.

## getDeletedEntities

Returns the read-only collection of deleted entities using the specified sort keys and a collection of property names used for categorization.

#### **Parameters:**

kind - the deletion kind of deleted entities.

sortKeys - the collection of EntitySortKey objects to be used for sorting the resulting deleted entity collection or null if the collection does not need to be sorted.

#### **Returns:**

The read-only collection of IDeletionStub objects representing the deleted entities.

## Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred trying to access Deleted or Disposed class.

IOException - if an I/O error occurs.

#### See Also:

IDeletionStub EntitySortKey

## getDrafts

Returns the read-only collection of entity drafts using the specified sort keys and a collection of property names used for categorization.

## **Parameters:**

sortKeys - the collection of EntitySortKey objects to be used for sorting the resulting collection of entity drafts or null if the collection does not need to be sorted.

categorizationPropertyNames - the collection of property names used for categorization.

## **Returns:**

The read-only collection of IDraftStub objects representing the drafts.

#### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred trying to access Drafts class.
- Error occurred while getting entity child entities on archive.

IOException - if an I/O error occurs.

# getLogEntities

Returns the read-only collection of logged entities using the specified sort keys and a collection of property names used for categorization.

## **Parameters:**

```
type - the log type.
```

sortKeys - the collection of EntitySortKey objects to be used for sorting the resulting logged entity collection or null if the collection does not need to be sorted.

 $\verb|categorizationPropertyNames| - the collection of property names used for categorization.\\$ 

## **Returns:**

The read-only collection of IEntityStub objects representing the logged entities.

#### Throws

```
IllegalArgumentException - if invalid log type.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred trying to access Import, Export or Transfer class.
- Error occurred while getting entity child entities on archive.

IOException - if an I/O error occurs.

#### See Also:

IEntityStub EntitySortKey

## search

Searches for child entity stubs of the archive using the specified entity search filter, sort keys, search options, expression string and a collection of property names used for categorization.

### **Parameters:**

```
filter - the entity search filter or a null reference.
sortKeys - the collection of EntitySortKey objects.
options - the search options.
searchExpression - the search expression string.
categorizationPropertyNames - the collection of property names used for categorization.
maxElements - the number of elements the resulting collection should be truncated to.
```

## **Returns:**

The read-only collection of ISearchedEntityStub objects representing the search results.

## Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while performing search on archive.

IOException - if an I/O error occurs.

## See Also:

ISearchedEntityStub
EntityFilter
EntitySortKey
SearchOptions

## search

Searches for child entity stubs of the archive using the specified entity search filter, sort keys, search options, expression string and a collection of property names used for categorization.

### **Parameters:**

```
idKind - the entity identifier kind.
id - the entity identifier.
filter - the entity search filter or a null reference.
sortKeys - the collection of EntitySortKey objects.
options - the search options.
searchExpression - the search expression string.
categorizationPropertyNames - the collection of property names used for categorization.
maxElements - the number of elements the resulting collection should be truncated to.
```

#### **Returns:**

The read-only collection of ISearchedEntityStub objects representing the search results.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while performing search on archive.

IOException - if an I/O error occurs.

### See Also:

ISearchedEntityStub
EntityFilter
EntitySortKey
SearchOptions

## createReview

Creates the review given the list of retention policies and scope entity.

Note: This operation allows user to pass a reason for creating review. Reason can be passed through AuditLog message.

#### **Parameters:**

```
scope - the scope entity.
policies - a collection of retention policies.
```

#### Returns:

An IReview instance.

#### Throws:

NullPointerException - if policies is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

### See Also:

IReview IEntityStub IRetentionPolicy

## createReview

Creates the review given the query expression and scope entity.

Note: This operation allows user to pass a reason for creating review. Reason can be passed through AuditLog message.

## **Parameters:**

```
scope - the scope entity.
queryExpression - the query expression.
```

## **Returns:**

An IReview instance.

## Throws:

NullPointerException - queryExpression is a null reference. CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

## See Also:

IReview
IEntityStub

## getReviews

Gets the read-only collection of review folders using the specified sort keys and a collection of property names used for categorization.

#### **Parameters:**

```
sortKeys - the collection of EntitySortKey objects. categorizationPropertyNames - the collection of property names used for categorization.
```

## **Returns:**

The read-only collection of IReviewStub objects representing the review folders.

## Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entity child entities on archive.

IOException - if an I/O error occurs.

## See Also:

IReviewStub EntitySortKey

# getReviewInfo

```
 \begin{array}{c} \text{public} \quad \underline{\frac{\text{IReviewStub}}{\text{String id}}} \quad \underline{\text{getReviewInfo}}(\underline{\text{EntityIdKind}} \quad \text{idKind,} \\ \text{throws javax.security.auth.login.LoginException,} \\ \underline{\frac{\text{StorageConnectorException}}{\text{IOException}}}, \end{array}
```

Gets the review document info.

#### **Parameters:**

idKind - the review document identifier kind.

id - the review document identifier.

#### **Returns:**

An IReviewStub stub.

#### **Throws:**

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Identifier does not represent a review.

IOException - if an I/O error occurs.

## See Also:

IReviewStub

# getEffectiveRights

Gets the users effective rights.

### **Parameters:**

idKind - the entity identifier kind.

id - the entity identifier.

subject - the directory entity of the user to impersonate or a null reference for the current user.

## **Returns:**

The read-only set of rights describing users effective rights.

#### Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.

IOException - if an I/O error occurs.

## openReview

Opens the review.

Note: This operation allows user to pass a reason for opening review. Reason can be passed through AuditLog message.

#### **Parameters:**

```
idKind - the review document identifier kind. id - he review document identifier. mode - the review document access mode.
```

#### **Returns:**

The IReview instance.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.

 ${\tt IOException -} if \ an \ I/O \ error \ occurs.$ 

### See Also:

**IReview** 

# audit Log Query

Gets the audit log query results data input stream.

## **Parameters:**

parameters - the audit log query parameters.

## **Returns:**

The audit log query results data input stream.

#### Throws

```
NullPointerException - if parameters is a null reference.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error getting audit query results data stream.

IOException - if an I/O error occurs.

## See Also:

AuditQuery

# getReport

Gets the audit log query results data input stream.

#### **Parameters:**

type - the audit log query parameters.

#### **Returns:**

The report input data stream or a null reference if there is no report for the specified report type.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while getting archive report.

IOException - if an I/O error occurs.

## See Also:

ReportType

## getSystemPropertyName

```
public String getSystemPropertyName(SystemProperty systemProperty)
```

Gets the system property name.

## **Parameters:**

systemProperty - the system property.

## **Returns:**

The system property name.

## Throws:

IllegalArgumentException - if invalid system property.

## See Also:

SystemProperty

# ${\bf getPublicClassificationCode}$

Converts the specified classification code in canonical format to the public classification code.

## **Parameters:**

```
classificationCode - the classification code in canonical format (e.g. "C=001^C=001^C="+...+"^F=2004^F="+...+"^D=0001", where "C=", "F=" and "D=" denote class, folder and document respectively and "^" is the classification hierarchy delimiter).
```

#### **Returns:**

The public classification code (e.g. "001.001."+...+"-2004-"+...+"/0001", where ".", "-" and "/" are class, folder and document entity type hierarchy delimiters) or a null reference if classificationCode is null.

## **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred converting classification code to public format.

IOException - if an I/O error occurs.

## getSystemPropertySortKey

Gets the entity sort key for sorting entity collection by the specified system property.

### **Parameters:**

```
systemProperty - the system property. direction - the sorting direction.
```

## **Returns:**

An EntitySortKey object used for sorting entity collection by the specified system property.

### See Also:

```
SystemProperty
EntitySortKey
EntitySortKeyDirection
```

## getInternalId

Resolves the specified external identifier to the entity identifier that external identifier is associated with.

## **Parameters:**

externalId - an external entity identifier.

#### **Returns:**

The entity identifier that externalId is associated with.

#### Throws

LoginException - if a login error occurs. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while getting internal identifier.

IOException - if an I/O error occurs.

# getDraftInfo

Queries archiving server for draft public properties (metadata attributes) and other specifics which can be accessed without opening a draft. The returned IDraftStub object describes the public information about the draft which was queried.

## **Parameters:**

id - the draft identifier to be queried for their public information.

#### Returns:

An IDraftStub object.

#### **Throws:**

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Draft identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Identifier does not represent a draft.

IOException - if an I/O error occurs.

## openDraft

Opens a IDraft from the archive given by the draft identifier with the specified access mode. **Note:** This operation allows user to pass a reason for opening draft. Reason can be passed through AuditLog message.

#### **Parameters:**

```
id - the draft identifier.
mode - the draft access mode.
```

## **Returns:**

An IDraft instance.

## **Throws:**

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed. Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening draft on archive.

IOException - if an I/O error occurs.

## close

public void close()

Closes all active sessions to an archive.

# com.imis.storageconnector Class IASessionPool

# public class **IASessionPool** extends Object

Represents a session pool with one storage server node.

Constructor Summary	
public	IASessionPool (String host, com.imis.imisarc.client.IASessionOptions options, com.imis.imisarc.client.IASessionContext context, int maxCount, boolean persistent, com.imis.imisarc.client.IConnectingListener connectingListener, com.imis.imisarc.client.IAuthenticatingListener authenticatingListener)  Initializes a new instance of the IASessionPool class.

Method Summary		
int	acquire() Acquires the reference to the session pool.	
void	acquireSession(IACSession session)  Acquires the specified session and removes it from the session pool, if the session reference count equals 1.	
boolean	Adds the session to the session pool.	
Date	<u>cleanSessions</u> (Date nextCheck, int period)  Cleans sessions that were not used for a specified period or more from the session pool.	
void	closeSessions() Closes all sessions in the session pool.	
com.imis.imisarc.clie nt.IASessionContext	getContext()  Gets the session pool context.	
boolean	Gets a value indicating whether session pool is persistent or not.	
IACSession	getSession()  Gets an authenticated session from the session pool.	
int	release()  Releases the reference to the session pool.	
void	releaseSession(IACSession session)  Releases the specified session and returns it to the session pool, if the session reference count equals 0.	
void	Sets a value indicating whether session pool is persistent or not.	

### Methods inherited from class java.lang.Object

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

### Constructors

### **IASessionPool**

Initializes a new instance of the IASessionPool class.

Sessions in a persistent session pool is not removed from the list of session context session pools.

#### **Parameters:**

```
host - a host of the IMiS/ARC Storage Server.

options - a IMiS/ARC Client session options.

context - an IMiS/ARC Client authenticated session context.

maxCount - the maximum number of sessions in the session pool.

persistent - true to indicate the session pool is persistent; otherwise, false.

connectingListener - the IMiS/ARC Client session Connecting event listener.

authenticatingListener - the IMiS/ARC Client session Authenticating event listener.
```

# Methods

### getContext

```
public com.imis.imisarc.client.IASessionContext getContext()
```

Gets the session pool context.

### **Returns:**

The session pool context.

### getPersistent

```
public boolean getPersistent()
```

Gets a value indicating whether session pool is persistent or not.

### **Returns:**

true if session pool is persistent; otherwise, false.

### setPersistent

```
public void setPersistent(boolean value)
```

Sets a value indicating whether session pool is persistent or not.

#### **Parameters:**

value - true if session pool is persistent; otherwise, false.

### acquire

```
public int acquire()
```

Acquires the reference to the session pool.

This method increments and returns the session pool reference count.

### **Returns:**

The session pool reference count.

### release

```
public int release()
```

Releases the reference to the session pool.

This method decrements and returns the session pool reference count.

#### **Returns:**

The session pool reference count.

### closeSessions

```
public void closeSessions()
```

Closes all sessions in the session pool.

### cleanSessions

Cleans sessions that were not used for a specified period or more from the session pool.

### **Parameters:**

```
nextCheck - the time the next session clean is scheduled. period - the period for default session clean check in seconds.
```

#### Returns:

The time the next clean should be performed. Default return value, used when there are no sessions in the session pool, is set to Now + period.

### addSession

```
public boolean addSession(IACSession session)
```

Adds the session to the session pool.

#### **Parameters:**

session - the IMiS/ARC Client session to add.

#### **Returns:**

true if the session was added to the session pool; otherwise false.

# getSession

Gets an authenticated session from the session pool.

This method either retrieves and removes an existing session from the session pool or creates a new session. Whatever the case, the resulting session must be passed as a parameter to the <u>release()</u> method to place the session back in the session pool after use.

#### **Returns:**

An IMiS/ARC Client session.

### **Throws:**

 $\label{login} \begin{tabular}{ll} Login Exception - if a login error occurs. \\ Storage Connector Exception - if \\ \end{tabular}$ 

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.

IOException - if an I/O error occurs.

### acquireSession

```
public void acquireSession(IACSession session)
```

Acquires the specified session and removes it from the session pool, if the session reference count equals 1.

### Parameters:

session - the IMiS/ARC Client session to acquire.

### releaseSession

```
public void releaseSession(IACSession session)
```

Releases the specified session and returns it to the session pool, if the session reference count equals 0.

### Parameters:

session - the IMiS/ARC Client session to release.

# com.imis.storageconnector Class IASessionPoolManager

# public class IASessionPoolManager extends Object

Represents the IMiS/Storage Connector session pool manager.

IASessionPoolManager is a singleton class that allows a single instance of this class to be created.

Method Summary		
void	close() Closes the session pool manager thread.	
static <u>IASessionPoolManager</u>	Gets a singleton instance of the IASessionPoolManager class.	
IASessionPool	<pre>getSessionPool(String host, Map options,   com.imis.imisarc.client.IConnectingListener connectingListener,   com.imis.imisarc.client.IAuthenticatingListener authenticatingListener)   Gets the session pool for context based on the specified host and storage/archive options.</pre>	
void	releaseSessionPool (IASessionPool sessionPool)  Releases the session pool and removes it from the list of context session pools if the reference count value after release equals to 0.	

### Methods inherited from class java.lang.Object

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

# Methods

### getInstance

public static IASessionPoolManager getInstance()

Gets a singleton instance of the  ${\tt IASessionPoolManager}$  class.

### **Returns:**

An IASessionPoolManager instance.

### close

public void close()

Closes the session pool manager thread.

### getSessionPool

Gets the session pool for context based on the specified host and storage/archive options.

This method is used to get the context session pool for the IArchive and IAStorage instances.

#### **Parameters:**

```
host - a storage/archive host name or IP address and port.

options - a map of storage/archive options.

connectingListener - the IMiS/ARC Client session Connecting event listener.

authenticatingListener - the IMiS/ARC Client session Authenticating event listener.
```

#### **Returns:**

The context session pool.

#### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.

IOException - if an I/O error occurs.

### releaseSessionPool

```
public void releaseSessionPool(IASessionPool sessionPool)
```

Releases the session pool and removes it from the list of context session pools if the reference count value after release equals to 0.

#### **Parameters:**

sessionPool - the context session pool.

# com.imis.storageconnector Interface IAuthenticatingListener

public interface **IAuthenticatingListener** extends EventListener

The listener interface for receiving AuthenticatingEvent.

# **Method Summary**

void

authenticating(AuthenticatingEvent e)

This method gets called when data for authentication is needed.

# Methods

# authenticating

public void authenticating(AuthenticatingEvent e)

This method gets called when data for authentication is needed.

### **Parameters:**

e - the AuthenticatingEvent object.

# com.imis.storageconnector Interface IConnectingListener

public interface IConnectingListener extends

The listener interface for receiving ConnectingEvent.

# Method Summary

void

connecting(ConnectingEvent e)

This method gets called when session is attempting to connect.

# Methods

# connecting

public void connecting(ConnectingEvent e)

This method gets called when session is attempting to connect.

### **Parameters:**

e - the ConnectingEvent object.

# com.imis.storageconnector Interface IContentTypeResolver

 $\label{eq:public_interface} \begin{public} public interface \end{public} IContent Type Resolver \\ extends \end{public}$ 

Defines the methods used by external content type and extension resolver.

Method Summary	
String	Gets the first available content type for a specified extension.
List	Gets the content types for a specified extension.
String	getExtension (String contentType)  Gets the first available extension for a specified content type.
List	getExtensions (String contentType)  Gets the extensions for a specified content type.

# Methods

### getExtension

public String getExtension(String contentType)

Gets the first available extension for a specified content type.

### **Parameters:**

contentType - the file format content type (case sensitive).

### **Returns:**

The first available extension (including the leading period) for the specified content type or a null reference if no extensions are defined.

### **Throws:**

NullPointerException - if contentType is a null reference.

# getExtensions

public List getExtensions(String contentType)

Gets the extensions for a specified content type.

### **Parameters:**

contentType - the file format content type (case sensitive).

#### Returns

A list of extensions (including the leading period) for the specified content type.

### Throws:

NullPointerException - if contentType is a null reference.

### getContentType

public String getContentType(String extension)

Gets the first available content type for a specified extension.

### **Parameters:**

extension - a file format extension (with or without a leading period).

### **Returns:**

The first available content type for a specified extension or a null reference if no content types are defined.

### **Throws:**

NullPointerException - if extension is a null reference.

# getContentTypes

public List getContentTypes(String extension)

Gets the content types for a specified extension.

### **Parameters:**

extension - a file format extension (with or without a leading period).

#### **Returns:**

A list of content types for a specified extension.

### **Throws:**

NullPointerException - if extension is a null reference.

# com.imis.storageconnector Class ObjectIdEncoding

### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ObjectIdEncoding** extends Enum

Defines constants that represent the encoding of object identifiers used when creating new objects.

Constants are used as values for the <a href="StorageConnector.OPTION\_OBJECT\_IDENCODING">Storage object identifier encoding disposition option</a>.

#### See Also:

```
StorageConnector.openIMiSARCStorage(String, Map),
StorageConnector.openIMiSARCStorage(String, String, Map),
StorageConnector.openIMiSARCStorage(String, int, Map),
StorageConnector.openIMiSARCStorage(String, int, String, Map)
```

Field Summary	
public static final	Base 16 encoding.
public static final	Base 64 encoding.
public static final	Base 85 encoding.

Method Summary	
static ObjectIdEncoding	<pre>valueOf(String name)</pre>
static ObjectIdEncoding[]	values()

### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

# Fields

### BASE16

### BASE64

public static final com.imis.storageconnector.ObjectIdEncoding BASE64

Base 64 encoding.

### BASE85

public static final com.imis.storageconnector.ObjectIdEncoding BASE85

Base 85 encoding.

# Methods

### values

public final static ObjectIdEncoding[] values()

### valueOf

public static ObjectIdEncoding valueOf(String name)

# com.imis.storageconnector Class ObjectIdKind

### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ObjectIdKind** extends Enum

Defines constants that represent the kind of object identifiers used when opening objects.

Constants are used as values for the <a href="StorageConnector.OPTION\_OBJECT\_IDKIND">Storage Object identifier kind disposition option</a>.

### See Also:

```
StorageConnector.openIMisARCStorage(String, Map),
StorageConnector.openIMisARCStorage(String, String, Map),
StorageConnector.openIMisARCStorage(String, int, Map),
StorageConnector.openIMisARCStorage(String, int, String, Map)
```

Field Summary	
public static final	EXTERNAL Object identifier is external.
public static final	INTERNAL Object identifier is internal.
public static final	UNKNOWN Object identifier type is not known.

Method Summary	
static ObjectIdKind	<pre>valueOf(String name)</pre>
static ObjectIdKind[]	values()

### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

### **UNKNOWN**

public static final com.imis.storageconnector.ObjectIdKind UNKNOWN

Object identifier type is not known.

Object identifier type can be either internal or external.

### **INTERNAL**

public static final com.imis.storageconnector.ObjectIdKind INTERNAL

Object identifier is internal.

Document.getId() represents an internal object identifier.

### **EXTERNAL**

public static final com.imis.storageconnector.ObjectIdKind EXTERNAL

Object identifier is external.

External object identifiers can be associated with an object using the <a href="Storage.setExternalObjectId(String">Storage.setExternalObjectId(String</a>, <a href="Storage.setExternalObjectId(String">String</a>) method.

# Methods

### values

public final static ObjectIdKind[] values()

### valueOf

public static ObjectIdKind valueOf(String name)

# com.imis.storageconnector Class ObjectIdType

### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ObjectIdType** extends Enum

Defines constants that represent the types of object identifiers used when creating new objects.

Constants are used as values for the <a href="StorageConnector.OPTION\_OBJECT\_IDTYPE">Storage Object identifier type disposition option</a>.

### See Also:

```
StorageConnector.openIMisARCStorage(String, Map),
StorageConnector.openIMisARCStorage(String, String, Map),
StorageConnector.openIMisARCStorage(String, int, Map),
StorageConnector.openIMisARCStorage(String, int, String, Map)
```

Field Summary	
public static final	192 bit long object identifier.
public static final	1D256 256 bit long object identifier.

Method Summary	
static ObjectIdType	<pre>valueOf(String name)</pre>
static ObjectIdType[]	values()

### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

# Fields

### **ID192**

### **ID256**

public static final com.imis.storageconnector.ObjectIdType ID256
256 bit long object identifier.

# Methods

### values

public final static ObjectIdType[] values()

### valueOf

public static ObjectIdType valueOf(String name)

# com.imis.storageconnector Class Storage

### **All Implemented Interfaces:**

com.imis.IAutoCloseable

public abstract class **Storage** extends Object implements com.imis.IAutoCloseable

Abstract base class for storage supported by IMiS/Storage Connector.

**Note:** Only IMIS\_ARC storage is currently implemented by IMiS/Storage Connector. Use one of the StorageConnector.openIMiSARCStorage methods to create an IMIS\_ARC storage.

### See Also:

```
StorageConnector.openIMiSARCStorage(String), StorageConnector.openIMiSARCStorage(String, int), StorageConnector.openIMiSARCStorage(String, Map),
StorageConnector.openIMiSARCStorage(String, String),
StorageConnector.openIMiSARCStorage(String, int, Map),
StorageConnector.openIMiSARCStorage(String, int, String),
StorageConnector.openIMiSARCStorage(String, String, Map),
StorageConnector.openIMiSARCStorage(String, int, String, Map)
```

# **Constructor Summary**

protected

Storage(StorageType storeType)

Initializes a new instance of the Storage class.

Method Summary		
void	<u>addAuthenticatingListener(IAuthenticatingListener</u> listener)  Adds an <u>IAuthenticatingListener</u> object.	
void	<u>addConnectingListener(IConnectingListener</u> listener)  Adds an <u>IConnectingListener</u> object.	
abstract InputStream	auditLogQuery(AuditQuery parameters)  Gets the audit log query results data input stream.	
abstract InputStream	<u>auditLogQuery(AuditQuery</u> parameters, Map options)  Gets the audit log query results data input stream using the specified object options.	
abstract void	close() Closes the storage.	
abstract <u>Document</u>	<u>createObject</u> (String profile, String mime)  Creates a document in the storage profile using the specified MIME type.	
abstract <u>Document</u>	<u>createObject</u> (String profile, String mime, Map options)  Creates a document in the storage profile using the specified MIME type and options.	
abstract void	deleteObject(String id) Deletes a document from the storage.	

abstract void	deleteObject(String id, Map options)  Deletes a document from the storage using the specified options.
abstract AuditLog	getAuditLog()  Gets the AuditLog object from the thread safe local store.
abstract long	getCapacity()  Gets the storage capacity.
abstract long	Gets the storage profile capacity, in bytes.
abstract int	getProfileObjectCount(String profile)  Gets the storage profile object count.
abstract long	getProfileSpaceAvailable(String profile)  Gets the storage profile available space, in bytes.
abstract long	getProfileSpaceUsed(String profile)  Gets the storage profile used space, in bytes.
abstract long	getSpaceAvailable()  Gets the storage available space.
abstract long	getSpaceUsed()  Gets the storage used space.
abstract String	getStoreInfo()  Gets the storage information.
StorageType	getStoreType()  Gets the storage type.
boolean	isclosed()  Gets a value indicating whether the storage is closed.
abstract void	<pre>moveObject(String id, String profile) Moves a document to the storage profile.</pre>
abstract <u>Document</u>	<ul> <li><u>moveObject</u>(String id, String profile, <u>DocumentAccess</u> mode)</li> <li>Moves a document to the storage profile and opens the document with the specified access mode.</li> </ul>
abstract int	objectCount()  Gets the number of objects on storage.
abstract <u>Document</u>	openObject (String id, DocumentAccess mode)  Opens a document on the storage using the specified access mode.
abstract <u>Document</u>	openObject (String id, DocumentAccess mode, Map options)  Opens a document on the storage using the specified access mode and options.
void	removeAuthenticatingListener(IAuthenticatingListener listener)  Removes an IAuthenticatingListener object.
void	removeConnectingListener(IConnectingListener listener)  Removes an IConnectingListener object.

abstract String	resolveExternalObjectId(String externalId)  Resolves the specified external identifier to the object identifier that external identifier is associated with using the object options.
abstract String	resolveExternalObjectId (String externalId, Map options)  Resolves the specified external identifier to the object identifier that external identifier is associated with using the specified options.
abstract String	retrieveObject (String id) Retrieves a document from the storage to a temporary file.
abstract String	retrieveObject(String id, OutputStream target)  Retrieves a document from the storage and copies the contents to the specified OutputStream.
abstract String	retrieveObject (String id, String target)  Retrieves a document from the storage to a specified local file.
abstract void	setExternalObjectId (String id, String externalId)  Sets the association of the specified external identifier with an object on the IMiS/ARC Storage Server.
void	Sets a value indicating whether the storage is closed.
Document	<pre>storeObject(Document source, String profile) Stores a source document on the storage profile with the source document default MIME type and returns a document opened with the source document access mode.</pre>
abstract String	<pre>storeObject(Document source, String profile, String mime) Stores a source document on the storage profile with the specified MIME type and returns a document identifier.</pre>
abstract <u>Document</u>	<pre>storeObject(Document source, String profile, String mime, DocumentAccess mode)  Stores a source document on the storage profile with the specified MIME type and returns a document opened with the specified access mode.</pre>
abstract String	<pre>storeObject(InputStream source, String profile, String mime) Stores InputStream contents on the storage profile with the specified MIME type and returns a document identifier.</pre>
abstract <u>Document</u>	<pre>storeObject(InputStream source, String profile, String mime, DocumentAccess mode)  Stores InputStream contents on the storage profile with the specified MIME type and returns a document opened with the specified access mode.</pre>
abstract String	<u>storeObject</u> (String source, String profile, String mime) Stores a local file on the storage profile with the specified MIME type and returns a document identifier.
abstract <u>Document</u>	<pre>storeObject(String source, String profile, String mime, DocumentAccess mode)  Stores a local file on the storage profile with the specified MIME type and returns a document opened with the specified access mode.</pre>

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface com.imis.IAutoCloseable

close

### Constructors

### **Storage**

```
protected Storage(StorageType storeType)
```

Initializes a new instance of the Storage class.

#### **Parameters:**

storeType - a storage type.

#### Throws:

StorageConnectorException - if demo license expired.

# Methods

### addConnectingListener

public void addConnectingListener(IConnectingListener listener)

Adds an IConnectingListener object.

#### **Parameters:**

listener - an IConnectingListener.

### removeConnectingListener

public void removeConnectingListener(IConnectingListener listener)

Removes an IConnectingListener object.

### **Parameters:**

listener - an IConnectingListener.

### addAuthenticatingListener

public void addAuthenticatingListener(IAuthenticatingListener listener)

Adds an IAuthenticatingListener object.

### **Parameters:**

 ${\tt listener-an\ IAuthenticatingListener.}$ 

# remove Authenticating Listener

public void removeAuthenticatingListener(IAuthenticatingListener listener)

Removes an IAuthenticatingListener object.

#### Parameters:

listener - an IAuthenticatingListener.

### **isClosed**

```
public boolean isClosed()
```

Gets a value indicating whether the storage is closed.

#### **Returns:**

true if the storage is closed; otherwise, false.

### setIsClosed

```
protected void setIsClosed(boolean value)
```

Sets a value indicating whether the storage is closed.

#### **Parameters:**

value - true if the storage is closed; otherwise, false.

### getStoreType

```
public StorageType getStoreType()
```

Gets the storage type.

#### **Returns:**

A storage type.

### getStoreInfo

```
public abstract String getStoreInfo()
  throws StorageConnectorException
```

Gets the storage information.

### **Returns:**

A storage information.

### Throws:

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs.}$ 

# getCapacity

Gets the storage capacity.

Note: This feature is currently not supported on IMIS\_ARC storage.

### **Returns:**

Storage capacity, in bytes.

### **Throws:**

```
StorageConnectorException - if an IMiS/Storage Connector error occurs.
```

IOException - if an I/O error occurs.

# getSpaceAvailable

```
\begin{array}{c} \text{public abstract long } \textbf{getSpaceAvailable()} \\ \text{throws} \quad & \frac{\textbf{StorageConnectorException}}{\textbf{IOException}}, \end{array}
```

Gets the storage available space.

Note: This feature is currently not supported on IMIS\_ARC storage.

### **Returns:**

Available space on the storage, in bytes.

#### **Throws:**

 $\underline{ \tt StorageConnectorException} \text{ - if an IMiS/Storage Connector error occurs.} \\ \underline{ \tt IOException - if an I/O error occurs.} \\$ 

### getSpaceUsed

```
\begin{array}{c} \text{public abstract long } \textbf{getSpaceUsed()} \\ \text{throws} \quad & \underbrace{\text{StorageConnectorException}}_{\text{IOException}}, \end{array}
```

Gets the storage used space.

Note: This feature is currently not supported on IMIS\_ARC storage.

### **Returns:**

Used space on the storage, in bytes.

#### Throws:

 $\underline{ \tt StorageConnectorException} \ - \ if \ an \ IMiS/Storage \ Connector \ error \ occurs. \\ \hline {\tt IOException - if \ an \ I/O \ error \ occurs.}$ 

### objectCount

Gets the number of objects on storage.

Note: This feature is currently not supported on IMIS\_ARC storage.

#### **Returns:**

The number of objects on storage.

### **Throws:**

```
{\tt \underline{StorageConnectorException}} \ - \ if \ an \ IMiS/Storage \ Connector \ error \ occurs.  
 {\tt IOException - if \ an \ I/O \ error \ occurs.}
```

### getAuditLog

```
public abstract AuditLog getAuditLog()
```

Gets the AuditLog object from the thread safe local store.

### **Returns:**

An AuditLog instance.

### createObject

Creates a document in the storage profile using the specified MIME type.

### **Parameters:**

profile - a name of the profile where the new document is created. mime - a MIME type of the new document.

#### Returns:

A Document instance.

#### Throws:

```
NullPointerException - if mime is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.

IOException - if an I/O error occurs.

### createObject

Creates a document in the storage profile using the specified MIME type and options.

Applicable options are StorageConnector.OPTION\_OBJECT\_IDTYPE and StorageConnector.OPTION\_OBJECT\_IDENCODING. IMIS\_ARC storage object identifier encoding disposition option.

#### **Parameters:**

```
profile - a name of the profile where the new document is created.
mime - a MIME type of the new document.
options - a map of object options from which desired object identifier type and encoding can be obtained.
```

#### **Returns:**

A Document instance.

### **Throws:**

```
NullPointerException - if mime is a null reference.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS\_ARC storage errors:

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.

IOException - if an I/O error occurs.

### openObject

Opens a document on the storage using the specified access mode.

#### **Parameters:**

```
id - a document identifier.
mode - a document access mode.
```

#### **Returns:**

A Document instance.

### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening an object.

IOException - if an I/O error occurs.

# openObject

Opens a document on the storage using the specified access mode and options.

Applicable option is StorageConnector.OPTION\_OBJECT\_IDKIND.

### **Parameters:**

```
id - a document identifier.mode - a document access mode.options - a map of object options from which desired object identifier kind can be obtained.
```

#### **Returns:**

A Document instance.

#### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening an object.

IOException - if an I/O error occurs.

### moveObject

Moves a document to the storage profile.

### **Parameters:**

```
id - a document identifier.
profile - a name of the profile where the document is moved.
```

### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while moving an object.

IOException - if an I/O error occurs.

### moveObject

Moves a document to the storage profile and opens the document with the specified access mode.

### **Parameters:**

id - a document identifier.

profile - a name of the profile where the document is moved.

mode - a document access mode.

#### **Returns:**

A Document instance.

### Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS\_ARC storage errors:

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while moving an object.
- Error occurred while opening an object.

IOException - if an I/O error occurs.

### deleteObject

Deletes a document from the storage.

### Parameters:

id - a document identifier.

### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while removing an object.

IOException - if an I/O error occurs.

# deleteObject

Deletes a document from the storage using the specified options.

Applicable option is StorageConnector.OPTION\_OBJECT\_IDKIND.

#### **Parameters:**

id - a document identifier.

options - a map of object options from which desired object identifier kind can be obtained.

#### Throws:

NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS\_ARC storage errors:

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while removing an object.

IOException - if an I/O error occurs.

### storeObject

Stores a source document on the storage profile with the source document default MIME type and returns a document opened with the source document access mode.

### **Parameters:**

```
source - a source Document.
profile - a name of the profile where the document is stored.
```

### **Returns:**

A Document opened in the source document access mode.

#### Throws:

```
NullPointerException - if source is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.
- Error copying stream contents.
- Error occurred while committing object changes.
- Error occurred while closing object.
- Error occurred while opening object.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

### storeObject

Stores a source document on the storage profile with the specified MIME type and returns a document opened with the specified access mode.

#### **Parameters:**

```
source - a source Document.
profile - a name of the profile where the document is stored.
mime - a document MIME type or a null reference to use source default MIME type.
mode - a document access mode.
```

#### **Returns:**

A Document opened in the specified access mode.

#### Throws:

```
NullPointerException - if source is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- Default MIME type is not available.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.
- Error copying stream contents.
- Error occurred while committing object changes.
- Error occurred while closing object.
- Error occurred while opening object.

IOException - if an I/O error occurs.

# storeObject

Stores a local file on the storage profile with the specified MIME type and returns a document opened with the specified access mode.

### Parameters:

```
source - a path to the source file.

profile - a name of the profile where the document is stored.

mime - a document MIME type or a null reference to use default MIME type resolved from file extension.

mode - a document access mode.
```

### **Returns:**

A Document opened in the specified access mode.

#### **Throws:**

```
NullPointerException - if source is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS ARC storage errors:
```

- Operation on closed storage is not allowed.
- File has no extension which is required if MIME type is not provided!
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.
- Error copying stream contents.
- Error occurred while committing object changes.
- Error occurred while closing object.
- Error occurred while opening object.

SecurityException - if a security error is detected. IOException - if an I/O error occurs.

### storeObject

Stores InputStream contents on the storage profile with the specified MIME type and returns a document opened with the specified access mode.

### **Parameters:**

```
source - a source InputStream.

profile - a name of the profile where the document is stored.

mime - a document MIME type.

mode - a document access mode.
```

### **Returns:**

A Document opened in the specified access mode.

### Throws:

```
NullPointerException - if source or mime is a null reference.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
```

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs.}$ 

IMIS\_ARC storage errors:

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.
- Error copying stream contents.
- Error occurred while committing object changes.
- Error occurred while closing object.
- Error occurred while opening object.

IOException - if an I/O error occurs.

### storeObject

Stores a source document on the storage profile with the specified MIME type and returns a document identifier.

#### **Parameters:**

```
source - a source Document.

profile - a name of the profile where the document is stored.

mime - a document MIME type or a null reference to use source default MIME type.
```

#### **Returns:**

A document identifier.

### Throws:

```
NullPointerException - if source is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

• Operation on closed storage is not allowed.

- Default MIME type is not available.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.
- Error copying stream contents.
- Error occurred while committing object changes.
- Error occurred while closing object.

IOException - if an I/O error occurs.

# storeObject

Stores a local file on the storage profile with the specified MIME type and returns a document identifier.

#### **Parameters:**

```
source - a path to the source file.

profile - a name of the profile where the document is stored.

mime - a document MIME type or a null reference to use default MIME type resolved from file extension.
```

#### **Returns:**

A document identifier.

#### Throws:

```
NullPointerException - if source is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- File has no extension which is required if MIME type is not provided.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.
- Error copying stream contents.
- Error occurred while committing object changes.
- Error occurred while closing object.

```
SecurityException - if a security error is detected. IOException - if an I/O error occurs.
```

# storeObject

Stores InputStream contents on the storage profile with the specified MIME type and returns a document identifier.

### **Parameters:**

```
source - a source InputStream.

profile - a name of the profile where the document is stored.

mime - a document MIME type.
```

### **Returns:**

A document identifier.

### Throws:

```
NullPointerException - if source or mime is a null reference.
CancellationException - if an operation was canceled by the user.
```

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS\_ARC storage errors:

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating an object.
- Error copying stream contents.
- Error occurred while committing object changes.
- Error occurred while closing object.

IOException - if an I/O error occurs.

### retrieveObject

Retrieves a document from the storage to a temporary file.

#### **Parameters:**

id - a document identifier.

#### **Returns:**

A string containing the full path of the retrieved object.

#### Throws:

```
NullPointerException - if id is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS_ARC storage errors:
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening an object.
- Error copying stream contents.
- Error occurred while closing object.

SecurityException - if a security error is detected. IOException - if an I/O error occurs.

### retrieveObject

Retrieves a document from the storage to a specified local file.

#### **Parameters:**

id - a document identifier.

target - a path of the retrieved document.

#### **Returns:**

A string containing Document.getDefaultMime() of the retrieved document.

#### Throws:

NullPointerException - if id or target is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS ARC storage errors:

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening an object.
- Error copying stream contents.
- Error occurred while closing object.

IOException - if an I/O error occurs.

### retrieveObject

Retrieves a document from the storage and copies the contents to the specified OutputStream.

### Parameters:

id - a document identifier.

target - a target OutputStream where the retrieved document contents are copied.

#### Returns:

A string containing Document.getDefaultMime() of the retrieved document.

#### Throws:

NullPointerException - if id or target is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs.

IMIS\_ARC storage errors:

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening an object.
- Error copying stream contents.
- Error occurred while closing object.

IOException - if an I/O error occurs.

# setExternalObjectId

Sets the association of the specified external identifier with an object on the IMiS/ARC Storage Server.

### **Parameters:**

```
id - an object identifier.externalId - an external object identifier.
```

#### Throws:

```
NullPointerException - if id or externalId is a null reference. CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs. StorageConnectorException - if
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while associating external identifier with object.

IOException - if an I/O error occurs.

### resolveExternalObjectId

Resolves the specified external identifier to the object identifier that external identifier is associated with using the object options.

### **Parameters:**

externalId - an external object identifier.

### **Returns:**

The object identifier that externalId is associated with.

### Throws:

```
NullPointerException - if externalId is a null reference.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
StorageConnectorException - if
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while searching for external identifier association with an object.

IOException - if an I/O error occurs.

# resolveExternalObjectId

Resolves the specified external identifier to the object identifier that external identifier is associated with using the specified options.

#### **Parameters:**

```
externalId - an external object identifier.

options - a map of object options from which desired object identifier type and encoding can be obtained.
```

#### **Returns:**

The object identifier that external Id is associated with.

#### Throws:

```
NullPointerException - if externalId is a null reference.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
StorageConnectorException - if
```

- Operation on closed storage is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while searching for external identifier association with an object.

IOException - if an I/O error occurs.

### getProfileCapacity

```
\begin{array}{c} \text{public abstract long } \textbf{getProfileCapacity}(\text{String profile}) \\ \text{throws } \frac{\text{StorageConnectorException}}{\text{IOException}}, \end{array}
```

Gets the storage profile capacity, in bytes.

**Note:** This feature is currently not supported on IMIS\_ARC storage.

### **Parameters:**

profile - a name of the storage profile.

### **Returns:**

A storage profile capacity, in bytes.

#### Throws:

```
\underline{ \tt StorageConnectorException} \text{ - if an IMiS/Storage Connector error occurs.} \\ \underline{ \tt IOException - if an I/O error occurs.} \\
```

# ${\bf get Profile Space Available}$

```
\begin{array}{c} \text{public abstract long } \textbf{getProfileSpaceAvailable}(\text{String profile}) \\ \text{throws} \quad & \underline{\text{StorageConnectorException}}, \\ \hline & \underline{\text{IOException}} \end{array},
```

Gets the storage profile available space, in bytes.

Note: This feature is currently not supported on IMIS\_ARC storage.

#### **Parameters:**

profile - a name of the storage profile.

### **Returns:**

A storage profile available space, in bytes.

#### Throws:

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs. <u>IOException - if an I/O error occurs</u>.

### getProfileSpaceUsed

```
\begin{array}{c} \text{public abstract long } \textbf{getProfileSpaceUsed}(\text{String profile}) \\ \text{throws } \underbrace{\text{StorageConnectorException}}_{\text{IOException}}, \end{array}
```

Gets the storage profile used space, in bytes.

Note: This feature is currently not supported on IMIS\_ARC storage.

#### **Parameters:**

profile - a name of the storage profile.

#### **Returns:**

A storage profile used space, in bytes.

#### Throws:

 $\underline{ \tt StorageConnectorException} \ - \ if \ an \ IMiS/Storage \ Connector \ error \ occurs. \\ \hline {\tt IOException - if \ an \ I/O \ error \ occurs.}$ 

### getProfileObjectCount

```
\begin{array}{c} \text{public abstract int } \textbf{getProfileObjectCount}(\text{String profile}) \\ \text{throws } \frac{\text{StorageConnectorException}}{\text{IOException}}, \end{array}
```

Gets the storage profile object count.

**Note:** This feature is currently not supported on IMIS\_ARC storage.

### **Parameters:**

profile - a name of the storage profile.

### **Returns:**

A number of documents on the storage profile.

### Throws:

```
<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs. 
IOException - if an I/O error occurs.
```

# auditLogQuery

Gets the audit log query results data input stream.

#### **Parameters:**

parameters - the audit log query parameters.

#### **Returns:**

The audit log query results data input stream.

#### Throws

```
NullPointerException - if parameters is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed storage is not allowed.
- Error getting audit query results data input stream.

IOException - if an I/O error occurs.

## auditLogQuery

Gets the audit log query results data input stream using the specified object options.

#### **Parameters:**

```
parameters - the audit log query parameters.

options - a map of object options from which desired object identifier type and encoding can be obtained.
```

#### **Returns:**

The audit log query results data input stream.

#### Throws:

```
NullPointerException - if parameters is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed storage is not allowed.
- Error getting audit query results data input stream.

IOException - if an I/O error occurs.

#### close

Closes the storage.

#### Throws:

```
\underline{ \tt StorageConnectorException} \text{ - if an IMiS/Storage Connector error occurs.} \\ \underline{ \tt IOException - if an I/O error occurs.} \\
```

## com.imis.storageconnector Class StorageConnector

# public class **StorageConnector** extends Object

Defines the class with basic IMiS/Storage Connector methods.

StorageConnector is a singleton class that allows only one instance of this class to be created and accessed.

A singleton instance can be acquired with static  $\underline{\mathtt{getInstance}()}$  property. When the StorageConnector singleton is no longer in use call  $\underline{\mathtt{freeInstance}()}$  method to insure proper  $\underline{\mathsf{IMiS/Storage}}$  Connector shutdown.

Field Summary	
public static final	DEFAULT_PAGE_COUNT Default entity collection page count. Value: 8
public static final	Default_page_size Default entity collection page size. Value: 64
public static final	MAX_OPTION_NAME_LENGTH  Maximum length of the authentication name options.  Value: 1024
public static final	OPTION_APPLICATION_NAME  IMIS_ARCHIVE archive and IMIS_ARC storage audit trail application name option.  Value: ApplicationName
public static final	OPTION_ARCHIVE_ID  IMIS_ARCHIVE archive identifier option.  Value: ArchiveId
public static final	OPTION_AUTH_CRYPTO_ALGORITHM  IMIS_ARCHIVE archive and IMIS_ARC storage authentication cryptographic algorithm option.  Value: AuthCryptoAlgorithm
public static final	OPTION_AUTH_CRYPTO_CIPHERMODE  IMIS_ARCHIVE archive and IMIS_ARC storage authentication block cipher mode option.  Value: AuthCryptoCipherMode
public static final	OPTION_AUTH_CRYPTO_KEYSIZE  IMIS_ARCHIVE archive and IMIS_ARC storage authentication key size option.  Value: AuthCryptoKeySize
public static final	OPTION_AUTH_KEY  IMIS_ARC storage authentication key data option.  Value: AuthKey

public static final	OPTION_AUTH_TYPE  IMIS_ARCHIVE archive and IMIS_ARC storage authentication key type option.
	Value: AuthType
public static final	OPTION_AUTH_TYPE_DISPOSITION  IMIS_ARCHIVE archive authentication type disposition option.  Value: AuthTypeDisposition
public static final	OPTION_COMPUTER_NAME  IMIS_ARCHIVE archive and IMIS_ARC storage audit trail computer name option.  Value: ComputerName
public static final	OPTION_CONTENT_PART_IDENCODING  IMIS_ARCHIVE archive content part identifier encoding disposition option.  Value: ContentPartIdEncoding
public static final	OPTION_CONTENT_PART_IDTYPE  IMIS_ARCHIVE archive content part identifier type disposition option.  Value: ContentPartIdType
public static final	OPTION_DEFERRED_COLLECTION_FILTERING  IMIS_ARCHIVE collection filtering disposition.  Value: DeferredCollectionFiltering
public static final	OPTION_DISCOVERY_ARCHIVETYPES  IMIS_ARCHIVE archive discovery archive types option.  Value: DiscoveryArchiveTypes
public static final	OPTION_DISCOVERY_HINT  IMIS_ARCHIVE archive discovery hint option.  Value: DiscoveryHint
public static final	OPTION_ENTITY_IDENCODING  IMIS_ARCHIVE archive entity identifier encoding disposition option.  Value: EntityIdEncoding
public static final	OPTION_ENTITY_IDTYPE  IMIS_ARCHIVE archive entity identifier type disposition option.  Value: EntityIdType
public static final	OPTION_ENTITYCOLLECTION_PAGECOUNT  IMIS_ARCHIVE archive entity collection page count option.  Value: EntityCollectionPageCount
public static final	OPTION_ENTITYCOLLECTION_PAGESIZE  IMIS_ARCHIVE archive entity collection page size option.  Value: EntityCollectionPageSize
public static final	OPTION_IMPERSONALIZATION_USER_NAME  IMIS_ARCHIVE archive authentication impersonalization user name option.  Value: ImpersonalizationUserName
public static final	OPTION_KERBEROS_KDC  IMIS_ARCHIVE archive Kerberos Key Distribution Center (KDC) option.  Value: KerberosKDC

public static final	OPTION_KERBEROS_REALM  IMIS_ARCHIVE archive Kerberos Realm option.  Value: KerberosRealm
public static final	OPTION_KERBEROS_SPN  IMIS_ARCHIVE archive Kerberos Service Principal Name (SPN) option.  Value: KerberosSPN
public static final	OPTION_KERBEROS_TICKET  IMIS_ARCHIVE archive Kerberos Service Ticket option.  Value: KerberosTicket
public static final	OPTION_LOCAL_ADDRESS  IMIS_ARCHIVE archive client local address option.  Value: LocalAddress
public static final	OPTION_LOCAL_CERTIFICATE  IMIS_ARCHIVE archive local certificate option.  Value: LocalCertificate
public static final	OPTION_LOCAL_CERTIFICATE_KEY  IMIS_ARCHIVE archive local certificate key option.  Value: LocalCertificate
public static final	OPTION_MAX_IO_PAYLOAD_SIZE  IMIS_ARCHIVE archive maximum I/O payload size.  Value: MaxIOPayloadSize
public static final	OPTION_MAX_SESSIONS_PER_USER  IMIS_ARCHIVE archive and IMIS_ARC storage maximum number of sessions per user option.  Value: MaxSessionsPerUser
public static final	OPTION_NODES  IMIS_ARCHIVE archive and IMIS_ARC storage additional cluster nodes option.  Value: Nodes
public static final	OPTION_OBJECT_IDENCODING  IMIS_ARC storage object identifier encoding disposition option.  Value: ObjectIdEncoding
public static final	OPTION_OBJECT_IDKIND  IMIS_ARC storage object identifier kind disposition option.  Value: ObjectIdKind
public static final	OPTION_OBJECT_IDTYPE  IMIS_ARC storage object identifier type disposition option.  Value: ObjectIdType
public static final	OPTION_OUTBOUND_ADDRESS  IMIS_ARCHIVE archive and IMIS_ARC storage client outbound IPv4 address option.  Value: OutboundAddress
public static final	OPTION_OUTBOUND_ADDRESS_V6  IMIS_ARCHIVE archive and IMIS_ARC storage client outbound IPv6 address option.  Value: OutboundAddressV6

public static final	OPTION_PERSISTENT_SESSIONS  IMIS_ARCHIVE archive and IMIS_ARC storage persistent sessions option.  Value: PersistentSessions
public static final	OPTION_USER_NAME  IMIS_ARCHIVE archive and IMIS_ARC storage audit trail user name option.  Value: UserName
public static final	OPTION_USER_PASSWORD  IMIS_ARCHIVE archive user password option.  Value: UserPassword
public static final	PROPERTY_AUDIT_LOG_REQUIRED  Specifies an IMIS_ARCHIVE archive property key for a boolean value indicating whether audit log message must be specified for operations that support audit log.  Value: AuditLogRequired
public static final	PROPERTY_AUDIT_LOG_SUPPORTED  Specifies an IMIS_ARCHIVE archive property key for a boolean value indicating whether audit log is supported.  Value: AuditLogSupported
public static final	PROPERTY_AUTHENTICATED_USER_ACCOUNT  Specifies an IMIS_ARCHIVE archive property key for a String value representing authenticated user account.  Value: AuthenticatedUserAccount
public static final	PROPERTY_CAPABILITIES  Specifies an IMIS_ARCHIVE archive property key for a set of ArchiveCapabilities values representing archive capabilities.  Value: Capabilities
public static final	PROPERTY_CLASS_HIERARCHY_DELIMITER  Specifies an IMIS_ARCHIVE archive property key for a String value representing class entity classification code hierarchy delimiter.  Value: ClassHierarchyDelimiter
public static final	PROPERTY_DOCUMENT_HIERARCHY_DELIMITER  Specifies an IMIS_ARCHIVE archive property key for a String value representing document entity classification code hierarchy delimiter.  Value: DocumentHierarchyDelimiter
public static final	PROPERTY_FOLDER_HIERARCHY_DELIMITER  Specifies an IMIS_ARCHIVE archive property key for a String value representing folder entity classification code hierarchy delimiter.  Value: FolderHierarchyDelimiter
public static final	PROPERTY_ROOT_EFFECTIVE_RIGHTS  Specifies an IMIS_ARCHIVE archive property key for a IReadOnlyEntityRights value representing the archive root effective rights.  Value: RootEffectiveRights
public static final	PROPERTY_SERVICE_NAME  Specifies an IMIS_ARCHIVE archive property key for a String value representing the name of the service.  Value: ServiceName

public static final	PROPERTY_SERVICE_VERSION  Specifies an IMIS_ARCHIVE archive property key for a long value representing the version number of the service.  Value: ServiceVersion
public static final	PROPERTY_TRAFFIC_ENCRYPTED  Specifies an IMIS_ARCHIVE archive property key for a boolean value indicating whether traffic between client and server is encrypted.  Value: TrafficEncrypted

Method Summary	
void	addObjectRef (Object obj)  Adds an object to the list of objects referenced by IMiS/Storage Connector.
void	finalize()  Called by the garbage collector on an object when garbage collection determines that there are no more references to the object.
static void	<u>freeInstance</u> ()  Terminates the singleton instance of the StorageConnector class.
static void	fromBackEndAuthenticationOptions (Map source, Map target)  Converts the specified IMiS/ARC Client authentication options to the IMiS/Storage Connector authentication options.
static <u>AuthType</u>	<pre>fromBackEndAuthenticationType e type) Converts the specified IMiS/ARC Client authentication type to the IMiS/Storage Connector authentication type.</pre>
<u>IContentTypeResolver</u>	<pre>getContentTypeResolver() Gets the content type resolver.</pre>
<u>IContentTypeResolver</u>	<pre>getCustomContentTypeResolver() Gets the custom content type resolver.</pre>
static StorageConnector	<pre>getInstance() Gets a singleton instance of the StorageConnector class.</pre>
String	getVersionInfo()  Gets the version information as string value.
void	logAddHandler (Handler handler) Adds a log handler to the storage object.
Level	logGetLevel ( ) Gets the logging level of the logger.
void	Line Inables or disables the IMiS/Storage Connector internal logging.
boolean	logIsInternal()  Gets a value indicating whether the internal logging of the IMiS/Storage Connector is enabled or not.
void	logRemoveHandler (Handler handler) Removes a log handler associated with the storage object.

void	logSetLevel (Level level)  Sets the logging level of the logger and associated log handlers
	Sets the logging level of the logger and associated log handlers.
void	<pre>objectTransfer(IArchive archive, EntityIdKind sourceIdKind, List sourceIds, EntityIdKind targetIdKind, String targetId, String targetContentName, List descriptions)</pre>
	Transfers source legacy objects to the specified content on the target entity.
<u>IArchive</u>	openArchive(ArchiveType type, String host, int port, Map options)  Opens an archive from the host, specified by the type, host name or IP address and TCP port.
<u>IArchive</u>	openArchive(ArchiveType type, String host, Map options)  Opens an archive from the host, specified by the type and host name or IP address and default port 16807.
Storage	openContentManagerStorage (String name, String username, String password)  Opens a storage on IBM DB2 Content Manager specified by the name using a specified username and a password.
Storage	openDocumentManagerStorage() Opens a storage on IBM Lotus Domino Document Manager or Domino.Doc compliant Storage Server.
Storage	openFileSystemStorage(String rootDirectory)  Opens a storage on Local/Remote File System specified by the root directory.
Storage	openIMiSARCStorage (String host)  Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address and default port 16807.
Storage	openIMiSARCStorage (String host, int port)  Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address and port.
Storage	openIMiSARCStorage (String host, int port, Map options)  Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, port and storage options.
Storage	openIMiSARCStorage (String host, int port, String profile)  Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, port and profile.
Storage	openIMiSARCStorage (String host, int port, String profile, Map options)  Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, port, profile and storage options.
Storage	openIMiSARCStorage (String host, Map options)  Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, default port 16807 and storage options.
Storage	openIMiSARCStorage (String host, String profile)  Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, default port 16807 and profile.
Storage	openIMiSARCStorage (String host, String profile, Map options)  Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, default port 16807, profile and storage options.

static String	optionsToString(Map options)
Seattle String	Returns a string representation of an IMIS_ARC storage options, excluding authentication sensitive data.
	Jenom v Guiui
static Set	readOptionDiscoveryArchiveTypes(Map options)
	Reads the OPTION_DISCOVERY_ARCHIVETYPES value from the specified options.
static String	readOptionDiscoveryHint(Map options)
	Reads the OPTION_DISCOVERY_HINT value from the specified options.
static int	readOptionEntityCollectionPageCount(Map options)
	Reads the OPTION_ENTITYCOLLECTION_PAGECOUNT value from the specified options.
static int	readOptionEntityCollectionPageSize(Map options)
	Reads the OPTION_ENTITYCOLLECTION_PAGESIZE value from the specified options.
void	setCustomContentTypeResolver(IContentTypeResolver value)
	Sets the custom content type resolver.
static void	toBackEndAuthenticationOptions(Map source, Map target)
	Converts the specified IMiS/Storage Connector authentication options to the IMiS/ARC Client authentication options.
static	toBackEndAuthenticationType(AuthType type)
com.imis.imisarc.clie nt.AuthenticationType	Converts the specified IMiS/Storage Connector authentication type to the IMiS/ARC Client authentication type.

## Methods inherited from class java.lang.Object

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

## Fields

## **OPTION\_PERSISTENT\_SESSIONS**

public static final java.lang.String OPTION\_PERSISTENT\_SESSIONS

IMIS\_ARCHIVE archive and IMIS\_ARC storage persistent sessions option.

Specifies whether established sessions are to be preserved for subsequent usage or if they should be closed after each transaction.

The value of the persistent sessions option is specified as Boolean.

Default value is set to true.

The following code example demonstrates how to make storage sessions persistent.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_PERSISTENT_SESSIONS, Boolean.TRUE);

// Open storage on IMis/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

#### Constant value: PersistentSessions

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_MAX\_SESSIONS\_PER\_USER

public static final java.lang.String OPTION\_MAX\_SESSIONS\_PER\_USER

IMIS\_ARCHIVE archive and IMIS\_ARC storage maximum number of sessions per user option.

Specifies the maximum number of sessions per user (i.e. number of sessions in context session pool).

The value of the maximum number of sessions per user option is specified as Integer.

Default value is set to 1.

The following code example demonstrates how to set more than one storage sessions per user.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_MAX_SESSIONS_PER_USER, new Integer(5));

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: MaxSessionsPerUser

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## **OPTION\_NODES**

public static final java.lang.String OPTION\_NODES

IMIS\_ARCHIVE archive and IMIS\_ARC storage additional cluster nodes option.

Specifies the list of additional server nodes in the cluster of IMiS/ARC Storage Servers.

The value of the storage additional cluster nodes option can be specified in one of the following forms:

- String of hosts in hostname\_or\_ipaddress:port form separated by the semicolon (;),
- List of String hosts in hostname\_or\_ipaddress:port form or
- List of InetSocketAddress hosts.

The following code example demonstrates how to specify additional server node.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarc1.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_NODES, "iarc2.acme.com:16807");

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: Nodes

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## MAX\_OPTION\_NAME\_LENGTH

public static final int MAX\_OPTION\_NAME\_LENGTH

Maximum length of the authentication name options.

Constant value: 1024

#### See Also:

OPTION\_USER\_NAME
OPTION\_COMPUTER\_NAME
OPTION\_APPLICATION\_NAME

## OPTION\_USER\_NAME

public static final java.lang.String OPTION\_USER\_NAME

IMIS\_ARCHIVE archive and IMIS\_ARC storage audit trail user name option.

Specifies the user name used when establishing a new session with IMiS/ARC Storage Server.

The value of the user name option is specified as String.

User name can not be longer than MAX\_OPTION\_NAME\_LENGTH.

The following code example demonstrates how to set user name used when establishing a new session to IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_USER_NAME, "Test User");

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: UserName

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_COMPUTER\_NAME

public static final java.lang.String OPTION\_COMPUTER\_NAME

IMIS\_ARCHIVE archive and IMIS\_ARC storage audit trail computer name option.

Specifies the computer name used when establishing a new session with IMiS/ARC Storage Server. If no computer name is specified, it is implicitly set to InetAddress.getLocalHost().getHostName().

The value of the computer name option is specified as String.

Computer name can not be longer than MAX\_OPTION\_NAME\_LENGTH.

The following code example demonstrates how to set computer name used when establishing a new session to IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_COMPUTER_NAME, "Test Computer");

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: ComputerName

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_APPLICATION\_NAME

public static final java.lang.String OPTION\_APPLICATION\_NAME

IMIS\_ARCHIVE archive and IMIS\_ARC storage audit trail application name option.

Specifies the application name used when establishing a new session with IMiS/ARC Storage Server. If no computer name is specified, it is implicitly set to "IMiS/Storage Connector + version".

The value of the application name option is specified as String.

Authentication application name can not be longer than MAX\_OPTION\_NAME\_LENGTH.

The following code example demonstrates how to set audit trail application name used when establishing a new session to IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_APPLICATION_NAME, "Test Application");

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: ApplicationName

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_LOCAL\_ADDRESS

public static final java.lang.String OPTION\_LOCAL\_ADDRESS

IMIS\_ARCHIVE archive client local address option.

Specifies the local address from where the user is establishing a new session with IMiS/ARC Storage Server.

The value of the archive client local address option can be specified as InetAddress or String.

The following code example demonstrates how to set client local address used when establishing a new session to IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_LOCAL_ADDRESS,
InetAddress.getByName("127.0.0.1"));

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: LocalAddress

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## OPTION\_AUTH\_TYPE

public static final java.lang.String OPTION\_AUTH\_TYPE

IMIS\_ARCHIVE archive and IMIS\_ARC storage authentication key type option.

Specifies the type of the cryptographic key used when establishing a connection to IMiS/ARC Storage Server.

The value of the storage authentication key type option is specified as one of AuthType enum value.

The following code example demonstrates how to set pre-shared key authentication type to be used when establishing a connection to IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_AUTH_TYPE, AuthType.PRE_SHARED_KEY);

// Open storage on IMis/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: AuthType

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_AUTH\_KEY

public static final java.lang.String OPTION\_AUTH\_KEY

IMIS\_ARC storage authentication key data option.

Specifies the authentication key used when establishing a connection to IMiS/ARC Storage Server.

The value of the storage authentication key data option can be specified as String or byte[].

Used only when OPTION\_AUTH\_TYPE is specified as AuthType.PRE\_SHARED\_KEY.

The following code example demonstrates how to set an authentication key used with pre-shared key authentication.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_AUTH_TYPE, AuthType.PRE_SHARED_KEY);
options.put(StorageConnector.OPTION_AUTH_KEY, "psk");

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: AuthKey

#### See Also:

```
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_USER\_PASSWORD

public static final java.lang.String OPTION\_USER\_PASSWORD

IMIS\_ARCHIVE archive user password option.

Specifies the authentication user password used when establishing a new session with IMiS/ARC Storage Server.

The value of the archive user password option is specified as string.

Used only when OPTION\_AUTH\_TYPE is specified as AuthType.LOCAL\_CREDENTIALS.

The following code example demonstrates how to set user password.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_AUTH_TYPE, AuthType.LOCAL_CREDENTIALS);
options.put(StorageConnector.OPTION_USER_PASSWORD, "password");

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: UserPassword

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## OPTION\_AUTH\_CRYPTO\_KEYSIZE

public static final java.lang.String OPTION\_AUTH\_CRYPTO\_KEYSIZE

IMIS\_ARCHIVE archive and IMIS\_ARC storage authentication key size option.

Specifies the size of the cryptographic key used when establishing a connection to IMiS/ARC Storage Server. If no cryptographic key size is specified, it is implicitly set to AuthCryptoKeySize.KS128.

The value of the storage authentication key size option is specified as one of AuthCryptoKeySize enum value.

Used only when OPTION\_AUTH\_TYPE is specified.

The following code example demonstrates how to set 256 bit cryptographic key used with pre-shared key authentication.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_AUTH_TYPE, AuthType.PRE_SHARED_KEY);
options.put(StorageConnector.OPTION_AUTH_CRYPTO_KEYSIZE, AuthCryptoKeySize.KS256);

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: AuthCryptoKeySize

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_AUTH\_CRYPTO\_ALGORITHM

public static final java.lang.String OPTION\_AUTH\_CRYPTO\_ALGORITHM

IMIS\_ARCHIVE archive and IMIS\_ARC storage authentication cryptographic algorithm option.

Specifies the type of the cryptographic algorithm used when establishing a connection to IMiS/ARC Storage Server. If no cryptographic algorithm is specified, it is implicitly set to AuthCryptoAlgorithm.AES.

The value of the storage authentication cryptographic algorithm option is specified as one of <a href="AuthCryptoAlgorithm"><u>AuthCryptoAlgorithm</u></a> enum value.

Used only when OPTION\_AUTH\_TYPE is specified.

The following code example demonstrates how to set AES cryptographic algorithm used with pre-shared key authentication.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_AUTH_TYPE, AuthType.PRE_SHARED_KEY);
options.put(StorageConnector.OPTION_AUTH_CRYPTO_ALGORITHM, AuthCryptoAlgorithm.AES);

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: AuthCryptoAlgorithm

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_AUTH\_CRYPTO\_CIPHERMODE

public static final java.lang.String OPTION\_AUTH\_CRYPTO\_CIPHERMODE

IMIS\_ARCHIVE archive and IMIS\_ARC storage authentication block cipher mode option.

Specifies the block cipher mode used when establishing a connection to IMiS/ARC Storage Server. If no block cipher is specified, it is implicitly set to AuthCryptoCipherMode.CBC.

The value of the storage authentication block cipher mode option is specified as one of  $\underline{\text{AuthCryptoCipherMode}}$  enum value.

Used only when OPTION\_AUTH\_TYPE is specified.

The following code example demonstrates how to set CBC block cipher mode used with pre-shared key authentication.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_AUTH_TYPE, AuthType.PRE_SHARED_KEY);
options.put(StorageConnector.OPTION_AUTH_CRYPTO_CIPHERMODE,
AuthCryptoCipherMode.CBC);

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: AuthCryptoCipherMode

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_OBJECT\_IDTYPE

public static final java.lang.String OPTION\_OBJECT\_IDTYPE

IMIS\_ARC storage object identifier type disposition option.

Specifies the object identifier type disposition for the newly created objects. If no object identifier type disposition is specified, it is implicitly set to ObjectIdType.ID256.

The value of the storage object identifier type disposition option is specified as one of ObjectIdType enum value.

The following code example demonstrates how to set 256 bit long object identifiers when creating new objects.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_OBJECT_IDTYPE, ObjectIdType.ID256);

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: ObjectIdType

#### See Also:

```
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_OBJECT\_IDENCODING

public static final java.lang.String OPTION\_OBJECT\_IDENCODING

IMIS\_ARC storage object identifier encoding disposition option.

Specifies the object identifier encoding disposition for the newly created objects. If no object identifier encoding disposition is specified, it is implicitly set to ObjectIdEncoding.BASE16.

The value of the storage object identifier encoding disposition option is specified as one of ObjectIdEncoding enum value.

The following code example demonstrates how to set base 64 encoding for object identifiers when creating new objects.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_OBJECT_IDENCODING, ObjectIdEncoding.BASE16);

// Open storage on IMiS/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: ObjectIdEncoding

#### See Also:

```
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_OBJECT\_IDKIND

public static final java.lang.String OPTION\_OBJECT\_IDKIND

IMIS\_ARC storage object identifier kind disposition option.

Specifies the object identifier kind disposition for handling existing objects. If no object identifier kind disposition is specified, it is implicitly set to ObjectIdKind.INTERNAL.

The value of the storage object identifier kind disposition option is specified as one of ObjectIdKind enum value.

The following code example demonstrates how to set external object identifier kind disposition when opening new objects.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for storage on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_OBJECT_IDKIND, ObjectIdKind.EXTERNAL);

// Open storage on IMis/ARC Storage Server
Storage stg = sc.openIMiSARCStorage(host, port, options);
```

Constant value: ObjectIdKind

#### See Also:

```
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## **OPTION\_ENTITY\_IDTYPE**

public static final java.lang.String OPTION\_ENTITY\_IDTYPE

IMIS\_ARCHIVE archive entity identifier type disposition option.

Specifies the entity identifier type disposition for the newly created entities. If no entity identifier type disposition is specified, it is implicitly set to EntityIdType.ID256.

The value of the archive entity identifier type disposition option is specified as one of EntityIdType enum value.

The following code example demonstrates how to set 256 bit long entity identifiers when creating new entities.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_ENTITY_IDTYPE, EntityIdType.ID256);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: EntityIdType

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## OPTION\_ENTITY\_IDENCODING

public static final java.lang.String OPTION\_ENTITY\_IDENCODING

IMIS\_ARCHIVE archive entity identifier encoding disposition option.

Specifies the entity identifier encoding disposition for the newly created entities. If no entity identifier encoding disposition is specified, it is implicitly set to EntityIdEncoding.BASE16.

The value of the archive entity identifier encoding disposition option is specified as one of <a href="EntityIdEncoding"><u>EntityIdEncoding</u></a> enum value.

The following code example demonstrates how to set base 64 encoding for entity identifiers when creating new entities.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_ENTITY_IDENCODING, EntityIdEncoding.BASE16);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: EntityIdEncoding

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## OPTION\_CONTENT\_PART\_IDTYPE

public static final java.lang.String OPTION\_CONTENT\_PART\_IDTYPE

IMIS\_ARCHIVE archive content part identifier type disposition option.

Specifies the content part identifier type disposition for the newly created content parts. If no content part identifier type disposition is specified, it is implicitly set to ContentPartIdType.ID256.

The value of the archive content part identifier type disposition option is specified as one of <a href="ContentPartIdType">ContentPartIdType</a> enum value.

The following code example demonstrates how to set 256 bit long content part identifiers when creating new content parts.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_CONTENT_PART_IDTYPE, ContentPartIdType.ID256);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: ContentPartIdType

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## OPTION\_CONTENT\_PART\_IDENCODING

public static final java.lang.String OPTION\_CONTENT\_PART\_IDENCODING

IMIS\_ARCHIVE archive content part identifier encoding disposition option.

Specifies the content part identifier encoding disposition for the newly created content parts. If no content part identifier encoding disposition is specified, it is implicitly set to ContentPartIdEncoding.BASE16.

The value of the archive content part identifier encoding disposition option is specified as one of ContentPartIdEncoding enum value.

The following code example demonstrates how to set base 64 encoding for content part identifiers when creating new content parts.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_CONTENT_PART_IDENCODING,
ContentPartIdEncoding.BASE16);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: ContentPartIdEncoding

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## OPTION\_ENTITYCOLLECTION\_PAGESIZE

public static final java.lang.String OPTION\_ENTITYCOLLECTION\_PAGESIZE

IMIS\_ARCHIVE archive entity collection page size option.

Specifies the page size of entity collection. If no entity collection page size is specified, it is implicitly set to 64.

The value of the archive entity collection page size option is specified as positive int.

The following code example demonstrates how to set entity collection page size.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_ENTITYCOLLECTION_PAGESIZE, 64);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: EntityCollectionPageSize

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## **DEFAULT PAGE SIZE**

public static final int DEFAULT\_PAGE\_SIZE

Default entity collection page size.

Constant value: 64

## OPTION\_ENTITYCOLLECTION\_PAGECOUNT

public static final java.lang.String OPTION\_ENTITYCOLLECTION\_PAGECOUNT

IMIS\_ARCHIVE archive entity collection page count option.

Specifies the page count of entity collection. If no entity collection page count is specified, it is implicitly set to 8.

The value of the archive entity collection page count option is specified as positive int.

The following code example demonstrates how to set entity collection page count.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_ENTITYCOLLECTION_PAGECOUNT, 8);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: EntityCollectionPageCount

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## **DEFAULT\_PAGE\_COUNT**

public static final int DEFAULT\_PAGE\_COUNT

Default entity collection page count.

Constant value: 8

## OPTION\_ARCHIVE\_ID

public static final java.lang.String OPTION\_ARCHIVE\_ID

IMIS\_ARCHIVE archive identifier option.

Specifies the archive identifier. If no archive identifier is specified, it is implicitly set to 0.

The value of the archive identifier option is specified as int or String.

The following code example demonstrates how to set archive identifier.

```
Get an instance of the IMiS/Storage Connector
   StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
   String host = "iarc.acme.com";
   int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
   Map options = new TreeMap();
   options.put(StorageConnector.OPTION_ARCHIVE_ID, 1);

// Open archive on IMiS/ARC Storage Server
   IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: ArchiveId

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

### **OPTION DISCOVERY HINT**

```
public static final java.lang.String OPTION_DISCOVERY_HINT
```

IMIS\_ARCHIVE archive discovery hint option.

Specifies the discovery hint representing IMiS/ARC Storage Server host string. If none specified, archive discovery is disabled.

The value of the archive discovery hint option is specified as String.

The following code example demonstrates how to set discovery hint.

```
// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_DISCOVERY_HINT, "iarc.acme.com:16807");

// Find all archives on IMiS/ARC Storage Server
Collection<IArchiveDescriptor> archives = Discovery.findArchives(options);
```

Constant value: DiscoveryHint

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## **OPTION\_DISCOVERY\_ARCHIVETYPES**

public static final java.lang.String OPTION\_DISCOVERY\_ARCHIVETYPES

IMIS\_ARCHIVE archive discovery archive types option.

Specifies the discovery archive types. If no archive type is specified, it is implicitly set to EnumSet.allof(ArchiveType.class).

The value of the archive discovery archive types option is specified as one of ArchiveType enum value.

The following code example demonstrates how to set discovery hint.

```
// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_DISCOVERY_ARCHIVETYPES,
ArchiveType.IMIS_ARCHIVE);

// Find all archives on IMiS/ARC Storage Server
Collection<IArchiveDescriptor> archives = Discovery.findArchives(options);
```

Constant value: DiscoveryArchiveTypes

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## OPTION\_AUTH\_TYPE\_DISPOSITION

public static final java.lang.String OPTION\_AUTH\_TYPE\_DISPOSITION

IMIS\_ARCHIVE archive authentication type disposition option.

Specifies the authentication type disposition. If no authentication type disposition is specified, it is implicitly set to:

- AuthType.KERBEROS5\_SERVICE\_TICKET
- AuthType.LDAP\_CREDENTIALS
- AuthType.LOCAL\_CREDENTIALS

The value of the authentication type disposition option is specified as a collection of distinct AuthType enum values.

The following code example demonstrates how to set authentication type disposition.

```
// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
List<AuthType> disposition = new ArrayList<AuthType>(new AuthType[] {
   AuthType.LDAP_CREDENTIALS,
   AuthType.LOCAL_CREDENTIALS
});
options.put(StorageConnector.OPTION_AUTH_TYPE_DISPOSITION, disposition);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: AuthTypeDisposition

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## OPTION\_KERBEROS\_KDC

public static final java.lang.String OPTION\_KERBEROS\_KDC

IMIS\_ARCHIVE archive Kerberos Key Distribution Center (KDC) option.

Specifies the Kerberos KDC used when establishing a new session with IMiS/ARC Storage Server.

The value of the archive Kerberos KDC option is specified as String.

**Note:** Used only when OPTION\_AUTH\_TYPE is specified as AuthType.KERBEROS5\_SERVICE\_TICKET.

The following code example demonstrates how to set Kerberos KDC.

```
// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_KERBEROS_KDC, "kdc.acme.com");

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: KerberosKDC

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## OPTION\_KERBEROS\_SPN

public static final java.lang.String OPTION\_KERBEROS\_SPN

IMIS\_ARCHIVE archive Kerberos Service Principal Name (SPN) option.

Specifies the Kerberos SPN used when establishing a new session with IMiS/ARC Storage Server.

The value of the archive Kerberos SPN option is specified as String.

**Note:** Used only when OPTION\_AUTH\_TYPE is specified as AuthType.KERBEROS5\_SERVICE\_TICKET.

The following code example demonstrates how to set Kerberos SPN.

```
// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_KERBEROS_SPN, "IARC/iarc.acme.com@ACME.COM");

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: KerberosSPN

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## **OPTION KERBEROS REALM**

public static final java.lang.String OPTION\_KERBEROS\_REALM

IMIS\_ARCHIVE archive Kerberos Realm option.

Specifies the Kerberos Realm used when establishing a new session with IMiS/ARC Storage Server.

The value of the archive Kerberos Realm option is specified as String.

**Note:** Used only when OPTION\_AUTH\_TYPE is specified as AuthType.KERBEROS5\_SERVICE\_TICKET.

The following code example demonstrates how to set Kerberos Realm.

```
// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.Add(StorageConnector.OPTION_KERBEROS_REALM, "ACME.COM");

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: KerberosRealm

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## OPTION\_KERBEROS\_TICKET

public static final java.lang.String OPTION\_KERBEROS\_TICKET

IMIS\_ARCHIVE archive Kerberos Service Ticket option.

Specifies the Kerberos Service Ticket used when establishing a new session with IMiS/ARC Storage Server.

The value of the Kerberos Service Ticket option is specified as byte[].

**Note:** Used only when OPTION\_AUTH\_TYPE is specified as AuthType.KERBEROS5\_SERVICE\_TICKET.

The following code example demonstrates how to set Kerberos Service Ticket.

```
// Get an instance of the IMis/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMis/ARC Storage Server host & port
String host = "iarc.acme.com";
int port = 16807;

byte[] ticket = new byte[] { ... };

// Set options for archive on IMis/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_KERBEROS_TICKET, ticket);

// Open archive on IMis/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: KerberosTicket

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## OPTION\_LOCAL\_CERTIFICATE

public static final java.lang.String OPTION\_LOCAL\_CERTIFICATE

IMIS\_ARCHIVE archive local certificate option.

Specifies the local certificate used when establishing a new session with IMiS/ARC Storage Server.

The value of the local certificate option is specified as X509Certificate.

The following code example demonstrates how to set local certificate.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarc.acme.com";
int port = 16807;

X509Certificate cert = ...;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_LOCAL_CERTIFICATE, cert);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: LocalCertificate

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## OPTION\_LOCAL\_CERTIFICATE\_KEY

public static final java.lang.String OPTION\_LOCAL\_CERTIFICATE\_KEY

IMIS\_ARCHIVE archive local certificate key option.

Specifies the local certificate key used when establishing a new session with IMiS/ARC Storage Server.

The value of the local certificate key option is specified as PrivateKey.

The following code example demonstrates how to set local certificate key.

```
// Get an instance of the IMis/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMis/ARC Storage Server host & port
String host = "iarc.acme.com";
int port = 16807;

PrivateKey key = ...;

// Set options for archive on IMis/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_LOCAL_CERTIFICATE_KEY, key);

// Open archive on IMis/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: LocalCertificate

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## OPTION\_OUTBOUND\_ADDRESS

public static final java.lang.String OPTION\_OUTBOUND\_ADDRESS

IMIS\_ARCHIVE archive and IMIS\_ARC storage client outbound IPv4 address option.

Specifies the outbound IPv4 address used when establishing a new session with IMiS/ARC Storage Server.

The value of the archive client outbound IPv4 address option can be specified as Inet4Address or String.

The following code example demonstrates how to set client outbound IPv4 address used when establishing a new session to IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_OUTBOUND_ADDRESS,
InetAddress.getByName("192.168.2.1"));

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: OutboundAddress

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_OUTBOUND\_ADDRESS\_V6

public static final java.lang.String OPTION\_OUTBOUND\_ADDRESS\_V6

IMIS\_ARCHIVE archive and IMIS\_ARC storage client outbound IPv6 address option.

Specifies the outbound IPv6 address used when establishing a new session with IMiS/ARC Storage Server.

The value of the archive client outbound IPv6 address option can be specified as Inet6Address or String.

The following code example demonstrates how to set client outbound IPv6 address used when establishing a new session to IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_OUTBOUND_ADDRESS_V6,
InetAddress.getByName("0000:0000:0000:0000:FFFF:C0A8:0201"));

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: OutboundAddressV6

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
openIMiSARCStorage(String, Map)
openIMiSARCStorage(String, String, Map)
openIMiSARCStorage(String, int, Map)
openIMiSARCStorage(String, int, String, Map)
```

## OPTION\_IMPERSONALIZATION\_USER\_NAME

public static final java.lang.String OPTION\_IMPERSONALIZATION\_USER\_NAME

IMIS\_ARCHIVE archive authentication impersonalization user name option.

Specifies the impersonalization user name used when establishing a new session with IMiS/ARC Storage Server.

The value of the impersonalization user name option is specified as String.

Impersonalization user name can not be longer than MAX\_OPTION\_NAME\_LENGTH.

This option is applicable on server version 9.9 or above.

The following code example demonstrates how to set impersonalization user name used when establishing a new session to IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_IMPERSONALIZATION_USER_NAME, "Test Impersonate User");

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: ImpersonalizationUserName

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## OPTION MAX IO PAYLOAD SIZE

public static final java.lang.String OPTION\_MAX\_IO\_PAYLOAD\_SIZE

IMIS\_ARCHIVE archive maximum I/O payload size.

Specifies the requested maximum I/O usable payload size used in communicating with IMiS/ARC Storage Server. This value can be adjusted by the server in case server doesn't allow values as high as requested.

This option is applicable on server version 9.8 or above.

The following code example demonstrates how to set the maximum size of I/O packet used in communicating with IMiS/ARC Storage Server.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_MAX_IO_PAYLOAD_SIZE, 262144);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: MaxIOPayloadSize

#### See Also:

openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)

## OPTION\_DEFERRED\_COLLECTION\_FILTERING

public static final java.lang.String OPTION\_DEFERRED\_COLLECTION\_FILTERING

IMIS\_ARCHIVE collection filtering disposition.

Specifies how the IMiS/ARC Storage Server should filter its entity collections. Entity collections can be pre-filtered (filtering is done at collection creation stage) or elements can be filtered while they are being read. This option significantly impacts how fast large entity collections can be accessed. While it's good to have filtered collections available as soon as possible, the caller might wait longer than necessary to be able to access the first element since filtering also processes elements which might never be accessed. Deferred filtering instructs the server to delay filtering to element read stage and filter elements while they are being read. These collections are more responsive and caller can access first elements faster. The down side of this is that collection element count might not be the same as accessible element count so the code must be adapted to compensate this behaviour. In general collection iteration stops at last available element while accessing elements by their indexes might return null results if the index is beyond accessible element count.

The value of deferred collection filtering option is specified as Boolean.

Default value is set to false.

This option is applicable on server version 9.10 or above.

The following code example demonstrates how to enable deferred collection filtering.

```
// Get an instance of the IMiS/Storage Connector
StorageConnector sc = StorageConnector.getInstance();

// Set IMiS/ARC Storage Server host & port
String host = "iarcl.acme.com";
int port = 16807;

// Set options for archive on IMiS/ARC Storage Server
Map options = new TreeMap();
options.put(StorageConnector.OPTION_DEFERRED_COLLECTION_FILTERING, Boolean.TRUE);

// Open archive on IMiS/ARC Storage Server
IArchive archive = sc.openArchive(ArchiveType.IMIS_ARCHIVE, host, port, options);
```

Constant value: DeferredCollectionFiltering

#### See Also:

```
openArchive(ArchiveType, String, Map)
openArchive(ArchiveType, String, int, Map)
```

## PROPERTY\_AUDIT\_LOG\_REQUIRED

public static final java.lang.String PROPERTY\_AUDIT\_LOG\_REQUIRED

Specifies an IMIS\_ARCHIVE archive property key for a boolean value indicating whether audit log message must be specified for operations that support audit log.

Constant value: AuditLogRequired

## PROPERTY\_AUDIT\_LOG\_SUPPORTED

```
public static final java.lang.String PROPERTY_AUDIT_LOG_SUPPORTED
```

Specifies an IMIS\_ARCHIVE archive property key for a boolean value indicating whether audit log is supported. Constant value: AuditLogSupported

## PROPERTY CAPABILITIES

public static final java.lang.String PROPERTY CAPABILITIES

Specifies an IMIS\_ARCHIVE archive property key for a set of <u>ArchiveCapabilities</u> values representing archive capabilities.

Constant value: Capabilities

## PROPERTY\_CLASS\_HIERARCHY\_DELIMITER

public static final java.lang.String PROPERTY\_CLASS\_HIERARCHY\_DELIMITER

Specifies an IMIS\_ARCHIVE archive property key for a String value representing class entity classification code hierarchy delimiter.

Constant value: ClassHierarchyDelimiter

## PROPERTY DOCUMENT HIERARCHY DELIMITER

public static final java.lang.String PROPERTY DOCUMENT HIERARCHY DELIMITER

Specifies an IMIS\_ARCHIVE archive property key for a String value representing document entity classification code hierarchy delimiter.

Constant value: DocumentHierarchyDelimiter

## PROPERTY\_FOLDER\_HIERARCHY\_DELIMITER

public static final java.lang.String PROPERTY\_FOLDER\_HIERARCHY\_DELIMITER

Specifies an IMIS\_ARCHIVE archive property key for a String value representing folder entity classification code hierarchy delimiter.

Constant value: FolderHierarchyDelimiter

## PROPERTY ROOT EFFECTIVE RIGHTS

public static final java.lang.String PROPERTY ROOT EFFECTIVE RIGHTS

Specifies an IMIS\_ARCHIVE archive property key for a <a href="IReadOnlyEntityRights">IReadOnlyEntityRights</a> value representing the archive root effective rights.

Constant value: RootEffectiveRights

## PROPERTY\_SERVICE\_NAME

public static final java.lang.String PROPERTY\_SERVICE\_NAME

Specifies an IMIS\_ARCHIVE archive property key for a String value representing the name of the service. Constant value: ServiceName

See Also:

PROPERTY\_SERVICE\_VERSION

## PROPERTY\_SERVICE\_VERSION

public static final java.lang.String PROPERTY\_SERVICE\_VERSION

Specifies an IMIS\_ARCHIVE archive property key for a long value representing the version number of the service. Version number equals IMiS/ARChive Storage Server build number from server version 9.9 or above.

Version	Name
460	IMiS/ARChive Storage Server 6.x
530	IMiS/ARChive Storage Server 7.x
580	IMiS/ARChive Storage Server 8.x
590	IMiS/ARChive Storage Server 9.x
670	IMiS/ARChive Storage Server 9.7.x
685	IMiS/ARChive Storage Server 9.8.x
690	IMiS/ARChive Storage Server 9.9.1810.690

Constant value: ServiceVersion

## PROPERTY\_TRAFFIC\_ENCRYPTED

public static final java.lang.String PROPERTY\_TRAFFIC\_ENCRYPTED

Specifies an IMIS\_ARCHIVE archive property key for a boolean value indicating whether traffic between client and server is encrypted.

Constant value: TrafficEncrypted

## PROPERTY\_AUTHENTICATED\_USER\_ACCOUNT

public static final java.lang.String PROPERTY AUTHENTICATED USER ACCOUNT

Specifies an IMIS\_ARCHIVE archive property key for a String value representing authenticated user account.

Constant value: AuthenticatedUserAccount

## Methods

## getInstance

public static StorageConnector getInstance()

Gets a singleton instance of the StorageConnector class.

#### **Returns:**

A StorageConnector instance.

### freeInstance

public static void freeInstance()

Terminates the singleton instance of the StorageConnector class.

This method must be called when StorageConnector singleton instance is not used any more.

#### See Also:

getInstance()

## finalize

protected void finalize()
 throws Throwable

Called by the garbage collector on an object when garbage collection determines that there are no more references to the object.

Any exception thrown by the finalize method causes the finalization of this object to be halted, but is otherwise ignored.

#### Throws:

Throwable - if an error or exception occurs.

## optionsToString

public static String optionsToString(Map options)

Returns a string representation of an IMIS\_ARC storage options, excluding authentication sensitive data.

#### **Parameters:**

options - an IMIS\_ARC storage options.

#### **Returns:**

a string containing the key-value pairs.

## readOptionEntityCollectionPageSize

public static int readOptionEntityCollectionPageSize(Map options)

Reads the OPTION\_ENTITYCOLLECTION\_PAGESIZE value from the specified options.

#### **Parameters:**

options - the map of options.

#### Returns

The entity collection page size.

## readOptionEntityCollectionPageCount

public static int readOptionEntityCollectionPageCount(Map options)

Reads the  ${\tt OPTION\_ENTITYCOLLECTION\_PAGECOUNT}$  value from the specified options.

#### **Parameters:**

options - the map of options.

#### **Returns:**

The entity collection page size.

## readOptionDiscoveryHint

public static String readOptionDiscoveryHint(Map options)

Reads the OPTION\_DISCOVERY\_HINT value from the specified options.

#### **Parameters:**

options - the map of options.

#### **Returns:**

The archive discovery hint.

## readOptionDiscoveryArchiveTypes

public static Set readOptionDiscoveryArchiveTypes(Map options)

Reads the OPTION\_DISCOVERY\_ARCHIVETYPES value from the specified options.

#### **Parameters:**

options - the map of options.

#### **Returns:**

The discovery archive types.

## fromBackEndAuthenticationType

```
public static AuthType
fromBackEndAuthenticationType(com.imis.imisarc.client.AuthenticationType type)
```

Converts the specified IMiS/ARC Client authentication type to the IMiS/Storage Connector authentication type.

#### **Parameters:**

type - the IMiS/ARC Client authentication type.

#### **Returns:**

The authentication type.

#### Throws:

IllegalArgumentException - if invalid internal authentication type.

## toBackEndAuthenticationType

```
public static com.imis.imisarc.client.AuthenticationType
toBackEndAuthenticationType(AuthType type)
```

Converts the specified IMiS/Storage Connector authentication type to the IMiS/ARC Client authentication type.

#### **Parameters:**

type - the authentication type.

#### Returns

The IMiS/ARC Client authentication type.

#### Throws:

IllegalArgumentException - if invalid authentication type.

# from Back End Authentication Options

Converts the specified IMiS/ARC Client authentication options to the IMiS/Storage Connector authentication options.

#### **Parameters:**

```
source - the IMiS/ARC Client authentication options. target - the authentication options.
```

# to Back End Authentication Options

Converts the specified IMiS/Storage Connector authentication options to the IMiS/ARC Client authentication options.

#### **Parameters:**

```
source - the authentication options.
```

target - the IMiS/ARC Client authentication options.

## addObjectRef

```
public void addObjectRef(Object obj)
  throws StorageConnectorException
```

Adds an object to the list of objects referenced by IMiS/Storage Connector.

#### **Parameters:**

obj - an Object instance.

#### Throws:

StorageConnectorException - if demo license expired.

## getContentTypeResolver

```
public IContentTypeResolver getContentTypeResolver()
```

Gets the content type resolver.

#### **Returns:**

An IContentTypeResolver instance.

## getCustomContentTypeResolver

public IContentTypeResolver getCustomContentTypeResolver()

Gets the custom content type resolver.

#### **Returns:**

An IContentTypeResolver instance.

## setCustomContentTypeResolver

public void setCustomContentTypeResolver(IContentTypeResolver value)

Sets the custom content type resolver.

## **Parameters:**

value - an IContentTypeResolver instance.

## logAddHandler

public void logAddHandler(Handler handler)

Adds a log handler to the storage object.

#### **Parameters:**

handler - a Handler instance.

#### Throws:

SecurityException - if a security manager exists and if the caller does not have LoggingPermission("control").

## logRemoveHandler

public void logRemoveHandler(Handler handler)

Removes a log handler associated with the storage object.

#### **Parameters:**

handler - a Handler instance.

#### **Throws:**

SecurityException - if a security manager exists and if the caller does not have LoggingPermission("control").

## logIsInternal

```
public boolean logIsInternal()
```

Gets a value indicating whether the internal logging of the IMiS/Storage Connector is enabled or not.

#### **Returns:**

true to enable internal logging; otherwise, false.

#### See Also:

logInternal(boolean)

## logInternal

```
public void logInternal(boolean enabled)
  throws IOException
```

Enables or disables the IMiS/Storage Connector internal logging.

When internal logging is enabled, IMiS/Storage Connector writes to the "IMiS.StorageConnector.Java.%g.log" rotating log files located in

- \* the system temporary folder on Windows systems (i.e. System.getProperty("java.io.tmpdir")) or
- \* the user home folder on other systems (i.e. System.getProperty("user.home")) where %g escape sequence is a generation number used to distinguish rotated log files.

#### **Parameters:**

enabled - true to enable internal logging; otherwise, false.

### Throws:

IOException - if there are IO problems opening the files.

SecurityException - if a security manager exists and if the caller does not have LoggingPermission("control").

#### See Also:

logIsInternal()

## logGetLevel

```
public Level logGetLevel()
```

Gets the logging level of the logger.

#### **Returns:**

The logging level.

# logSetLevel

```
public void logSetLevel(Level level)
```

Sets the logging level of the logger and associated log handlers.

#### **Parameters:**

level - the logging level.

#### Throws:

SecurityException - if a security manager exists and if the caller does not have LoggingPermission("control").

## getVersionInfo

```
public String getVersionInfo()
```

Gets the version information as string value.

#### **Returns:**

A string containing version information.

## openIMiSARCStorage

```
public Storage openIMiSARCStorage(String host)
  throws StorageConnectorException
```

Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address and default port 16807.

#### **Parameters:**

host - a host name or IP address of the IMiS/ARC Storage Server.

#### **Returns:**

A Storage instance.

#### Throws:

```
NullPointerException - if host is a null reference.
StorageConnectorException - if an IMiS/Storage Connector error occurs.
```

## openIMiSARCStorage

Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address and port.

#### **Parameters:**

```
host - a host name or IP address of the IMiS/ARC Storage Server. port - a TCP port number of the IMiS/ARC Storage Server.
```

#### **Returns:**

A Storage instance.

#### **Throws:**

```
NullPointerException - if host is a null reference. 
IllegalArgumentException - if port is outside the range of valid port values. 
StorageConnectorException - if an IMiS/Storage Connector error occurs.
```

# openIMiSARCStorage

```
\frac{Storage}{String} \begin{array}{c} \textbf{openIMiSARCStorage} (\texttt{String host,} \\ \hline String profile) \\ \\ \textbf{throws } \underline{StorageConnectorException} \end{array}
```

Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, default port 16807 and profile.

#### **Parameters:**

host - a host name or IP address of the IMiS/ARC Storage Server. profile - a name of the profile on the IMiS/ARC Storage Server.

#### **Returns:**

A Storage instance.

#### Throws:

NullPointerException - if host is a null reference. StorageConnectorException - if an IMiS/Storage Connector error occurs.

## openIMiSARCStorage

Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, port and profile.

#### **Parameters:**

```
host - a host name or IP address of the IMiS/ARC Storage Server. port - a TCP port number of the IMiS/ARC Storage Server. profile - a name of the profile on the IMiS/ARC Storage Server.
```

#### **Returns:**

A Storage instance.

#### Throws:

```
NullPointerException - if host is a null reference.

IllegalArgumentException - if port is outside the range of valid port values.

StorageConnectorException - if an IMiS/Storage Connector error occurs.
```

## openIMiSARCStorage

Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, default port 16807 and storage options.

#### **Parameters:**

```
host - a host name or IP address of the IMiS/ARC Storage Server. options - an IMIS_ARC storage options.
```

#### **Returns:**

A Storage instance.

#### Throws:

NullPointerException - if host is a null reference. StorageConnectorException - if an IMiS/Storage Connector error occurs.

## openIMiSARCStorage

Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, port and storage options.

#### **Parameters:**

```
host - a host name or IP address of the IMiS/ARC Storage Server. port - a TCP port number of the IMiS/ARC Storage Server. options - an IMIS_ARC storage options.
```

#### **Returns:**

A Storage instance.

#### Throws:

```
NullPointerException - if host is a null reference.

IllegalArgumentException - if port is outside the range of valid port values.

StorageConnectorException - if an IMiS/Storage Connector error occurs.
```

## openIMiSARCStorage

Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, default port 16807, profile and storage options.

#### **Parameters:**

```
host - a host name or IP address of the IMiS/ARC Storage Server. profile - a name of the profile on the IMiS/ARC Storage Server. options - an IMIS_ARC storage options.
```

#### **Returns:**

A Storage instance.

#### Throws

```
NullPointerException - if host is a null reference. 
StorageConnectorException - if an IMiS/Storage Connector error occurs.
```

## openIMiSARCStorage

Opens a storage on IMiS/ARC Storage Server specified by the host name or IP address, port, profile and storage options.

#### **Parameters:**

```
host - a host name or IP address of the IMiS/ARC Storage Server.
port - a TCP port number of the IMiS/ARC Storage Server.
profile - a name of the profile on the IMiS/ARC Storage Server.
options - an IMIS_ARC storage options.
```

#### **Returns:**

A Storage instance.

#### Throws:

```
NullPointerException - if host is a null reference.

IllegalArgumentException - if port is outside the range of valid port values.

StorageConnectorException - if an IMiS/Storage Connector error occurs.
```

## openFileSystemStorage

Opens a storage on Local/Remote File System specified by the root directory.

**Note:** FILE\_SYSTEM storage is currently not supported by IMiS/Storage Connector.

#### **Parameters:**

rootDirectory - a root directory path.

#### **Returns:**

A Storage instance.

#### Throws:

```
<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs. 
UnknownHostException - if an unknown host error occurs. 
IOException - if an I/O error occurs.
```

## openContentManagerStorage

Opens a storage on IBM DB2 Content Manager specified by the name using a specified username and a password.

Note: CONTENT\_MANAGER storage is currently not supported by IMiS/Storage Connector.

#### **Parameters:**

```
name - a name of the datastore.
username - a user name.
password - a password.
```

#### **Returns:**

A Storage instance.

#### **Throws:**

```
StorageConnectorException - if an IMiS/Storage Connector error occurs. UnknownHostException - if an unknown host error occurs. IOException - if an I/O error occurs.
```

## openDocumentManagerStorage

Opens a storage on IBM Lotus Domino Document Manager or Domino.Doc compliant Storage Server.

**Note:** DOMINO\_DOC storage is currently not supported by IMiS/Storage Connector.

## **Returns:**

A Storage instance.

#### **Throws:**

```
StorageConnectorException - if an IMiS/Storage Connector error occurs. UnknownHostException - if an unknown host error occurs. IOException - if an I/O error occurs.
```

## openArchive

Opens an archive from the host, specified by the type and host name or IP address and default port 16807.

#### Parameters:

```
type - a type of archive to which Storage Connector should connect to. host - a host name or IP address of the archiving system. options - an archive login and session options.
```

#### **Returns:**

An IArchive instance.

#### **Throws:**

```
NullPointerException - if host is a null reference. IllegalArgumentException - if type is invalid archive type. StorageConnectorException - if demo license expired.
```

## openArchive

Opens an archive from the host, specified by the type, host name or IP address and TCP port.

Additional options are used to further determine the user credentials which should be used when connecting to the server, archive identifier if service is hosted on multi-archive system, crypto context information, etc...

#### **Parameters:**

```
type - a type of archive to which Storage Connector should connect to.
host - a host name or IP address of the archiving system.
port - a TCP port number of the archiving system.
options - an archive login and session options.
```

## **Returns:**

An IArchive instance.

#### Throws:

```
NullPointerException - if host is a null reference.

IllegalArgumentException - if type is invalid archive type or port is outside the range of valid port values.

StorageConnectorException - if demo license expired.
```

# objectTransfer

Transfers source legacy objects to the specified content on the target entity.

#### **Parameters:**

```
archive - the archive.
sourceIdKind - the source legacy object identifiers kind.
sourceIds - the source legacy object identifiers.
targetIdKind - the target entity identifier kind.
targetId - the target entity identifier.
targetContentName - the target content name.
```

descriptions - the collection of object descriptions to be used when transferring legacy objects to its target or a null reference if none specified. If object descriptions are specified collection must contain same number of elements as sourcelds collection and their values can be null.

#### **Throws:**

LoginException - if a login error occurs. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Collection of legacy object identifiers is required and cannot be empty.
- Number of descriptions must equal number of legacy object identifiers.
- Error getting session from the session pool.
- Error occurred while transferring legacy objects on archive.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

# com.imis.storageconnector Class StorageConnectorException

## **All Implemented Interfaces:**

Serializable

# public class **StorageConnectorException** extends com.imis.GlobalizedException

Represents errors that occur during IMiS/Storage Connector execution.

Constructor Summary	
public	StorageConnectorException (String resourceName)  Initializes a new instance of the StorageConnectorException class with a specified name of the string resource that describes the current exception.
public	StorageConnectorException (String resourceName, Object arg0) Initializes a new instance of the StorageConnectorException class with a specified name of the formatted string resource that describes the current exception.
public	StorageConnectorException(String resourceName, Object[] args)  Initializes a new instance of the StorageConnectorException class with a specified name of the formatted string resource that describes the current exception.
public	StorageConnectorException (String resourceName, Throwable cause)  Initializes a new instance of the StorageConnectorException class with a specified name of the string resource that describes the current exception and a reference to the inner exception that is the cause of this exception.
public	StorageConnectorException (String resourceName, Throwable cause, Object arg0)  Initializes a new instance of the StorageConnectorException class with a specified name of the formatted string resource that describes the current exception and a reference to the inner exception that is the cause of this exception.
public	StorageConnectorException (String resourceName, Throwable cause, Object[] args)  Initializes a new instance of the StorageConnectorException class with a specified name of the formatted string resource that describes the current exception and a reference to the inner exception that is the cause of this exception.

Methods inherited from class com.imis.GlobalizedException
getMessage

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

## **StorageConnectorException**

public StorageConnectorException(String resourceName)

Initializes a new instance of the StorageConnectorException class with a specified name of the string resource that describes the current exception.

The Throwable.getMessage() of the new instance is initialized with the specified string resource or the resource name, if the string resource is not found in the resources.

#### **Parameters:**

resourceName - the name of the string resource that describes the current exception.

## StorageConnectorException

Initializes a new instance of the StorageConnectorException class with a specified name of the formatted string resource that describes the current exception.

The Throwable.getMessage() of the new instance is initialized with the specified formatted string resource or the resource name, if the string resource is not found in the resources.

#### **Parameters:**

resourceName - the name of the string resource containing one format item that describes the current exception. arg0 - an object to format.

## **StorageConnectorException**

Initializes a new instance of the StorageConnectorException class with a specified name of the formatted string resource that describes the current exception.

The Throwable.getMessage() of the new instance is initialized with the specified formatted string resource or the resource name, if the string resource is not found in the resources.

#### **Parameters:**

resourceName - the name of the string resource containing zero or more format items that describes the current exception.

args - an object array containing zero or more objects to format.

## **StorageConnectorException**

Initializes a new instance of the StorageConnectorException class with a specified name of the string resource that describes the current exception and a reference to the inner exception that is the cause of this exception.

The Throwable.getMessage() of the new instance is initialized with the specified string resource or the resource name, if the string resource is not found in the resources.

Note that the detail message associated with cause is not automatically incorporated in this exception's detail message.

#### **Parameters:**

resourceName - the name of the string resource that describes the current exception. cause - the cause (which is saved for later retrieval by the getCause() method). (A null value is permitted, and indicates that the cause is nonexistent or unknown.)

## **StorageConnectorException**

Initializes a new instance of the StorageConnectorException class with a specified name of the formatted string resource that describes the current exception and a reference to the inner exception that is the cause of this exception.

The Throwable.getMessage() of the new instance is initialized with the specified formatted string resource or the resource name, if the string resource is not found in the resources.

#### **Parameters:**

resourceName - the name of the string resource containing one format item that describes the current exception. cause - the cause (which is saved for later retrieval by the getCause() method). (A null value is permitted, and indicates that the cause is nonexistent or unknown.) arg0 - an object to format.

## **StorageConnectorException**

Initializes a new instance of the StorageConnectorException class with a specified name of the formatted string resource that describes the current exception and a reference to the inner exception that is the cause of this exception.

The Throwable.getMessage() of the new instance is initialized with the specified formatted string resource or the resource name, if the string resource is not found in the resources.

#### **Parameters:**

resourceName - the name of the string resource containing zero or more objects to format that describes the current exception.

cause - the cause (which is saved for later retrieval by the getCause() method). (A null value is permitted, and indicates that the cause is nonexistent or unknown.)

args - an object array containing zero or more objects to format.

# com.imis.storageconnector Class StorageConnectorLogger

# public class **StorageConnectorLogger** extends com.imis.util.logging.Logger

Defines the IMiS/Storage Connector logger.

StorageConnectorLogger is a singleton class derived from the com.imis.util.logging.Logger class that allows a single instance of this class to be created.

Fields inherited from class java.util.logging.Logger	
global	

Method Summary		
void	Adds the specified log handler to the IMiS/Storage Connector logger.	
void	Einalize()  Called by the garbage collector on an object when garbage collection determines that there are no more references to the object.	
static <u>StorageConnectorLogge</u> <u>r</u>	Gets a singleton instance of the StorageConnectorLogger class.	
boolean	getInternalLogging()  Gets the value indicating whether the IMiS/Storage Connector logger is logging to an internal file log handler.	
void	removeHandler (Handler handler)  Removes the specified log handler to the IMiS/Storage Connector logger.	
void	Sets a value indicating whether the IMiS/Storage Connector logger enables or disables logging to an internal file log handler.	
void	SetLevel (Level level)  Gets the effective logging level.	

## Methods inherited from class com.imis.util.logging.Logger

addHandler, debug, debug, entering, entering, entering, entering, entering, entering, error, error, exiting, exiting, exiting, exiting, info, info, log, logEntry, logEntry, logEntry, logEntry, removeHandler, warn, warn, warn

## Methods inherited from class java.util.logging.Logger

addHandler, config, entering, entering, entering, exiting, exiting, fine, finer, finest, getAnonymousLogger, getAnonymousLogger, getFilter, getHandlers, getLevel, getLogger, getLogger, getName, getParent, getResourceBundle, getResourceBundleName, getUseParentHandlers, info, isLoggable, log, log, log, log, log, logp, logp, logp, logp, logp, logrb, logrb, logrb, logrb, removeHandler, setFilter, setLevel, setParent, setUseParentHandlers, severe, throwing, warning

#### Methods inherited from class java.lang.Object

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

## Methods

## finalize

protected void finalize()
 throws Throwable

Called by the garbage collector on an object when garbage collection determines that there are no more references to the object.

This method disables internal logging and clears logger session list.

Any exception thrown by the finalize method causes the finalization of this object to be halted, but is otherwise ignored.

#### Throws:

Throwable - if an error or exception occurs.

## getInstance

public static StorageConnectorLogger getInstance()

Gets a singleton instance of the StorageConnectorLogger class.

## **Returns:**

A StorageConnectorLogger instance.

## getInternalLogging

public boolean getInternalLogging()

Gets the value indicating whether the IMiS/Storage Connector logger is logging to an internal file log handler.

#### **Returns:**

true to enable logging to the internal file log handler; otherwise, false.

## setInternalLogging

public void setInternalLogging(boolean value)
 throws IOException

Sets a value indicating whether the IMiS/Storage Connector logger enables or disables logging to an internal file log handler.

When this method is called with parameter true IMiS/Storage Connector logger starts logging to the rotating log files located in

- \* the system temporary folder on Windows systems (i.e. System.getProperty("java.io.tmpdir")) or;
- \* the user home folder on other systems (i.e. System.getProperty("user.home")).

Rotating log file name is set to "IMiS.StorageConnector.Java.%g.log", where %g escape sequence is a generation number used to distinguish rotated log files.

#### **Parameters:**

value - true to enable logging to the internal file log handler; otherwise, false.

#### **Throws:**

IOException - if there are IO problems opening the files.

SecurityException - if a security manager exists and if the caller does not have LoggingPermission("control").

#### addHandler

public void addHandler(Handler handler)

Adds the specified log handler to the IMiS/Storage Connector logger.

#### **Parameters:**

handler - the java.util.logging.Handler object to add.

## removeHandler

public void removeHandler(Handler handler)

Removes the specified log handler to the IMiS/Storage Connector logger.

#### **Parameters:**

handler - the java.util.logging.Handler object to remove.

## setLevel

public void setLevel(Level level)

Gets the effective logging level.

### **Parameters:**

level - the logging level for the logger. Default value is Level. INFO

#### Throws:

SecurityException - if a security manager exists and if the caller does not have LoggingPermission("control").

# com.imis.storageconnector Class StorageType

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **StorageType** extends Enum

Defines storage types supported by IMiS/Storage Connector.

**Note:** Only IMIS\_ARC storage is currently implemented by IMiS/Storage Connector.

Field Summary	
public static final	CONTENT_MANAGER IBM DB2 Content Manager Server.
public static final	DOMINO_DOC  IBM Lotus Domino Document Manager or Domino.Doc compliant Storage Server.
public static final	FILE_SYSTEM  Local/Remote File System.
public static final	IMIS_ARC IMiS/ARChive Storage Server.
public static final	Lotus Notes Document Imaging Mass Storage Server (LN:DI MSS).
public static final	ODMA compliant Storage Server.

Method Summary	
static <u>StorageType</u>	<pre>valueOf(String name)</pre>
static StorageType[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

## FILE SYSTEM

public static final com.imis.storageconnector.StorageType FILE\_SYSTEM

Local/Remote File System.

**Note:** FILE\_SYSTEM storage is currently not supported by IMiS/Storage Connector.

## **IMIS ARC**

public static final com.imis.storageconnector.StorageType IMIS\_ARC

IMiS/ARChive Storage Server.

## LNDI\_MSS

public static final com.imis.storageconnector.StorageType LNDI\_MSS

Lotus Notes Document Imaging Mass Storage Server (LN:DI MSS).

Note: LNDI\_MSS storage is currently not supported by IMiS/Storage Connector.

## **ODMA**

public static final com.imis.storageconnector.StorageType ODMA

ODMA compliant Storage Server.

Note: ODMA storage is currently not supported by IMiS/Storage Connector.

## DOMINO\_DOC

public static final com.imis.storageconnector.StorageType DOMINO\_DOC

IBM Lotus Domino Document Manager or Domino.Doc compliant Storage Server.

**Note:** DOMINO\_DOC storage is currently not supported by IMiS/Storage Connector.

## CONTENT\_MANAGER

public static final com.imis.storageconnector.StorageType CONTENT\_MANAGER

IBM DB2 Content Manager Server.

**Note:** CONTENT\_MANAGER storage is currently not supported by IMiS/Storage Connector.

## **Methods**

## values

public final static StorageType[] values()

# valueOf

public static StorageType valueOf(String name)

# **Package**

# com.imis.storageconnector.entitymodel

# com.imis.storageconnector.entitymodel Class AccessMode

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **AccessMode** extends Enum

Represents the type of access.

Field Summary	
public static final	Read access.
public static final	READ_WRITE Read and write access.
public static final	WRITE Write access.

Method Summary	
static <u>AccessMode</u>	<pre>valueOf(String name)</pre>
static AccessMode[]	<u>values()</u>

## Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

## **READ**

public static final com.imis.storageconnector.entitymodel.AccessMode READ Read access. Data can be read.

## **WRITE**

public static final com.imis.storageconnector.entitymodel.AccessMode WRITE Write access. Data can be written.

## **READ\_WRITE**

public static final com.imis.storageconnector.entitymodel.AccessMode READ\_WRITE

Read and write access. Data can be written and read.

# Methods

## values

public final static AccessMode[] values()

## valueOf

public static AccessMode valueOf(String name)

# com.imis.storageconnector.entitymodel Class ACLEntrySubjectType

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ACLEntrySubjectType** extends Enum

Defines constants for ACL entry subject type.

Field Summary	
public static final	ATTRIBUTE Subject is attribute.
public static final	DIRECTORY_ENTITY Subject is directory entity.
public static final	UNKNOWN Not known.

Method Summary	
static ACLEntrySubjectType	<pre>valueOf(String name)</pre>
static ACLEntrySubjectType[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

## Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

## **UNKNOWN**

public static final com.imis.storageconnector.entitymodel.ACLEntrySubjectType UNKNOWN

Not known.

## **DIRECTORY\_ENTITY**

 $\verb|public static final com.imis.storage connector.entity model. A CLE ntry Subject Type \\ \verb|DIRECTORY_ENTITY| \\$ 

Subject is directory entity.

## **ATTRIBUTE**

 $\verb|public static final com.imis.storage connector.entity model. A CLE ntry Subject Type \verb| ATTRIBUTE| \\$ 

Subject is attribute.

# Methods

## values

public final static ACLEntrySubjectType[] values()

## valueOf

public static ACLEntrySubjectType valueOf(String name)

## com.imis.storageconnector.entitymodel Class ACLFilterItem

public class **ACLFilterItem** extends EntityFilterItem

Represents the ACL filter item.

# **Constructor Summary**

public

ACLFilterItem(IDirectoryEntity subject, Set filter)
Initializes a new instance of the ACLFilterItem class.

# **Method Summary**

String

toString()

Returns a string that represents the entity filter item.

 ${\bf Methods\ inherited\ from\ class\ com.imis.storage connector.entity model.Entity Filter Item}$ 

toString

#### Methods inherited from class java.lang.Object

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

## Constructors

### **ACLFilterItem**

Initializes a new instance of the ACLFilterItem class.

#### **Parameters:**

subject - the directory entity subject. filter - the entity rights filter.

#### Throws:

NullPointerException - if subject is a null reference.

## Methods

# toString

public String toString()

Returns a string that represents the entity filter item.

## **Returns:**

A string that represents the entity filter item.

# com.imis.storageconnector.entitymodel Class ContentPartIdEncoding

#### All Implemented Interfaces:

Serializable, Comparable

# public final class **ContentPartIdEncoding** extends Enum

Defines constants for the encoding of content part identifier used when creating new content parts.

Used as values for the IMISARCHIVE archive content part identifier encoding disposition option. **See Also:** 

StorageConnector.OPTION\_CONTENT\_PART\_IDENCODING, StorageConnector.openArchive(ArchiveType, String, Map), StorageConnector.openArchive(ArchiveType, String, int, Map)

Field Summary	
public static final	Base 16 encoding.
public static final	BASE 64 encoding.
public static final	BASE 85 encoding.

Method Summary	
static ContentPartIdEncoding	<pre>valueOf(String name)</pre>
static ContentPartIdEncoding	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

## Fields

## BASE16

public static final com.imis.storageconnector.entitymodel.ContentPartIdEncoding BASE16
Base 16 encoding.

## BASE64

public static final com.imis.storageconnector.entitymodel.ContentPartIdEncoding BASE64

Base 64 encoding.

## BASE85

public static final com.imis.storageconnector.entitymodel.ContentPartIdEncoding BASE85

Base 85 encoding.

## Methods

## values

public final static ContentPartIdEncoding[] values()

## valueOf

public static ContentPartIdEncoding valueOf(String name)

## com.imis.storageconnector.entitymodel Class ContentPartIdType

#### **All Implemented Interfaces:**

Serializable, Comparable

## public final class **ContentPartIdType** extends Enum

Defines constants for the type of content part identifiers used when creating new content parts.

Used as values for the IMISARCHIVE archive content part identifier type disposition option. **See Also:** 

StorageConnector.OPTION\_CONTENT\_PART\_IDTYPE, StorageConnector.openArchive(ArchiveType,
String, Map), StorageConnector.openArchive(ArchiveType, String, int, Map)

Field Summary	
public static final	192 bit long file value identifier.
public static final	1D256 256 bit long file value identifier.

Method Summary	
static ContentPartIdType	<u>valueOf</u> (String name)
static ContentPartIdType[]	values()

## Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

## Fields

## **ID192**

public static final com.imis.storageconnector.entitymodel.ContentPartIdType ID192

192 bit long file value identifier.

## **ID256**

public static final com.imis.storageconnector.entitymodel.ContentPartIdType ID256
256 bit long file value identifier.

## Methods

## values

public final static ContentPartIdType[] values()

## valueOf

public static ContentPartIdType valueOf(String name)

## com.imis.storageconnector.entitymodel Class DeletionKind

#### **All Implemented Interfaces:**

Serializable, Comparable

## public final class **DeletionKind** extends Enum

Describes the kind of entity deletion.

Field Summary	
public static final	DELETED Entity was deleted.
public static final	DISPOSED Entity was disposed through review.

Method Summary	
static <u>DeletionKind</u>	<pre>valueOf(String name)</pre>
static DeletionKind[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

### **DELETED**

public static final com.imis.storageconnector.entitymodel.DeletionKind **DELETED**Entity was deleted.

## **DISPOSED**

public static final com.imis.storageconnector.entitymodel.DeletionKind **DISPOSED**Entity was disposed through review.

## Methods

## values

public final static DeletionKind[] values()

## valueOf

public static DeletionKind valueOf(String name)

## com.imis.storageconnector.entitymodel Class EntityFilter

## public class **EntityFilter** extends Object

Represents the entity filter.

Field Summary	
public static final	ALL The entity filter that includes all entities.
public static final	CLASSES The entity filter that includes only IClass entities.
public static final	DOCUMENTS  The entity filter that includes only IDocument entities.
public static final	FOLDERS  The entity filter that includes only IFolder entities.

# Constructor Summary public | EntityFilter(Set filter, EntityFilterItem item) | Initializes a new instance of the EntityFilter class.

Method Summary	
EntityFilterItem	Gets the entity filter item.
Set	getType()  Gets the entity type filter.
String	toString()   Returns a string that represents the current EntityFilter.

### Methods inherited from class java.lang.Object

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

## Fields

## **ALL**

public static final com.imis.storageconnector.entitymodel.EntityFilter ALL

The entity filter that includes all entities.

## **CLASSES**

public static final com.imis.storageconnector.entitymodel.EntityFilter CLASSES

The entity filter that includes only IClass entities.

## **FOLDERS**

public static final com.imis.storageconnector.entitymodel.EntityFilter FOLDERS

The entity filter that includes only IFolder entities.

## **DOCUMENTS**

public static final com.imis.storageconnector.entitymodel.EntityFilter DOCUMENTS

The entity filter that includes only  ${\tt IDocument}$  entities.

## Constructors

## **EntityFilter**

Initializes a new instance of the EntityFilter class.

#### **Parameters:**

filter - the entity type filter. item - the entity filter item.

## Methods

## getType

```
public Set getType()
```

Gets the entity type filter.

## **Returns:**

The entity type filter.

## getItem

```
public EntityFilterItem getItem()
```

Gets the entity filter item.

#### **Returns:**

The entity filter item.

## toString

```
public String toString()
```

Returns a string that represents the current  ${\tt EntityFilter}.$ 

## **Returns:**

A string that represents the current EntityFilter.

## com.imis.storageconnector.entitymodel Class EntityFilterItem

**Direct Known Subclasses:** 

**ACLFilterItem** 

## public abstract class **EntityFilterItem** extends Object

Represents the base class for entity filter items.

See Also:

EntityFilter

## **Constructor Summary**

## **Method Summary**

abstract String

toString()

Returns a string that represents the entity filter item.

### Methods inherited from class java.lang.Object

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

## Constructors

## **EntityFilterItem**

public EntityFilterItem()

## Methods

## toString

public abstract String toString()

Returns a string that represents the entity filter item.

#### **Returns:**

A string that represents the entity filter item.

## com.imis.storageconnector.entitymodel Class EntityIdEncoding

#### **All Implemented Interfaces:**

Serializable, Comparable

## public final class **EntityIdEncoding** extends Enum

Defines constants for the encoding of entity identifier used when creating new entities.

Used as values for the IMISARCHIVE archive entity identifier encoding disposition option. **See Also:** 

StorageConnector.OPTION\_ENTITY\_IDENCODING, StorageConnector.openArchive(ArchiveType, String, Map), StorageConnector.openArchive(ArchiveType, String, int, Map)

Field Summary	
public static final	Base 16 encoding.
public static final	BASE 64 encoding.
public static final	BASE 85 encoding.

Method Summary	
static EntityIdEncoding	<u>valueOf</u> (String name)
static EntityIdEncoding[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

## Fields

## BASE16

public static final com.imis.storageconnector.entitymodel.EntityIdEncoding BASE16

Base 16 encoding.

## BASE64

public static final com.imis.storageconnector.entitymodel.EntityIdEncoding BASE64

Base 64 encoding.

## BASE85

public static final com.imis.storageconnector.entitymodel.EntityIdEncoding BASE85

Base 85 encoding.

## Methods

## values

public final static EntityIdEncoding[] values()

## valueOf

public static EntityIdEncoding valueOf(String name)

## com.imis.storageconnector.entitymodel Class EntityIdKind

#### All Implemented Interfaces:

Serializable, Comparable

## public final class **EntityIdKind** extends Enum

Describes the kind of identifier used to access an IEntity.

See Also:

IEntity

Field Summary	
public static final	CLASSIFICATION_CODE  Defines a classification code in canonical format which describes the entity position in the Classification tree.
public static final	EXTERNAL  Defines an external entity identifier which is generated by external system and associated with an IEntity are its creation or modification.
public static final	INTERNAL  Defines an internal entity identifier which is returned by the archive.
public static final	UNKNOWN  Defines an invalid entity identifier which should never be used for accessing an IEntity and its purpose is as an invalid value in parameter initialization.

Method Summary	
static EntityIdKind	<pre>valueOf(String name)</pre>
static EntityIdKind[]	values()

## Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

### UNKNOWN

public static final com.imis.storageconnector.entitymodel.EntityIdKind UNKNOWN

Defines an invalid entity identifier which should never be used for accessing an IEntity and its purpose is as an invalid value in parameter initialization.

### INTERNAL

public static final com.imis.storageconnector.entitymodel.EntityIdKind INTERNAL

Defines an internal entity identifier which is returned by the archive. It can be encoded in various combinations of EntityIdType and EntityIdEncoding.

## **EXTERNAL**

public static final com.imis.storageconnector.entitymodel.EntityIdKind EXTERNAL

Defines an external entity identifier which is generated by external system and associated with an IEntity are its creation or modification. It must uniquely identify an entity in order to be used for entity identification.

## CLASSIFICATION\_CODE

public static final com.imis.storage<br/>connector.entitymodel. Entity<br/>IdKind  ${\bf CLASSIFICATION}$   ${\bf CODE}$ 

Defines a classification code in canonical format which describes the entity position in the Classification tree. Classification code canonical parts are separated by the entity hierarchy delimiter "^". Canonical parts are composed of an entity type prefix, "C=", "F=" or "D=" for class, folder or document entity respectively, and relative classification code. (e.g.: "C=1^C=1^C=1" addresses a class which is identified by classification code 1 at level 1, classification code 1 on level 2 and classification code 1 on level 3).

## Methods

### values

public final static EntityIdKind[] values()

### valueOf

public static EntityIdKind valueOf(String name)

## com.imis.storageconnector.entitymodel Class EntityIdType

#### **All Implemented Interfaces:**

Serializable, Comparable

## public final class **EntityIdType** extends Enum

Defines constants for the type of entity identifiers used when creating new entities.

Used as values for the IMISARCHIVE archive entity identifier type disposition option. **See Also:** 

StorageConnector.OPTION\_ENTITY\_IDTYPE, StorageConnector.openArchive(ArchiveType, String, Map), StorageConnector.openArchive(ArchiveType, String, int, Map)

Field Summary	
public static final	192 bit long entity identifier.
public static final	ID256 256 bit long entity identifier.

Method Summary	
static EntityIdType	<pre>valueOf(String name)</pre>
static EntityIdType[]	values()

## Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

## **ID192**

public static final com.imis.storageconnector.entitymodel.EntityIdType ID192

192 bit long entity identifier.

## **ID256**

public static final com.imis.storageconnector.entitymodel.EntityIdType ID256
256 bit long entity identifier.

## Methods

## values

public final static EntityIdType[] values()

## valueOf

public static EntityIdType valueOf(String name)

## com.imis.storageconnector.entitymodel Class EntityQueryScope

#### **All Implemented Interfaces:**

Serializable, Comparable

## public final class **EntityQueryScope** extends Enum

Defines the entity info query scope that server must honor when returning its result. Note that general information (i.e. internal identifier, entity type, template name, created, updated and accessed timestamps, effective rights and child entity count) is always returned.

Field Summary	
public static final	DRAFT
	Information about entity draft should be returned.
public static final	PARENT_INFO
	Parent information should be returned (returns the same information as for queried entity).
public static final	PROPERTIES
	Properties information should be returned.
public static final	REFERENCES
	Entity references should be returned.
public static final	TEMPLATES
	Sub-entity templates should be returned.
public static final	VERSIONS
	All entity versions should be returned.

Method Summary	y
static EntityQueryScope	valueOf(String name)
static EntityQueryScope[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

### Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

## **PROPERTIES**

public static final com.imis.storageconnector.entitymodel.EntityQueryScope **PROPERTIES**Properties information should be returned.

### **TEMPLATES**

public static final com.imis.storageconnector.entitymodel.EntityQueryScope **TEMPLATES**Sub-entity templates should be returned.

## PARENT\_INFO

public static final com.imis.storageconnector.entitymodel.EntityQueryScope PARENT\_INFO

Parent information should be returned (returns the same information as for queried entity).

## REFERENCES

public static final com.imis.storageconnector.entitymodel.EntityQueryScope REFERENCES

Entity references should be returned.

#### DRAFT

public static final com.imis.storageconnector.entitymodel.EntityQueryScope DRAFT

Information about entity draft should be returned.

#### VERSIONS

public static final com.imis.storageconnector.entitymodel.EntityQueryScope **VERSIONS**All entity versions should be returned.

## Methods

### values

public final static EntityQueryScope[] values()

## valueOf

public static EntityQueryScope valueOf(String name)

## com.imis.storageconnector.entitymodel Class EntityRightsFilter

## **All Implemented Interfaces:**

Serializable, Comparable

## public final class **EntityRightsFilter** extends Enum

Defines the filter enumeration which controls what entities in regards to rights should be included in the entity collection.

Field Summary	
public static final	CHANGE_RETENTION  Entities with ChangeRetention right should be included in the collection.
public static final	CHANGE_RIGHTS Entities with ChangeRights right should be included in the collection.
public static final	CHANGE_SECURITY_CLASS  Entities with ChangeSecurityClass right should be included in the collection.
public static final	CHANGE_STATUS  Entities with ChangeStatus right should be included in the collection.
public static final	CREATE_REFERENCES  Entities with CreateReferences right should be included in the collection.
public static final	CREATE_SUB_ENTITIES  Entities with CreateSubEntities right should be included in the collection.
public static final	DELETE_ACCESS  Entities with DeleteAccess right should be included in the collection.
public static final	MOVE_ACCESS Entities with MoveAccess right should be included in the collection.
public static final	READ_ACCESS Entities with ReadAccess right should be included in the collection.
public static final	WRITE_ACCESS Entities with WriteAccess right should be included in the collection.

Method Summary	у
static EntityRightsFilter	<pre>valueOf(String name)</pre>
static EntityRightsFilter[]	values()

### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

## READ\_ACCESS

 $\verb|public static final com.imis.storage connector.entity model. Entity Rights Filter \\ \textit{READ\_ACCESS}|$ 

Entities with ReadAccess right should be included in the collection.

## WRITE ACCESS

public static final com.imis.storageconnector.entitymodel.EntityRightsFilter
WRITE ACCESS

 $Entities \ with \ {\tt WriteAccess} \ right \ should \ be \ included \ in \ the \ collection.$ 

## MOVE\_ACCESS

 $\verb"public static final com.imis.storage connector.entity model. Entity Rights Filter \verb"move access"$ 

Entities with MoveAccess right should be included in the collection.

## **DELETE ACCESS**

 $\verb|public| static final com.imis.storage connector.entity model. Entity Rights Filter \\ \verb|DELETE_ACCESS| \\$ 

Entities with DeleteAccess right should be included in the collection.

## CHANGE\_RIGHTS

 $\verb|public| static| final com.imis.storage connector.entity model. Entity Rights Filter \\ \textbf{CHANGE\_RIGHTS}|$ 

Entities with ChangeRights right should be included in the collection.

## CREATE\_SUB\_ENTITIES

public static final com.imis.storageconnector.entitymodel.EntityRightsFilter CREATE\_SUB\_ENTITIES

Entities with CreateSubEntities right should be included in the collection.

## CHANGE\_SECURITY\_CLASS

public static final com.imis.storageconnector.entitymodel.EntityRightsFilter CHANGE SECURITY CLASS

Entities with ChangeSecurityClass right should be included in the collection.

## CHANGE\_STATUS

 $\verb|public| static final com.imis.storage connector.entity model. Entity Rights Filter \\ \textbf{CHANGE\_STATUS}|$ 

Entities with ChangeStatus right should be included in the collection.

## CHANGE\_RETENTION

 $\verb|public| static final com.imis.storage connector.entity model. Entity Rights Filter \\ \textbf{CHANGE\_RETENTION} \\$ 

Entities with ChangeRetention right should be included in the collection.

## **CREATE\_REFERENCES**

 $\verb|public| static final com.imis.storage connector.entity model. Entity Rights Filter \\ \textbf{CREATE\_REFERENCES}|$ 

Entities with CreateReferences right should be included in the collection.

## Methods

## values

public final static EntityRightsFilter[] values()

## valueOf

public static EntityRightsFilter valueOf(String name)

## com.imis.storageconnector.entitymodel Class EntitySortKey

## public class **EntitySortKey** extends Object

Defines the object which encapsulates the description how entity collection should be sorted. **See Also:** 

IEntity.getSubEntities(EntityFilter, Collection, Collection),
IEntityStub.getSubEntities(EntityFilter, Collection, Collection),
IArchive.getRootClasses(Collection, Collection)

## **Constructor Summary**

public EntitySortKey (String propertyName, EntitySortKeyDirection direction)
Initializes a new instance of the EntitySortKey class.

| Method Summary | Set |

## Methods inherited from class java.lang.Object

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

## Constructors

## **EntitySortKey**

Initializes a new instance of the EntitySortKey class.

#### **Parameters:**

propertyName - the property unique name which should be sorted. direction - the sorting direction.

#### Throws:

NullPointerException - if propertyName is a null reference.

## Methods

## getPropertyName

public String getPropertyName()

Gets the property unique name.

The property unique name identifies a IProperty or IReadOnlyProperty within an IEntity instance.

#### Returns

The property unique name.

## setPropertyName

public void setPropertyName(String value)

Sets the property unique name.

The property unique name identifies a IProperty or IReadOnlyProperty within an IEntity instance.

#### **Parameters:**

value - the property unique name.

#### Throws:

NullPointerException - if value is a null reference.

## getDirection

public EntitySortKeyDirection getDirection()

Gets the entity sorting direction with which the values of property should be sorted.

#### **Returns:**

The entity sorting direction.

## setDirection

public void setDirection(EntitySortKeyDirection value)

Sets the entity sorting direction with which the values of property should be sorted.

#### **Parameters:**

value - the entity sorting direction.

## com.imis.storageconnector.entitymodel Class EntitySortKeyDirection

#### All Implemented Interfaces:

Serializable, Comparable

## public final class **EntitySortKeyDirection** extends Enum

Defines enumeration for sorting direction of entity collection elements.

Field Summary	
public static final	Values of property, identified by <a href="mailto:EntitySortKey.getPropertyName()">EntitySortKey.getPropertyName()</a> is to be sorted in ascending order.
public static final	Values of property, identified by <a href="mailto:EntitySortKey.getPropertyName()">EntitySortKey.getPropertyName()</a> is to be sorted in descending order.

Method Summary	
$\frac{\text{static}}{\text{EntitySortKeyDirectio}} \\ \frac{\underline{\underline{n}}}{\underline{n}}$	<u>valueOf</u> (String name)
static EntitySortKeyDirectio n[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

## Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

## **ASCENDING**

 $\verb|public| static final com.imis.storage connector.entity model. Entity Sort Key Direction \\ \textbf{ASCENDING} \\$ 

Values of property, identified by EntitySortKey.getPropertyName() is to be sorted in ascending order.

## **DESCENDING**

 $\verb|public| static| final com.imis.storage connector.entity model. Entity Sort Key Direction \\ \textbf{DESCENDING}$ 

Values of property, identified by EntitySortKey.getPropertyName() is to be sorted in descending order.

## Methods

## values

public final static EntitySortKeyDirection[] values()

## valueOf

public static EntitySortKeyDirection valueOf(String name)

## com.imis.storageconnector.entitymodel Class EntityType

#### All Implemented Interfaces:

Serializable, Comparable

## public final class **EntityType** extends Enum

Describes the IEntity specialization in the entity tree.

See Also:

IEntity

Field Summary	
public static final	ANY
	Represents a generic entity type.
public static final	CLASS
	Class entity type.
public static final	DOCUMENT
	Document entity type.
public static final	FOLDER
	Folder entity type.
public static final	UNKNOWN
	Unknown entity type.

Method Summary	
static <u>EntityType</u>	<pre>valueOf(String name)</pre>
static EntityType[]	values()

## Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

## Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

## **UNKNOWN**

 $\verb"public static final com.imis.storage connector.entity model. Entity Type \verb"unknown"$ 

Unknown entity type. This value defines an invalid IEntity type which is never returned on an coherent entity.

## **CLASS**

public static final com.imis.storageconnector.entitymodel.EntityType CLASS

Class entity type. This value defines a IClass object, instances which make classification scheme.

## **FOLDER**

public static final com.imis.storageconnector.entitymodel.EntityType FOLDER

Folder entity type. This value defines a IFolder object, which can contain additional sub-folders or documents.

## **DOCUMENT**

public static final com.imis.storageconnector.entitymodel.EntityType DOCUMENT

Document entity type. This value defines a IDocument object, which can be contained within a class, folder or sub-folder.

## **ANY**

public static final com.imis.storageconnector.entitymodel.EntityType ANY

Represents a generic entity type. This value defines a IEntity object.

## Methods

### values

public final static EntityType[] values()

## valueOf

public static EntityType valueOf(String name)

## com.imis.storageconnector.entitymodel Class EntityTypeFilter

#### **All Implemented Interfaces:**

Serializable, Comparable

## public final class **EntityTypeFilter** extends Enum

Defines the filter enumeration which controls what types of entities should be included in the entity collection. **See Also:** 

IEntity.getSubEntities(EntityFilter, Collection, Collection),
IEntityStub.getSubEntities(EntityFilter, Collection, Collection),
IArchive.getRootClasses(Collection, Collection)

Field Summary	
public static final	CLASSES Entities of type EntityType.CLASS should be included in the collection.
public static final	DOCUMENTS Entities of type EntityType.DOCUMENT should be included in the collection.
public static final	Entities of type EntityType.FOLDER should be included in the collection.

Method Summary	
static EntityTypeFilter	<pre>valueOf(String name)</pre>
static EntityTypeFilter[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

## Methods inherited from class java.lang.Object

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

## Methods inherited from interface java.lang.Comparable compareTo

## Fields

## **CLASSES**

public static final com.imis.storageconnector.entitymodel.EntityTypeFilter **CLASSES**Entities of type EntityType.CLASS should be included in the collection.

## **FOLDERS**

public static final com.imis.storageconnector.entitymodel.EntityTypeFilter FOLDERS

Entities of type EntityType.FOLDER should be included in the collection.

## **DOCUMENTS**

public static final com.imis.storageconnector.entitymodel.EntityTypeFilter **DOCUMENTS**Entities of type EntityType.DOCUMENT should be included in the collection.

## Methods

## values

public final static EntityTypeFilter[] values()

## valueOf

public static EntityTypeFilter valueOf(String name)

## com.imis.storageconnector.entitymodel Interface IACL

public interface IACL extends

Represents an Access Control List, a collection of rights attached to an IEntity.

The IACL object enables the caller to access the IEntity Security Descriptor. Based on the caller set of rights, it has the option of reading and/or modifying the IEntityACLEntry or IPropertyACLEntry objects, representing security constraints on the entity and its properties. It also provides means of creating new ACL entries which can be committed to the owner entity at the commit stage using the <a href="IEntity.save()">IEntity.save()</a> method or discarded.

See Also:

IEntity, IEntityACLEntry, IPropertyACLEntry

Method Summary		
IEntityACLEntry	Adds a new IEntityACLEntry specified with the ACL entry subject type and unique subject identifier to the owning entity IACL.	
IPropertyACLEntry	addPropertyEntry(String propertyName, ACLEntrySubjectType subjectType, String subject)  Adds a new IPropertyACLEntry specified by the property name, ACL entry subject type and unique subject identifier to the owning entity IACL.	
com.imis.util.IReadOn lyMap	getEntries()  Gets the read-only map of entity ACL entries assigned to the owner IEntity.	
com.imis.util.IReadOn lyMap	Gets the read-only map of read-only maps of property ACL entries assigned to the owner IProperty.	

## Methods

## getEntries

public com.imis.util.IReadOnlyMap getEntries()

Gets the read-only map of entity ACL entries assigned to the owner IEntity.

Use this method to iterate and access different entity ACL entries.

## **Returns:**

A read-only map of IEntityACLEntry objects sorted by pairs of ACL entry subject type and unique identifier.

## getPropertyEntries

public com.imis.util.IReadOnlyMap getPropertyEntries()

Gets the read-only map of read-only maps of property ACL entries assigned to the owner IProperty.

Use this method to iterate and access different property ACL entries.

#### **Returns:**

A read-only map of IPropertyACLEntry objects sorted externally by property name and internally by pairs of property ACL entry subject type and unique identifier.

## addEntry

Adds a new IEntityACLEntry specified with the ACL entry subject type and unique subject identifier to the owning entity IACL.

**Note:** An entry added in this manner is considered temporary until the owner IEntity changes are committed using the IEntity.save() method.

#### **Parameters:**

```
subjectType - the ACL entry subject type. subject - the ACL entry subject.
```

#### **Returns:**

An IEntityACLEntry instance.

#### Throws:

 ${\tt StorageConnectorException - if an IMiS/Storage \ Connector \ error \ occurs:}$ 

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- ACL entry for subject already exists.

## addPropertyEntry

```
\frac{\text{PropertyACLEntry} \  \, \text{addPropertyEntry}(\text{String propertyName}, \\ \frac{\text{ACLEntrySubjectType}}{\text{String subject})} \  \, \text{subjectType}, \\ \text{throws StorageConnectorException}
```

Adds a new IPropertyACLEntry specified by the property name, ACL entry subject type and unique subject identifier to the owning entity IACL.

**Note:** An entry added in this manner is considered temporary until the owner <code>IEntity</code> changes are committed using the <code>IEntity.save()</code> method.

#### **Parameters:**

```
propertyName - the property name.
subjectType - the ACL entry subject type.
subject - the ACL entry subject.
```

#### **Returns:**

A IPropertyACLEntry instance.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- ACL entry for property and subject already exists.

## com.imis.storageconnector.entitymodel Interface IBinaryValue

public interface IBinaryValue extends

Represents an unlimited length byte array property which has a read-write interface.

Method Summary		
String	getContentType()  Gets the binary value content type (MIME).	
byte[]	getValue()  Gets the value of the IBinaryValue as array of bytes.	
InputStream	openDataInputStream()  Opens a data input stream from which the binary value data can be read.	
OutputStream	openDataOutputStream(boolean append)  Opens a data output stream to which the binary value data can be written.	
void	<pre>setValue(byte[] value) Sets the value of the IBinaryValue as array of bytes.</pre>	

## Methods

## getContentType

```
public String getContentType()
```

Gets the binary value content type (MIME).

#### **Returns:**

The string representing the value content type (MIME).

## getValue

Gets the value of the IBinaryValue as array of bytes.

**Note:** This operation allows user to pass a reason for opening binary value data input stream. Reason can be passed through <a href="AuditLog">AuditLog</a> message.

#### Returns

The array of bytes representing the value of the IBinaryValue.

#### Throws:

```
{\tt CancellationException - if an operation was canceled by the user.} \\ {\tt LoginException - if a login error occurs}.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while opening binary value data stream.

IOException - if an I/O error occurs.

## setValue

Sets the value of the IBinaryValue as array of bytes.

**Note:** This operation allows user to pass a reason for opening binary value data output stream. Reason can be passed through AuditLog message.

#### **Parameters:**

value - the array of bytes representing the value of the IBinaryValue.

#### Throws:

```
NullPointerException - if value is null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while opening binary value data stream.

IOException - if an I/O error occurs.

## openDataInputStream

Opens a data input stream from which the binary value data can be read.

**Note:** This operation allows user to pass a reason for opening binary value data input stream. Reason can be passed through AuditLog message.

#### **Returns:**

A binary value data InputStream.

#### **Throws:**

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while opening property value data input stream.

IOException - if an I/O error occurs.

## openDataOutputStream

Opens a data output stream to which the binary value data can be written.

**Note:** This operation allows user to pass a reason for opening binary value data output stream. Reason can be passed through AuditLog message.

#### **Parameters:**

append - true to append data to the end of the output stream; otherwise false.

#### **Returns:**

A binary value data OutputStream.

#### **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Cannot open property value in read-write mode on a read-only property.
- Error occurred while opening property value data output stream.

IOException - if an I/O error occurs.

## com.imis.storageconnector.entitymodel Interface IClass

All Superinterfaces:

**IEntity** 

public interface IClass extends IEntity

Defines a IClass entity.

A IClass entity represents a node in the document classification scheme (tree). It may contain metadata attributes, has its inherited and explicit ACL entries and can contain additional sub-classes, sub-folders and/or documents as sub-entities.

Current implementation inherits from the base IEntity and adds factory methods for creating new instances of sub-entities which can be either Classes, Folders or Documents.

See Also:

IEntity, IFolder, IDocument

Method Summary	
IClass	<u>createClass</u> (String templateId) Creates a new subclass entity instance.
IDocument	<u>createDocument</u> (String templateId)  Creates a new IDocument entity instance.
<u>IFolder</u>	<u>createFolder</u> (String templateId)  Creates a new IFolder or sub-folder entity instance.
boolean	isChildClassificationCodeGenerated()  Gets a value indicating whether or not child classification code is auto generated.
void	Sets a value indicating whether or not child classification code is auto generated.

#### Methods inherited from interface com.imis.storageconnector.entitymodel.IEntity

accessed, areValuesInherited, close, closed, createBinaryValue, created, createStringMaxValue, getACL, getArchivalInformationalPackage, getArchive, getAuditLog, getCategories, getClassificationCode, getCreator, getDescription, getDraftCreator, getDraftId, getEffectiveRights, getEmailEntity, getEvidenceRecords, getExternalIds, getId, getKeywords, getMode, getModifiedBy, getMoveDetails, getOwner, getParent, getPhysicalEntity, getPickListValues, getProperties, getPublicClassificationCode, getReferences, getReport, getRetention, getSaveLog, getSecurityClass, getSecurityClassChangeDetails, getSignificance, getStatus, getStub, getSubEntities, getSubEntityTemplates, getSystemProperties, getSystemProperty, getTemplate, getTitle, getTransferDetails, getType, getVersionComment, getVersionLabel, getVersionSequence, hasAIP, hasDraft, hasReferences, hasVersions, isClosed, isPermanent, modified, opened, save, save, search, setCategories, setClassificationCode, setDescription, setExternalIds, setKeywords, setOwner, setSecurityClass, setSignificance, setStatus, setTitle, subEntityCount

Methods inherited from interface com.imis.IAutoCloseable

close

## **Methods**

## isChildClassificationCodeGenerated

```
public boolean isChildClassificationCodeGenerated()
    throws StorageConnectorException
```

Gets a value indicating whether or not child classification code is auto generated.

#### Returns

true if child classification code is auto generated; otherwise false.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while getting child classification code generated value.

## setChildClassificationCodeGenerated

```
public void setChildClassificationCodeGenerated(boolean value)
    throws StorageConnectorException
```

Sets a value indicating whether or not child classification code is auto generated.

#### **Parameters:**

value - true if child classification code is auto generated; otherwise false.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while setting child classification code generated value.

## createClass

Creates a new subclass entity instance.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

Note: This operation allows user to pass a reason for creating class. Reason can be passed through AuditLog message.

#### Parameters:

templateId - the class template identifier from the templates inventory.

#### **Returns:**

A new IClass instance.

#### Throws:

NullPointerException - if templateId is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

## createFolder

Creates a new IFolder or sub-folder entity instance.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

Note: This operation allows user to pass a reason for creating folder. Reason can be passed through AuditLog message.

#### **Parameters:**

templateId - the folder template identifier from the templates inventory.

#### **Returns:**

A new IFolder instance.

#### Throws:

NullPointerException - if templateId is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

## createDocument

Creates a new IDocument entity instance.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

**Note:** This operation allows user to pass a reason for creating document. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

### **Parameters:**

templateId - the document template identifier from the templates inventory.

#### **Returns:**

A new IDocument instance.

#### Throws:

NullPointerException - if templateId is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IContent

**All Superinterfaces:** 

**IReadOnlyContent** 

public interface **IContent** extends **IReadOnlyContent** 

Defines a content, a collection of content parts.

An IContent describes a collection of content parts assigned to an entity. It represents a digital (binary) collection of chapters. It has its attributes and methods for accessing the subsequent binary parts in a read-write fashion. It represents a digital (binary) collection of document chapters. It has its attributes and methods for accessing the subsequent binary parts in a read-write fashion.

**Note:** Any modifications made to the IContent is committed to the archive when owner IDocument entity is committed with IEntity.save() method otherwise they are discarded.

See Also:

IEntity, IDocument, IContentPart

Method Summary	
void	clear() Clears the content parts.
void	<pre>cloneParts(IEntity target, String targetContentName, Collection partsIds)</pre> Clones the specified content parts to the specified content on the target entity.
void	detachParts (Collection partsIds)  Detaches the specified contained content parts and makes them root content parts.
IReadOnlyPropertyRigh ts	getEffectiveRights ( )  Gets the effective rights on the content if content has ACL defined.
void	<pre>moveParts(EntityIdKind targetIdKind, String targetId, String targetContentName, Collection partsIds)  Moves the specified root content parts to the specified content on the target entity using the target entity identifier.</pre>
void	moveParts(IEntity target, String targetContentName, Collection partsIds)  Moves the specified root content parts to the specified content on the target entity.
void	<pre>queuePartsForConvert(Collection partsIds) Queues the specified content parts for conversion.</pre>
void	<pre>queuePartsForIndex(Collection partsIds) Queues the specified content parts for full-text index.</pre>
void	Sets the list of IContentPart objects.

Methods inherited from interface com.imis.storageconnector.entitymodel.IReadOnlyContent
getEffectiveRights, getName, getParts, isPublic, isReadOnly, isReadOnlyAfterCheckIn,

isReadOnlyAfterCreate, isVersionable, partsCount

# Methods

### getEffectiveRights

```
public IReadOnlyPropertyRights getEffectiveRights()
```

Gets the effective rights on the content if content has ACL defined.

### **Returns:**

The read-only set of rights describing users effective rights on the content or a null reference if none available.

### setParts

```
public void setParts(List parts)
  throws StorageConnectorException
```

Sets the list of IContentPart objects.

This method provides access to the ordered collection of content parts assigned to this content instance. The sequence used when setting the content parts is used as content parts sequence, maintained at the archive.

Deletion of a part is accomplished through setting the content parts collection and not including an IContentPart in the collection.

**Note:** Any modifications to the IContent is committed to the archive when parent entity is saved with <a href="IEntity.save()">IEntity.save()</a> method, otherwise it is discarded.

#### **Parameters:**

parts - a list of IContentPart objects.

### Throws:

NullPointerException - if parts is a null reference. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Content part is not compatible with the archive.
- Error occurred while getting properties.
- Error occurred while setting property values.

### cloneParts

Clones the specified content parts to the specified content on the target entity.

This operation requires server version 9.9 or above.

**Note:** This operation allows user to pass a reason for cloning content parts. Reason can be passed through <a href="AuditLog">AuditLog</a> message.

#### **Parameters:**

```
target - the target entity.
targetContentName - the target content name.
```

partsIds - the identifiers of the content parts to clone.

#### **Throws:**

NullPointerException - if if target, targetContentName or partsIds is a null reference. StorageConnectorException - if

- Error occurred while getting properties.
- Error occurred while cloning content parts.

IOException - if an I/O error occurs.

### detachParts

Detaches the specified contained content parts and makes them root content parts.

This operation requires server version 9.8 or above.

**Note:** This operation allows user to pass a reason for detaching content parts. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

### **Parameters:**

partsIds - the identifiers of the contained content parts to detach.

#### Throws:

 $\begin{tabular}{ll} NullPointer Exception - if parts Ids is a null reference. \\ Storage Connector Exception - if \end{tabular}$ 

- Error occurred while getting properties.
- Error occurred while detaching content parts.

IOException - if an I/O error occurs.

### moveParts

Moves the specified root content parts to the specified content on the target entity.

This operation requires server version 9.9 or above.

**Note:** This operation allows user to pass a reason for moving content parts. Reason can be passed through <a href="AuditLog">AuditLog</a> message.

### **Parameters:**

```
target - the target entity.
targetContentName - the target content name.
partsIds - the identifiers of the root content parts to move.
```

### Throws:

NullPointerException - if target, targetContentName or partsIds is a null reference.

StorageConnectorException - if

- Error occurred while getting properties.
- Error occurred while moving content parts.

IOException - if an I/O error occurs.

### moveParts

Moves the specified root content parts to the specified content on the target entity using the target entity identifier.

This operation requires server version 9.8 or above.

**Note:** This operation allows user to pass a reason for moving content parts. Reason can be passed through <a href="AuditLog">AuditLog</a> message.

#### **Parameters:**

```
targetIdKind - the target entity identifier kind.
targetId - the target entity identifier.
targetContentName - the target content name.
partsIds - the identifiers of the root content parts to move.
```

#### Throws:

 ${\tt NullPointerException-if targetId, targetContentName or partsIds is a null reference. StorageConnectorException-if}$ 

- Error occurred while getting properties.
- Error occurred while moving content parts.

IOException - if an I/O error occurs.

# queuePartsForConvert

Queues the specified content parts for conversion.

This operation requires server version 9.8 or above.

**Note:** This operation allows user to pass a reason for queuing content parts for conversion. Reason can be passed through AuditLog message.

#### **Parameters:**

partsIds - the identifiers of the content parts to queue for conversion.

### Throws:

NullPointerException - if partsIds is a null reference.

StorageConnectorException - if

- Error occurred while getting properties.
- Error occurred while queuing content parts for conversion.

IOException - if an I/O error occurs.

### queuePartsForIndex

Queues the specified content parts for full-text index.

This operation requires server version 9.8 or above.

**Note:** This operation allows user to pass a reason for queuing content parts for full-text index. Reason can be passed through AuditLog message.

#### **Parameters:**

partsIds - the identifiers of the content parts to queue for full-text index.

#### Throws:

NullPointerException - if partsIds is a null reference. StorageConnectorException - if

- Error occurred while getting properties.
- Error occurred while queuing content parts for full-text index.

IOException - if an I/O error occurs.

### clear

```
public void clear()
  throws StorageConnectorException
```

Clears the content parts.

This method does nothing if content had no parts assigned to it.

**Note:** Any modifications done to the IContent is committed to the archive when parent entity is saved with <a href="IEntity.save()">IEntity.save()</a> method, otherwise it is discarded.

### Throws:

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs: IMIS/ARC Storage Server archive errors:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Error occurred while clearing property values.

# com.imis.storageconnector.entitymodel Interface IContentPart

### public interface IContentPart extends

Defines a part of the IContent.

IContentPart describes a part of a IContent. It represents a digital (binary) chapter of a document. It has its properties which describe its attributes and methods for accessing the binary data.

Any modifications made to the IContentPart is committed to the archive when parent IDocument entity is committed with IEntity.save()
See Also:
method otherwise they are discarded.

IEntity, IDocument

Method Summary	
Calendar	accessed()  Gets the content part access timestamp or a null reference for unsaved content part created with the IDocument.createContentPart() method.
void	<pre>clone(IEntity target, String targetContentName) Clones this content part to the specified content on the target entity.</pre>
Calendar	<pre>created() Gets the content part creation timestamp or a null reference for unsaved content part created with the IDocument.createContentPart() method.</pre>
void	detach() Detaches this content part and makes it a root content part.
String	getContentType()  Gets the content type of this content part.
String	getDescription()  Gets the content part description.
String	getExtension()  Gets a default extension for the content type of this content part.
String	getId()  Gets the content part identifier.
IContentPart	getParent()  Gets the parent content part.
long	getSize()  Gets the size, in bytes, of the content part.
com.imis.util.IReadOn lyList	getSubParts()  Gets the read-only list of sub content parts.
boolean	isIndexed()  Gets the value indicating whether or not the content part is indexed.

boolean	isSigned()  Gets the value indicating whether or not the content part is digitally signed.
Calendar	<pre>modified() Gets the content part modification timestamp or a null reference for unsaved content part created with the IDocument.createContentPart() method.</pre>
void	<pre>move(EntityIdKind targetIdKind, String targetId, String targetContentName)  Moves this content part to the specified content on the target entity using the target entity identifier.</pre>
void	<pre>move(IEntity target, String targetContentName) Moves this content part to the specified content on the target entity.</pre>
InputStream	openDataInputStream()  Opens a new content part data input stream.
OutputStream	openDataOutputStream(boolean append)  Opens a new content part data output stream.
void	queueForConvert()  Queues this content part for conversion.
void	<pre>queueForIndex() Queues this content part for full-text index.</pre>
void	Sets the content part description.

# Methods

# getId

public String getId()

Gets the content part identifier.

### **Returns:**

The content part identifier.

# getDescription

public String getDescription()

Gets the content part description.

### **Returns:**

A string containing the content part description.

# setDescription

public void setDescription(String value)

Sets the content part description.

### **Parameters:**

value - a string containing the content part description.

#### **Throws:**

NullPointerException - if value is a null reference.

### getExtension

```
public String getExtension()
```

Gets a default extension for the content type of this content part.

### **Returns:**

A default extension for the content type of this content part or a null reference if no extension is available.

### getContentType

```
public String getContentType()
```

Gets the content type of this content part.

#### **Returns:**

The content type of this content part.

### getSize

```
public long getSize()
```

Gets the size, in bytes, of the content part.

#### **Returns:**

The size, in bytes, of the content part.

### created

```
public Calendar created()
```

Gets the content part creation timestamp or a null reference for unsaved content part created with the IDocument.createContentPart() method.

### **Returns:**

The date and time when the content part was created or a null reference.

### modified

```
public Calendar modified()
```

Gets the content part modification timestamp or a null reference for unsaved content part created with the IDocument.createContentPart() method.

#### Returns

The date and time when the content part was modified or a null reference.

### accessed

```
public Calendar accessed()
```

Gets the content part access timestamp or a null reference for unsaved content part created with the IDocument.createContentPart() method.

#### **Returns:**

The date and time when the content part was accessed or a null reference.

### isIndexed

```
public boolean isIndexed()
```

Gets the value indicating whether or not the content part is indexed.

#### **Returns:**

true if the content part is indexed; otherwise false.

### isSigned

```
public boolean isSigned()
```

Gets the value indicating whether or not the content part is digitally signed.

### **Returns:**

true if the content part is digitally signed; otherwise false.

### getParent

```
public IContentPart getParent()
```

Gets the parent content part.

### **Returns:**

The parent content part or a null reference if this content part has no parent.

# getSubParts

```
public com.imis.util.IReadOnlyList getSubParts()
```

Gets the read-only list of sub content parts.

### **Returns:**

The read-only list of sub content parts.

# openDataInputStream

Opens a new content part data input stream.

This method enables the caller to open a new content part data input stream from which data can be read.

**Note:** Multiple simultaneous and independent input streams can be opened from one instance but only one output stream instance can exist at one time.

**Note:** This operation allows user to pass a reason for opening content part data input stream. Reason can be passed through AuditLog message.

### **Returns:**

A content part data InputStream.

### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while opening content part data input stream.

IOException - if an I/O error occurs.

# openDataOutputStream

Opens a new content part data output stream.

This method enables the caller to open a new content part data input stream to which data can be written.

**Note:** Multiple simultaneous and independent input streams can be opened from one instance but only one output stream instance can exist at one time.

**Note:** This operation allows user to pass a reason for opening content part data output stream. Reason can be passed through AuditLog message.

#### **Parameters:**

append - true to append data to the end of the output stream; otherwise false.

#### **Returns:**

A content part data OutputStream.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Cannot open content part in output stream on a read-only content.
- Error occurred while opening content part data output stream.

IOException - if an I/O error occurs.

### clone

Clones this content part to the specified content on the target entity.

This operation requires server version 9.9 or above.

**Note:** This operation allows user to pass a reason for cloning content part. Reason can be passed through <u>AuditLog</u> message.

### Throws:

 ${\tt NullPointerException-if\ target\ or\ targetContentName\ is\ a\ null\ reference}.$ 

StorageConnectorException - if

• Error occurred while cloning content part.

IOException - if an I/O error occurs.

### detach

Detaches this content part and makes it a root content part.

This operation requires server version 9.8 or above.

**Note:** This operation allows user to pass a reason for detaching content part. Reason can be passed through <a href="Multilog"><u>AuditLog</u></a> message.

### **Throws:**

StorageConnectorException - if

• Error occurred while detaching content part.

IOException - if an I/O error occurs.

### move

```
\begin{array}{c} \text{public void } \pmb{\mathsf{move}}( \underbrace{\mathsf{IEntity}}_{\text{ContentName}}, \\ \text{String } targetContentName}) \\ \text{throws } \underbrace{\mathsf{StorageConnectorException}}_{\text{IOException}}, \\ \end{array}
```

Moves this content part to the specified content on the target entity.

This operation requires server version 9.9 or above.

**Note:** This operation allows user to pass a reason for moving content part. Reason can be passed through <a href="AuditLog">AuditLog</a> message.

### **Parameters:**

```
target - the target entity.
targetContentName - the target content name.
```

### **Throws:**

```
{\tt NullPointerException-if target\ or\ targetContentName\ is\ a\ null\ reference.} {\tt StorageConnectorException-if}
```

• Error occurred while moving content part.

IOException - if an I/O error occurs.

### move

Moves this content part to the specified content on the target entity using the target entity identifier.

This operation requires server version 9.8 or above.

**Note:** This operation allows user to pass a reason for moving content part. Reason can be passed through <a href="AuditLog">AuditLog</a> message.

#### **Parameters:**

```
targetIdKind - the target entity identifier kind.
targetId - the target entity identifier.
targetContentName - the target content name.
```

#### Throws:

 $\label{local_number_number} \mbox{NullPointerException - } \mbox{if targetId or targetContentName } \mbox{is a null reference.} \\ \mbox{StorageConnectorException - } \mbox{if}$ 

• Error occurred while moving content part.

IOException - if an I/O error occurs.

# queueForConvert

```
\begin{array}{c} \text{public void } \textbf{queueForConvert()} \\ \text{throws} \quad & \underline{\text{StorageConnectorException}} \,, \\ \hline \text{IOException} \end{array}
```

Queues this content part for conversion.

This operation requires server version 9.8 or above.

**Note:** This operation allows user to pass a reason for queuing content part for conversion. Reason can be passed through AuditLog message.

#### Throws:

```
StorageConnectorException - if
```

• Error occurred while queuing content part for conversion.

IOException - if an I/O error occurs.

# queueForIndex

Queues this content part for full-text index.

This operation requires server version 9.8 or above.

**Note:** This operation allows user to pass a reason for queuing content part for full-text index. Reason can be passed through AuditLog message.

### **Throws:**

StorageConnectorException - if

• Error occurred while queuing content part for full-text index.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

# com.imis.storageconnector.entitymodel Interface IDeletionStub

public interface **IDeletionStub** extends

Defines a deleted IEntity descriptor.

An IDeletionStub defines a deleted IEntity descriptor containing the entity title, description and deletion metadata attributes.

Method Summary	
Calendar	deleted()  Gets the describing deleted IEntity deletion time-stamp.
IDirectoryEntity	<pre>getAgent() Gets the IDirectoryEntity of an agent who deleted the IEntity.</pre>
String	<pre>getClassificationCode() Gets the describing deleted IEntity classification code in canonical format.</pre>
String	<pre>getDescription() Gets the describing deleted IEntity description.</pre>
String	<pre>getId() Gets the describing deleted IEntity unique identifier.</pre>
String	<pre>getPublicClassificationCode() Gets the describing deleted IEntity classification code in public format.</pre>
String	<pre>getReason() Gets the describing deleted IEntity reason for deletion.</pre>
String	<pre>Gets the describing deleted IEntity reference to an entity (internal, external) which is relevant for deleted IEntity.</pre>
<u>IEntityCollection</u>	<pre>getSubEntities(EntityFilter filter, Collection sortKeys, Collection categorizationPropertyNames)</pre> Gets the read-only collection of deleted child entity stubs of the describing deleted IEntity using the specified entity filter, sort keys and a collection of property names used for categorization.
String	<pre>getTitle() Gets the describing deleted IEntity title.</pre>
boolean	<pre>isContainer() Gets the value indicating whether the describing deleted IEntity represents a container of deleted entities.</pre>
long	subEntityCount()  Gets the absolute sub-entity count.

# Methods

### getId

```
public String getId()
```

Gets the describing deleted IEntity unique identifier.

### **Returns:**

A string that represents the describing deleted IEntity identifier.

### **isContainer**

```
public boolean isContainer()
```

Gets the value indicating whether the describing deleted IEntity represents a container of deleted entities.

#### Returns:

true if the describing deleted IEntity represents a container of deleted entities; otherwise false.

### getClassificationCode

```
public String getClassificationCode()
  throws StorageConnectorException
```

Gets the describing deleted IEntity classification code in canonical format.

### **Returns:**

A string that represents the describing deleted IEntity classification code or a null reference if this deletion stub represents an entity container.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# get Public Classification Code

```
public String getPublicClassificationCode()
  throws StorageConnectorException
```

Gets the describing deleted IEntity classification code in public format.

The entity classification code in canonical format is converted to entity public classification code by replacing the entity type prefix and classification hierarchy delimiter with the respective entity type hierarchy delimiters.

#### Returns:

A string that represents the describing deleted IEntity public classification code or a null reference if this deletion stub represents an entity container.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getTitle

```
public String getTitle()
  throws StorageConnectorException
```

Gets the describing deleted IEntity title.

### **Returns:**

The describing deleted IEntity title or container title if this deletion stub represents an entity container.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the describing deleted IEntity description.

#### **Returns:**

The describing deleted IEntity description or container description if this deletion stub represents an entity container.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

### deleted

```
public Calendar deleted()
  throws StorageConnectorException
```

Gets the describing deleted IEntity deletion time-stamp.

### **Returns:**

The date and time when the IEntity was deleted or a creation time-stamp if this deletion stub represents an entity container.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

### getAgent

```
public IDirectoryEntity getAgent()
  throws StorageConnectorException
```

Gets the IDirectoryEntity of an agent who deleted the IEntity.

### **Returns:**

The agent IDirectoryEntity who deleted the IEntity or a creator if this deletion stub represents an entity container.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

### getReason

```
public String getReason()
  throws StorageConnectorException
```

Gets the describing deleted IEntity reason for deletion.

### **Returns:**

A reason for deleting the IEntity or a null reference if this deletion stub represents an entity container.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getReference

```
public String getReference()
  throws StorageConnectorException
```

Gets the describing deleted IEntity reference to an entity (internal, external) which is relevant for deleted IEntity.

### **Returns:**

A reference to an entity (internal, external) which is relevant for deleted <code>IEntity</code> or a null reference if this deletion stub represents an entity container.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# subEntityCount

```
public long subEntityCount()
```

Gets the absolute sub-entity count.

### **Returns:**

The number of all immediate sub-entities.

# getSubEntities

Gets the read-only collection of deleted child entity stubs of the describing deleted IEntity using the specified entity filter, sort keys and a collection of property names used for categorization.

#### **Parameters:**

```
filter - the entity filter or a null reference.
sortKeys - the collection of EntitySortKey objects.
categorizationPropertyNames - the collection of property names used for categorization.
```

### **Returns:**

The read-only collection of IDeletionStub objects representing the entity children.

### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while getting entity child entities on archive.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IDispositionHold

public interface **IDispositionHold** extends

Represents a disposition hold.

Method Summary	Y
Calendar	accessed ( )  Gets the disposition hold last access time-stamp.
Calendar	<pre>created() Gets the disposition hold creation time-stamp.</pre>
<u>IDirectoryEntity</u>	getCreator()  Gets the disposition hold creator.
String	<pre>getDescription() Gets the disposition hold description.</pre>
String	getId()  Gets the disposition hold internal identifier.
String	getName ( )  Gets the disposition hold name.
String	getReason ( )  Gets the disposition hold reason.
Calendar	modified()  Gets the disposition hold last modification time-stamp.

# Methods

### getId

public String getId()

Gets the disposition hold internal identifier.

### **Returns:**

A string that represents the disposition hold internal identifier.

# getName

```
public String getName()
  throws StorageConnectorException
```

Gets the disposition hold name.

### **Returns:**

A string that represents the disposition hold name.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the disposition hold description.

#### Returns:

A string that represents the disposition hold description.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

### getCreator

```
public IDirectoryEntity getCreator()
    throws StorageConnectorException
```

Gets the disposition hold creator.

### **Returns:**

A IDirectoryEntity that represents the creator of the disposition hold.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Property value is not allowed based on the current template settings.

### created

```
public Calendar created()
```

Gets the disposition hold creation time-stamp.

#### Returns

The date and time when the disposition hold was created.

### modified

```
public Calendar modified()
```

Gets the disposition hold last modification time-stamp.

### **Returns:**

The date and time when the disposition hold was last modified.

### accessed

```
public Calendar accessed()
```

Gets the disposition hold last access time-stamp.

#### Returns:

The date and time when the disposition hold was last accessed.

# getReason

```
public String getReason()
  throws StorageConnectorException
```

Gets the disposition hold reason.

### **Returns:**

A string that represents the disposition hold reason.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# com.imis.storageconnector.entitymodel Interface IDispositionHoldEntry

public interface **IDispositionHoldEntry** extends

Represents a disposition hold entry.

Method Summary	
void	delete() Deletes the retention policy.
IDispositionHold	getDefinition()  Gets the disposition hold definition.
boolean	isInherited()  Gets the value indicating whether or not the disposition hold entry is inherited.

# Methods

### isInherited

public boolean isInherited()

Gets the value indicating whether or not the disposition hold entry is inherited.

### **Returns:**

true the disposition hold entry is inherited; otherwise false.

# getDefinition

```
public IDispositionHold getDefinition()
    throws StorageConnectorException
```

Gets the disposition hold definition.

### **Returns:**

An IDispositionHoldDefinition object.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed archive is not allowed.

### delete

```
public void delete()
  throws StorageConnectorException
```

Deletes the retention policy.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed retention is not allowed.
  Operation on inherited disposition hold entry is not allowed.
  Error occurred while removing disposition hold entry.
- Error occurred while reading retention entries.

# com.imis.storageconnector.entitymodel Interface IDocument

All Superinterfaces:

**IEntity** 

public interface **IDocument** extends **IEntity** 

Defines a IDocument entity.

A IDocument entity represents a physical document which can contain multiple IContent identified by unique identifiers. It can be contained within a IClass or IFolder entity and it is a final entity in the tree. It may contain its metadata attributes, has its inherited and explicit ACL entries and contains one or more binary objects, grouped by IContent.

Current implementation inherits from the base IEntity and adds factory methods for creating new instances of IContent. See Also:

IEntity, IClass, IFolder, IContent

Method Summary	
IContentPart	<pre>createContentPart(String contentType) Creates a new IContentPart which represents a new content part assigned to no owner.</pre>
<u>IContent</u>	getContent()  Gets the document content.
com.imis.util.IReadOn lyMap	getCustomContents()  Gets the read-only map of document custom contents.

### Methods inherited from interface com.imis.storageconnector.entitymodel.IEntity

accessed, areValuesInherited, close, closed, createBinaryValue, created, createStringMaxValue, getACL, getArchivalInformationalPackage, getArchive, getAuditLog, getCategories, getClassificationCode, getCreator, getDescription, getDraftCreator, getDraftId, getEffectiveRights, getEmailEntity, getEvidenceRecords, getExternalIds, getId, getKeywords, getMode, getModifiedBy, getMoveDetails, getOwner, getParent, getPhysicalEntity, getPickListValues, getProperties, getPublicClassificationCode, getReferences, getReport, getRetention, getSaveLog, getSecurityClass, getSecurityClassChangeDetails, getSignificance, getStatus, getStub, getSubEntities, getSubEntityTemplates, getSystemProperties, getSystemProperty, getTemplate, getTitle, getTransferDetails, getType, getVersionComment, getVersionLabel, getVersionSequence, hasAIP, hasDraft, hasReferences, hasVersions, isClosed, isPermanent, modified, opened, save, save, search, setCategories, setClassificationCode, setDescription, setExternalIds, setKeywords, setOwner, setSecurityClass, setSignificance, setStatus, setTitle, subEntityCount

### Methods inherited from interface com.imis.IAutoCloseable

close

# Methods

# getContent

```
public IContent getContent()
  throws StorageConnectorException
```

Gets the document content.

### **Returns:**

The document content.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getCustomContents

```
public com.imis.util.IReadOnlyMap getCustomContents()
    throws StorageConnectorException
```

Gets the read-only map of document custom contents.

#### **Returns:**

A read-only map of IContent objects sorted by document content unique identifiers.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.

### createContentPart

Creates a new IContentPart which represents a new content part assigned to no owner.

This instance must be added to the IContent.getParts container of the appropriate document content and committed to the archive using the IEntity.save() method otherwise it is discarded.

The content types used are taken from the list of IANA-registered content types.

The following code example demonstrates how to create a content part.

```
// Open a document specified by internal identifier from an archive instance
  com.imis.storageconnector.entitymodel.IDocument doc =
archive.openDocument(EntityIdKind.INTERNAL,
     id, AccessMode.READ_WRITE);
   // Open a document content named "content1"
   com.imis.storageconnector.entitymodel.IContent content =
doc.getContents().get("content1");
   // Get the list of document content parts
  List<IContentPart> parts = content.getParts();
   // Create a content part, open data stream, write data, close data stream
  com.imis.storageconnector.entitymodel.IContentPart part =
doc.createContentPart("application/pdf");
   // Add a content part to the list
  parts.add(part);
   // Assign the list back to the document content
  content.setParts(parts);
   // Save document changes
   doc.save();
```

### **Parameters:**

```
contentType - the content type (MIME).
```

### **Returns:**

A new IContentPart instance.

#### **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while creating file value.

IOException - if an I/O error occurs.

### See Also:

IDocument IContent

# com.imis.storageconnector.entitymodel Interface IDraft

public interface **IDraft** extends com.imis.IAutoCloseable

Defines a IDraft entity.

A IDraft entity represents a draft which can contain multiple IContent identified by unique identifiers.

Method Summary	
Calendar	accessed ( )  Gets the draft last access timestamp.
boolean	areValuesInherited(SystemProperty systemProperty)  Gets the value indicating whether the specified system property values are inherited.
void	close() Closes the draft and releases all its resources.
IBinaryValue	<pre>createBinaryValue(String contentType) Creates a new IBinaryValuewith no owner which represents a new binary value assigned to no owner.</pre>
<u> IContentPart</u>	<u>createContentPart</u> (String contentType)  Creates a new <u>IContentPart</u> which represents a new content part assigned to no owner.
Calendar	Created()  Gets the draft creation timestamp.
<u>IStringMaxValue</u>	<u>createStringMaxValue()</u> Creates a new IStringMaxValue which represents a new unbounded string property value assigned to no owner.
IACL	getACL()  Gets the draft IACL.
com.imis.util.IReadOn lyList	getCategories ()  Gets the list of draft categories.
IContent	getContent()  Gets the document content.
<u>IDirectoryEntity</u>	<pre>getCreator() Gets the creator IDirectoryEntity.</pre>
com.imis.util.IReadOn lyMap	getCustomContents()  Gets the read-only map of document custom contents.
String	getDescription()  Gets the IDraft description.
IReadOnlyEntityRights	getEffectiveRights()  Gets the users effective rights on the IDraft.

<u>IEmailEntity</u>	getEmailEntity()  Gets the email properties of this IDraft.
String	getId()  Gets the draft identifier.
com.imis.util.IReadOn lyList	getKeywords()  Gets the list of draft keywords.
<u>IDirectoryEntity</u>	getModifiedBy()  Gets the last modifier directory entity.
<u>IDirectoryEntity</u>	<pre>getOwner() Gets the owner IDirectoryEntity.</pre>
IPhysicalEntity	<pre>getPhysicalEntity() Gets the physical entity properties of this IDraft.</pre>
com.imis.util.IReadOn lyList	getPickListValues(SystemProperty systemProperty)  Gets the read-only list of the pick-list values for the specified system property.
com.imis.util.IReadOn	getProperties ( )  Gets the read-only map of properties sorted by property unique names.
String	getSourceId()  Gets the describing IDraft source entity identifier.
com.imis.util.IReadOn lyMap	<pre>getSystemProperties()  Gets the read-only map of read-only system properties sorted by SystemProperty enum values.</pre>
IReadOnlyProperty	getSystemProperty (SystemProperty systemProperty)  Gets the read-only property for the specified system property.
<u>ITemplate</u>	<pre>getTemplate() Gets the IDraft template.</pre>
String	getTitle()  Gets the IDraft title.
Calendar	modified()  Gets the draft last modification timestamp.
void	Saves the changes and reopens the draft in read-only mode.
void	<u>save(boolean close)</u> Saves the changes and optionally closes the draft or reopens the draft in read-only mode.
void	setCategories (List value) Sets the list of draft categories.
void	<pre>setDescription(String value) Sets the IDraft description.</pre>
void	setKeywords (List value) Sets the list of draft keywords.
void	setOwner(IDirectoryEntity value) Sets the owner IDirectoryEntity.

void

setTitle(String value)
Sets the IDraft title.

### Methods inherited from interface com.imis.IAutoCloseable

close

# Methods

### getId

```
public String getId()
  throws StorageConnectorException
```

Gets the draft identifier.

#### **Returns:**

A string that represents the draft identifier.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed draft is not allowed.

# getTitle

```
public String getTitle()
  throws StorageConnectorException
```

Gets the IDraft title.

### **Returns:**

The draft title.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setTitle

```
public void setTitle(String value)
  throws StorageConnectorException
```

Sets the IDraft title.

#### **Parameters:**

value - the draft title.

### **Throws:**

NullPointerException - if value is a null reference.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Operation on draft opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

### getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the IDraft description.

#### **Returns:**

The draft description.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setDescription

```
public void setDescription(String value)
    throws StorageConnectorException
```

Sets the IDraft description.

### Parameters:

value - the draft description.

### Throws:

 $\underline{\texttt{StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

- Operation on closed draft is not allowed.
- Operation on draft opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getSourceId

```
public String getSourceId()
  throws StorageConnectorException
```

Gets the describing IDraft source entity identifier.

#### **Returns:**

The describing IDraft source entity identifier.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### created

```
public Calendar created()
  throws StorageConnectorException
```

Gets the draft creation timestamp.

### **Returns:**

The date and time when the draft was created.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed draft is not allowed.

### modified

```
public Calendar modified()
  throws StorageConnectorException
```

Gets the draft last modification timestamp.

### **Returns:**

The date and time when the draft was last modified.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed draft is not allowed.

### getModifiedBy

```
public IDirectoryEntity getModifiedBy()
  throws StorageConnectorException
```

Gets the last modifier directory entity.

### **Returns:**

The last modifier directory entity or a null reference, if this instance has no last modifier directory entity.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

### accessed

```
public Calendar accessed()
  throws StorageConnectorException
```

Gets the draft last access timestamp.

#### **Returns:**

The date and time when the draft was last accessed.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

Operation on closed draft is not allowed.

### getACL

```
public IACL getACL()
    throws StorageConnectorException
```

Gets the draft IACL.

The IACL property provides access to an IACL instance containing ACL entries which define access rights for different entity operations.

#### **Returns:**

A IACL instance.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting ACL entries.

### getEffectiveRights

```
public IReadOnlyEntityRights getEffectiveRights()
    throws StorageConnectorException
```

Gets the users effective rights on the IDraft.

#### Returns:

The read-only set of rights describing users effective rights on the IDraft.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

Operation on closed draft is not allowed.

### getCreator

```
public IDirectoryEntity getCreator()
  throws StorageConnectorException
```

Gets the creator IDirectoryEntity.

### **Returns:**

The creator IDirectoryEntity.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### getOwner

```
public IDirectoryEntity getOwner()
   throws StorageConnectorException
```

Gets the owner IDirectoryEntity.

#### **Returns:**

The owner IDirectoryEntity or a null reference, if this instance has no owner IDirectoryEntity.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setOwner

```
public void setOwner(IDirectoryEntity value)
    throws StorageConnectorException
```

Sets the owner  ${\tt IDirectoryEntity}.$ 

#### Parameters:

value - the owner IDirectoryEntity or a null reference, if this instance has no owner IDirectoryEntity.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Operation on draft opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getEmailEntity

```
public IEmailEntity getEmailEntity()
    throws StorageConnectorException
```

Gets the email properties of this IDraft.

### **Returns:**

An IEmailEntity instance or a null reference if there are no email properties present.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

· Operation on closed draft is not allowed.

# getPhysicalEntity

```
public IPhysicalEntity getPhysicalEntity()
    throws StorageConnectorException
```

Gets the physical entity properties of this IDraft.

#### **Returns:**

An IPhysicalEntity instance or a null reference if there are no physical entity properties present.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed draft is not allowed.

### getTemplate

```
public ITemplate getTemplate()
  throws StorageConnectorException
```

Gets the IDraft template.

### **Returns:**

An ITemplate that represents the draft template.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

· Operation on closed draft is not allowed.

# getKeywords

```
public com.imis.util.IReadOnlyList getKeywords()
    throws StorageConnectorException
```

Gets the list of draft keywords.

#### **Returns:**

The list of draft keywords.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setKeywords

```
public void setKeywords(List value)
  throws StorageConnectorException
```

Sets the list of draft keywords.

#### **Parameters:**

value - the list of draft keywords.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Operation on draft opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

### getCategories

```
public com.imis.util.IReadOnlyList getCategories()
    throws StorageConnectorException
```

Gets the list of draft categories.

### **Returns:**

The list of draft categories.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setCategories

```
public void setCategories(List value)
  throws StorageConnectorException
```

Sets the list of draft categories.

### **Parameters:**

value - the list of draft categories.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Operation on draft opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getSystemProperties

```
public com.imis.util.IReadOnlyMap getSystemProperties()
    throws StorageConnectorException
```

Gets the read-only map of read-only system properties sorted by SystemProperty enum values.

#### Returns

The read-only map of IReadOnlyProperty objects sorted by SystemProperty enum values.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.

# getProperties

```
public com.imis.util.IReadOnlyMap getProperties()
  throws StorageConnectorException
```

Gets the read-only map of properties sorted by property unique names.

This method provides access to collection of properties assigned to the draft. You can iterate and access the different fields of property values with this method. The collection is read-only whereas collection items are not.

If the property is part of a group, a 'group namespace' prefix is used in property name. See IReadOnlyProperty.getName() method for further info.

### **Returns:**

The read-only map of IProperty objects sorted by property unique names.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.

### See Also:

**IProperty** 

# createStringMaxValue

 $Creates\ a\ new\ {\tt IStringMaxValue}\ which\ represents\ a\ new\ unbounded\ string\ property\ value\ assigned\ to\ no\ owner.$ 

This instance must be set to the IProperty values using the property setValue() or setValues() methods. IDraft must also be committed to the archive using the save() method otherwise this value is lost.

#### **Returns:**

A new IStringMaxValue instance.

### Throws:

CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while creating string value.

IOException - if an I/O error occurs.

#### See Also:

IProperty
PropertyType.STRINGMAX

# createBinaryValue

Creates a new IBinaryValuewith no owner which represents a new binary value assigned to no owner.

This instance must be set to the IProperty values using the property setValue() or setValues() methods. IDraft must also be committed to the archive using the <a href="mailto:save">save</a>() method otherwise this value is lost.

The binary value content types used are taken from the list of IANA-registered content types.

### **Parameters:**

contentType - the binary value content type.

### **Returns:**

A new IBinaryValue instance.

## Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while creating binary value.

IOException - if an I/O error occurs.

#### See Also:

IProperty
PropertyType.BINARY

# getSystemProperty

```
public IReadOnlyProperty getSystemProperty(SystemProperty systemProperty)
throws StorageConnectorException
```

Gets the read-only property for the specified system property.

### **Parameters:**

systemProperty - the system property.

#### **Returns:**

The read-only property for the specified system property.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## areValuesInherited

```
public boolean areValuesInherited(SystemProperty systemProperty)
    throws StorageConnectorException
```

Gets the value indicating whether the specified system property values are inherited.

#### **Parameters:**

systemProperty - the system property.

#### **Returns:**

true if the specified system property values are inherited; otherwise false.

#### Throws

```
IllegalArgumentException - if invalid system property. StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getPickListValues

```
public com.imis.util.IReadOnlyList getPickListValues(SystemProperty)
throws StorageConnectorException
```

Gets the read-only list of the pick-list values for the specified system property.

#### **Parameters:**

 ${\tt systemProperty-the} \ system \ property.$ 

### **Returns:**

The read-only list of IPickListValue objects representing the pick-list values for the specified system property.

#### Throws:

- Operation on closed draft is not allowed.
- Property is not present in template properties.
- Property is not a pick-list property.

#### save

Saves the changes and reopens the draft in read-only mode.

Calling this method is same as calling save(boolean) with false parameter.

Note: This operation allows user to pass a reason for saving draft. Reason can be passed through AuditLog message.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Operation on draft opened in read-only mode is not allowed.
- Error occurred while committing draft changes on archive.

IOException - if an I/O error occurs.

#### save

Saves the changes and optionally closes the draft or reopens the draft in read-only mode.

Call to this method commits all changes made to this draft instance after it was opened in write mode or created.

getId() method can be used after completion of this routine to access draft unique identifier.

Note: This operation allows user to pass a reason for saving draft. Reason can be passed through AuditLog message.

**Note:** IDraft is closed after call to this method and needs to be reopened if the caller wants to continue to access methods and properties which depend on the opened instance of an draft.

### **Parameters:**

close - true to close draft after save; otherwise false.

### Throws:

 $\underline{\texttt{StorageConnectorException}} \text{- if an IMiS/Storage Connector error occurs:}$ 

- Operation on closed draft is not allowed.
- Operation on draft opened in read-only mode is not allowed.
- Error occurred while committing draft changes on archive.

IOException - if an I/O error occurs.

## close

```
\begin{array}{c} \text{public void } \textbf{close()} \\ \text{throws} \quad & \underbrace{\text{StorageConnectorException}}_{\text{IOException}}, \end{array}
```

Closes the draft and releases all its resources.

**Note:** Any uncommitted changes are lost. Caller cannot use methods or properties which depend on an opened instance of the object.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while closing draft on archive.

IOException - if an I/O error occurs.

# getContent

```
public IContent getContent()
  throws StorageConnectorException
```

Gets the document content.

#### **Returns:**

The document content.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getCustomContents

```
public com.imis.util.IReadOnlyMap getCustomContents()
    throws StorageConnectorException
```

Gets the read-only map of document custom contents.

#### **Returns:**

A read-only map of IContent objects sorted by document content unique identifiers.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.
- Error occurred while getting properties.

# createContentPart

Creates a new IContentPart which represents a new content part assigned to no owner.

This instance must be added to the IContent.getParts container of the appropriate document content and committed to the archive using the save() method otherwise it is discarded.

The content types used are taken from the list of IANA-registered content types.

### **Parameters:**

contentType - the content type (MIME).

## **Returns:**

A new IContentPart instance.

## **Throws:**

CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed draft is not allowed.Error occurred while creating file value.

IOException - if an I/O error occurs.

# See Also:

IContent

# com.imis.storageconnector.entitymodel Interface IDraftStub

public interface **IDraftStub** extends

Defines an IDraft descriptor.

An IDraftStub defines an IDraft descriptor containing the draft identifier and type, public metadata attributes, callers effective rights on the entity object, etc. It also enables a caller to open a full-feature IDraft object using the open() method. Accessing IDraftStub properties and methods other than open() will not be recorded in the archive's AuditLog records.

**Note:** Instance is automatically recycled after the last reference is released. **See Also:** 

IDraft

Method Summary	
Calendar	accessed()  Gets the describing IDraft last access timestamp.
boolean	<u>areValuesInherited(SystemProperty</u> systemProperty)  Gets the value indicating whether the specified system property values are inherited.
String	<pre>checkIn(Short position, String comment) Checks in the draft.</pre>
Calendar	created()  Gets the describing IDraft creation timestamp.
void	discard() Discards the entity draft.
com.imis.util.IReadOn lyList	getCategories()  Gets the list of the describing IDraft categories.
<u>IReadOnlyContent</u>	getContent()  Gets the describing IDraft read-only content.
<u>IDirectoryEntity</u>	<pre>getCreator() Gets the describing IDraft creator IDirectoryEntity.</pre>
com.imis.util.IReadOn lyMap	getCustomContents()  Gets the describing IDraft read-only custom contents.
String	getDescription()  Gets the describing IDraft description.
IReadOnlyEntityRights	getEffectiveRights()  Gets the users effective rights on the describing IDraft.
String	getId()  Gets the describing IDraft unique identifier.
com.imis.util.IReadOn lyList	getKeywords()  Gets the describing IDraft list of keywords.

IDirectoryEntity	getModifiedBy()  Gets the last modifier directory entity.
IDirectoryEntity	getOwner()  Gets the describing IDraft owner IDirectoryEntity.
com.imis.util.IReadOn lyList	Gets the read-only list of the pick-list values for the specified system property.
com.imis.util.IReadOn lyMap	getProperties()  Gets the entity public metadata attributes.
String	getSourceId()  Gets the describing IDraft source entity identifier.
com.imis.util.IReadOn lyMap	getSystemProperties()  Gets the read-only map of read-only system properties sorted by SystemProperty enum values.
IReadOnlyProperty	getSystemProperty (SystemProperty systemProperty)  Gets the read-only property for the specified system property.
<u>ITemplate</u>	getTemplate()  Gets the describing IDraft template.
String	getTitle()  Gets the describing IDraft title.
Calendar	modified()  Gets the describing IDraft last modification timestamp.
IDraft	Opens an IDraft described by this IDraftStub using a specified draft access mode.

# Methods

# getId

public String getId()

Gets the describing IDraft unique identifier.

# **Returns:**

A string that represents the describing  ${\tt IDraft}$  identifier.

# getTitle

public String getTitle()
 throws StorageConnectorException

Gets the describing IDraft title.

## **Returns:**

The describing IDraft title.

# **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the describing IDraft description.

#### **Returns:**

The describing IDraft description.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getSourceId

```
public String getSourceId()
  throws StorageConnectorException
```

Gets the describing IDraft source entity identifier.

## **Returns:**

The describing IDraft source entity identifier.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# created

```
public Calendar created()
```

Gets the describing IDraft creation timestamp.

### **Returns:**

The date and time when the describing entity was created.

# modified

```
public Calendar modified()
```

Gets the describing IDraft last modification timestamp.

### **Returns:**

The date and time when the describing entity was last modified.

# getModifiedBy

```
public IDirectoryEntity getModifiedBy()
```

Gets the last modifier directory entity.

#### **Returns:**

The last modifier directory entity or a null reference, if this instance has no last modifier directory entity.

## accessed

```
public Calendar accessed()
```

Gets the describing IDraft last access timestamp.

#### **Returns:**

The date and time when the describing entity was last accessed.

# getEffectiveRights

```
public IReadOnlyEntityRights getEffectiveRights()
```

Gets the users effective rights on the describing IDraft.

### **Returns:**

The read-only set of rights describing users effective rights on the describing IDraft.

# getCreator

```
public IDirectoryEntity getCreator()
  throws StorageConnectorException
```

Gets the describing IDraft creator IDirectoryEntity.

#### Returns

The creator IDirectoryEntity.

## **Throws:**

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

• Property is not present in template properties.

# getOwner

```
public IDirectoryEntity getOwner()
    throws StorageConnectorException
```

Gets the describing IDraft owner IDirectoryEntity.

#### **Returns:**

The creator IDirectoryEntity or a null reference, if this instance has no owner IDirectoryEntity.

# Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getTemplate

```
public ITemplate getTemplate()
```

Gets the describing IDraft template.

#### **Returns:**

A string value that represents the entity template.

# getKeywords

```
public com.imis.util.IReadOnlyList getKeywords()
    throws StorageConnectorException
```

Gets the describing IDraft list of keywords.

### **Returns:**

The describing IDraft list of keywords.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getCategories

```
public com.imis.util.IReadOnlyList getCategories()
    throws StorageConnectorException
```

Gets the list of the describing IDraft categories.

## **Returns:**

A list of String objects that represents the describing IDraft categories.

# Throws:

 $\underline{\texttt{StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

• Property is not present in template properties.

# getSystemProperties

```
public com.imis.util.IReadOnlyMap getSystemProperties()
```

Gets the read-only map of read-only system properties sorted by SystemProperty enum values.

#### **Returns:**

The read-only map of IReadOnlyProperty objects sorted by SystemProperty enum values.

# getProperties

```
public com.imis.util.IReadOnlyMap getProperties()
```

Gets the entity public metadata attributes.

#### **Returns:**

The read-only map of IReadOnlyProperty objects sorted by the property names.

### See Also:

IReadOnlyProperty

# getContent

```
public IReadOnlyContent getContent()
    throws StorageConnectorException
```

Gets the describing IDraft read-only content.

### **Returns:**

The IReadOnlyContent object.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getCustomContents

```
public com.imis.util.IReadOnlyMap getCustomContents()
```

Gets the describing IDraft read-only custom contents.

#### **Returns:**

A read-only map of IReadOnlyContent objects sorted by the content names.

## See Also:

IDocument

IReadOnlyContent

# getSystemProperty

```
public <u>IReadOnlyProperty</u> getSystemProperty(<u>SystemProperty</u> systemProperty)
throws <u>StorageConnectorException</u>
```

Gets the read-only property for the specified system property.

### **Parameters:**

systemProperty - the system property.

#### Returns:

The read-only property for the specified system property.

## Throws:

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

• Property is not present in template properties.

# areValuesInherited

public boolean areValuesInherited(SystemProperty systemProperty)
 throws StorageConnectorException

Gets the value indicating whether the specified system property values are inherited.

#### **Parameters:**

systemProperty - the system property.

#### **Returns:**

true if the specified system property values are inherited; otherwise false.

#### Throws:

 ${\tt IllegalArgumentException - if invalid system property.} \\ {\tt StorageConnectorException - if an IMiS/Storage Connector error occurs:} \\$ 

• Property is not present in template properties.

# getPickListValues

public com.imis.util.IReadOnlyList getPickListValues(SystemProperty)
throws StorageConnectorException

Gets the read-only list of the pick-list values for the specified system property.

#### **Parameters:**

systemProperty - the system property.

### **Returns:**

The read-only list of IPickListValue objects representing the pick-list values for the specified system property.

#### **Throws:**

IllegalArgumentException - if invalid system property. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

## open

Opens an IDraft described by this IDraftStub using a specified draft access mode.

### **Parameters:**

mode - the entity access mode.

#### **Returns:**

An opened IDraft instance.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening draft on archive.

IOException - if an I/O error occurs.

# checkIn

Checks in the draft.

This operation allows user to pass reason for checking in entity draft. Reason can be passed through AuditLog message.

#### **Parameters:**

```
position - the check in position in the versioning tree.

comment - the entity draft check in comment recorded in version history or a null reference if not specified.
```

### **Returns:**

The checked in entity identifier.

### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while checking in entity on archive.

IOException - if an I/O error occurs.

# discard

Discards the entity draft.

This operation allows user to pass reason for discarding entity draft. Reason can be passed through AuditLog message.

### Throws:

```
CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.
```

# $\underline{\texttt{StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$

- Operation on non draft entity is not allowed.
  Operation on closed archive is not allowed.
  Error occurred while opening a session on server.
  Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while checking in entity on archive.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IEmailEntity

public interface **IEmailEntity** extends

Describes an email entity.

Method Summary	
List	getBCC()  Gets the list of email entity blind-copy-to recipient addresses.
List	getCC()  Gets the list of email entity copy-to recipient addresses.
Calendar	getDate()  Gets the email entity date and time.
String	getFrom()  Gets the email entity sender address.
String	getMessageId()  Gets the email entity message identifier.
String	getPriority()  Gets the email entity delivery priority.
String	getSubject()  Gets the email entity subject.
List	getTo()  Gets the list of email entity recipient addresses.
Boolean	isSigned()  Gets the value indicating whether or not email entity is digitally signed.
void	<pre>setBCC(List value) Sets the list of email entity blind-copy-to recipient addresses.</pre>
void	<pre>setCC(List value) Sets the list of email entity copy-to recipient addresses.</pre>
void	setDate(Calendar value) Sets the email entity date and time.
void	<pre>setFrom(String value) Sets the email entity sender address.</pre>
void	setMessageId(String value) Sets the email entity message identifier.
void	<pre>setPriority(String value) Sets the email entity delivery priority.</pre>

void	Sets the value indicating whether or not email entity is digitally signed.
void	Sets the email entity subject.
void	Sets the list of email entity recipient addresses.

# Methods

# getMessageId

```
public String getMessageId()
   throws StorageConnectorException
```

Gets the email entity message identifier.

#### **Returns:**

A string that represents the email entity message identifier.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setMessageId

```
public void setMessageId(String value)
  throws StorageConnectorException
```

Sets the email entity message identifier.

### **Parameters:**

value - A string that represents the email entity message identifier.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getDate

```
public Calendar getDate()
  throws StorageConnectorException
```

Gets the email entity date and time.

#### **Returns:**

The date and time of the email.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## setDate

```
public void setDate(Calendar value)
  throws StorageConnectorException
```

Sets the email entity date and time.

### **Parameters:**

value - the date and time of the email.

#### Throws:

NullPointerException - if value is a null reference. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getFrom

```
public String getFrom()
  throws StorageConnectorException
```

Gets the email entity sender address.

#### Returns.

A string that represents the email entity sender address.

# Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setFrom

```
public void setFrom(String value)
  throws StorageConnectorException
```

Sets the email entity sender address.

### **Parameters:**

value - a string that represents the email entity sender address.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getTo

```
public List getTo()
  throws StorageConnectorException
```

Gets the list of email entity recipient addresses.

#### **Returns:**

A list of String objects that represents the email entity recipient addresses.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setTo

```
public void setTo(List value)
  throws StorageConnectorException
```

Sets the list of email entity recipient addresses.

## **Parameters:**

value - a list of String objects that represents the email entity recipient addresses.

### Throws:

 ${\tt \underline{StorageConnectorException}} \ - \ if \ an \ IMiS/Storage \ Connector \ error \ occurs:$ 

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getCC

```
public List getCC()
  throws StorageConnectorException
```

Gets the list of email entity copy-to recipient addresses.

### **Returns:**

A list of String objects that represents the email entity copy-to recipient addresses.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setCC

```
public void setCC(List value)
  throws StorageConnectorException
```

Sets the list of email entity copy-to recipient addresses.

#### **Parameters:**

value - a list of String objects that represents the email entity copy-to recipient addresses.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# **getBCC**

```
public List getBCC()
  throws StorageConnectorException
```

Gets the list of email entity blind-copy-to recipient addresses.

## **Returns:**

A list of String objects that represents the email entity blind-copy-to recipient addresses.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setBCC

```
public void setBCC(List value)
   throws StorageConnectorException
```

Sets the list of email entity blind-copy-to recipient addresses.

### **Parameters:**

value - a list of String objects that represents the email entity blind-copy-to recipient addresses.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getSubject

```
public String getSubject()
  throws StorageConnectorException
```

Gets the email entity subject.

#### Returns

A string that represents the email entity subject.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setSubject

```
public void setSubject(String value)
  throws StorageConnectorException
```

Sets the email entity subject.

### **Parameters:**

value - a string that represents the email entity subject.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getPriority

```
public String getPriority()
  throws StorageConnectorException
```

Gets the email entity delivery priority.

#### **Returns:**

A string that represents the email entity delivery priority.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setPriority

```
public void setPriority(String value)
  throws StorageConnectorException
```

Sets the email entity delivery priority.

#### **Parameters:**

value - a string that represents the email entity delivery priority.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

# isSigned

```
public Boolean isSigned()
  throws StorageConnectorException
```

Gets the value indicating whether or not email entity is digitally signed.

# **Returns:**

true if the email entity is digitally signed; otherwise false.

# Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setSigned

```
public void setSigned(Boolean value)
  throws StorageConnectorException
```

Sets the value indicating whether or not email entity is digitally signed.

#### **Parameters:**

value - true if the email entity is digitally signed; otherwise false.

### Throws:

# $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$

- Operation on closed entity is not allowed.
  Operation on entity opened in read-only mode is not allowed.
  Error occurred while getting properties.
  Property is not present in template properties.
  Error occurred while setting property values.

# com.imis.storageconnector.entitymodel Interface IEntity

All Subinterfaces:

IClass, IDocument, IFolder

public interface **IEntity** extends com.imis.IAutoCloseable

Describes a generic entity.

There are currently 3 specializations of IEntity objects: IClass, IFolder and IDocument. Each has its specific methods and properties while the IEntity object prescribes the common features each entity contains.

Each instance of IEntity is never instantiated as an object with only a base interface implemented but rather an instance of specialized interface to which it can be cast based on the return value of the getType() method. When IEntity object (or its specialization) is initially created, it is not committed to the archive until appropriate save() method is used. IEntity objects should be closed after use to free its resources.

Method Summary	
Calendar	accessed()  Gets the entity last access timestamp.
boolean	<u>areValuesInherited(SystemProperty</u> systemProperty)  Gets the value indicating whether the specified system property values are inherited.
void	close () Closes the entity and releases all its resources.
Calendar	closed() Gets the entity status closed time-stamp.
IBinaryValue	<pre>createBinaryValue(String contentType) Creates a new IBinaryValuewith no owner which represents a new binary value assigned to no owner.</pre>
Calendar	created()  Gets the entity creation timestamp.
<u>IStringMaxValue</u>	<pre>createStringMaxValue() Creates a new IStringMaxValue which represents a new unbounded string property value assigned to no owner.</pre>
IACL	getACL()  Gets the entity IACL.
InputStream	getArchivalInformationalPackage()  Gets the IEntity archival informational package encoded in base 64 format.
<u>IArchive</u>	getArchive()  Gets the IArchive where the entity is stored.
AuditLog	<pre>getAuditLog() Gets the audit log object from the owning Archive.</pre>

com.imis.util.IReadOn lyList	getCategories ( )  Gets the list of entity categories.
String	getClassificationCode()  Gets the IEntity classification code in canonical format.
<u>IDirectoryEntity</u>	<pre>getCreator() Gets the creator IDirectoryEntity.</pre>
String	<pre>getDescription() Gets the IEntity description.</pre>
<u>IDirectoryEntity</u>	getDraftCreator()  Gets the entity's draft creator.
String	getDraftId()  Gets the entity's draft identifier.
IReadOnlyEntityRights	getEffectiveRights()  Gets the users effective rights on the IEntity.
<u>  IEmailEntity</u>	getEmailEntity()  Gets the email properties of this IEntity.
com.imis.util.IReadOn lyList	getEvidenceRecords()  Gets the IEntity read-only list of evidence records encoded in base 64 format.
com.imis.util.IReadOn lyList	getExternalIds()  Gets the list of entity unique external identifiers.
String	getId()  Gets the entity identifier.
com.imis.util.IReadOn lyList	getKeywords()  Gets the list of entity keywords.
AccessMode	getMode()  Gets the entity access mode.
<u>IDirectoryEntity</u>	getModifiedBy()  Gets the last modifier directory entity.
com.imis.util.IReadOn lyList	getMoveDetails()  Gets the read-only list of move details for the IEntity.
IDirectoryEntity	<pre>getOwner() Gets the owner IDirectoryEntity.</pre>
<u>IEntityStub</u>	getParent()  Gets the parent IEntityStub.
IPhysicalEntity	<pre>getPhysicalEntity() Gets the physical entity properties of this IEntity.</pre>
com.imis.util.IReadOn lyList	<u>getPickListValues(SystemProperty</u> systemProperty)  Gets the read-only list of the pick-list values for the specified system property.
com.imis.util.IReadOn lyMap	getProperties()  Gets the read-only map of properties sorted by property unique names.

String	getPublicClassificationCode()  Gets the IEntity classification code in public format.
com.imis.util.IReadOn lyList	getReferences()  Gets the read-only list of IReadOnlyEntityReference objects.
InputStream	getReport (ReportType type)  Gets the specified report data stream.
IRetention	Gets the retention for the entity.
com.imis.util.IReadOn lyList	getSaveLog()  Gets the read-only list of strings containing commit log reports for IEntity in XML format encoded per XML processing instruction.
String	getSecurityClass()  Gets the IEntity security class.
com.imis.util.IReadOn lyList	getSecurityClassChangeDetails()  Gets the read-only list of security class change details for the IEntity.
String	getSignificance()  Gets the IEntity significance.
String	getStatus()  Gets the IEntity status.
<u>IEntityStub</u>	getStub()  Gets the describing IEntity.
<u>IEntityCollection</u>	getSubEntities(EntityFilter filter, Collection sortKeys, Collection categorizationPropertyNames)  Gets the read-only collection of child entity stubs of the entity using the specified entity filter, sort keys and a collection of property names used for categorization.
com.imis.util.IReadOn lyList	<u>getSubEntityTemplates()</u> Gets the read-only list of templates that represent the IEntity sub-entity creation templates.
com.imis.util.IReadOn lyMap	getSystemProperties()  Gets the read-only map of read-only system properties sorted by SystemProperty enum values.
IReadOnlyProperty	Gets the read-only property for the specified system property.
ITemplate	getTemplate()  Gets the IEntity template identifier.
String	getTitle()  Gets the IEntity title.
ITransferDetails	getTransferDetails()  Gets the transferred details properties of this IEntity.
EntityType	getType()  Gets the entity type identifier.

String	getVersionComment ( )  Gets the entity check in comment.
String	getVersionLabel()  Gets the label of the entity version.
Integer	getVersionSequence()  Gets the entity version sequence.
boolean	hasAIP() Gets a value indicating whether or not the entity has AIP.
boolean	hasDraft()  Gets the value indicating whether or not the entity has a draft.
boolean	hasReferences ()  Gets the value indicating whether or not the entity has references.
boolean	hasVersions ()  Gets the value indicating whether or not the entity has versions.
boolean	isClosed()  Gets a value indicating whether the entity is closed.
boolean	isPermanent()  Gets a value indicating whether the entity is permanent.
Calendar	modified()  Gets the entity last modification timestamp.
Calendar	opened ( )  Gets the entity status opened time-stamp.
void	Saves the changes and reopens the entity in read-only mode.
void	Saves the changes and optionally closes the entity or reopens the entity in read-only mode.
<u>IEntityCollection</u>	<pre>search(EntityFilter filter, Collection sortKeys, Set options, String searchExpression, Collection categorizationPropertyNames, Long maxElements)  Searches for child entity stubs of the entity using the specified entity search filter, sort keys, search options, expression string and a collection of property names used for categorization.</pre>
void	setCategories(List value)  Sets the list of entity categories.
void	setClassificationCode (String value)  Sets the IEntity classification code in canonical format.
void	Sets the IEntity description.
void	setExternalIds (List value)  Sets the list of external entity identifiers.
void	<pre>setKeywords(List value) Sets the list of entity keywords.</pre>

void	SetOwner (IDirectoryEntity value)  Gets the owner IDirectoryEntity.
void	Sets the IEntity security class.
void	Sets the IEntity significance.
void	Sets the IEntity status.
void	Sets the IEntity title.
long	SubEntityCount()  Gets the absolute sub-entity count.

Methods inherited from interface com.imis.IAutoCloseable

close

# Methods

# getStub

public IEntityStub getStub()

Gets the describing IEntity.

### **Returns:**

The IEntityStub instance.

# getId

public String getId()
 throws StorageConnectorException

Gets the entity identifier.

## **Returns:**

A string that represents the entity identifier.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on unsaved new entity is not allowed.

# getClassificationCode

public String getClassificationCode()
 throws StorageConnectorException

Gets the IEntity classification code in canonical format.

#### **Returns:**

A string that represents the entity classification code.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on unsaved new entity is not allowed.
- Error occurred while getting classification code.

# setClassificationCode

```
public void setClassificationCode(String value)
  throws StorageConnectorException
```

Sets the IEntity classification code in canonical format.

#### Parameters:

value - a string that represents the entity classification code.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation is only allowed on a new entity.
- Error occurred while setting classification code.

# ${\bf getPublic Classification Code}$

```
public String getPublicClassificationCode()
  throws StorageConnectorException
```

Gets the IEntity classification code in public format.

The entity classification code in canonical format is converted to entity public classification code by replacing the entity type prefix and classification hierarchy delimiter with the respective entity type hierarchy delimiters.

### **Returns:**

A string that represents the entity public classification code.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on unsaved new entity is not allowed.
- Error occurred while getting classification code.

# getTitle

```
public String getTitle()
  throws StorageConnectorException
```

Gets the IEntity title.

#### **Returns:**

The entity title.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setTitle

```
public void setTitle(String value)
  throws StorageConnectorException
```

Sets the IEntity title.

### **Parameters:**

value - the entity title.

#### Throws:

NullPointerException - if value is a null reference. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getDescription

```
public String getDescription()
   throws StorageConnectorException
```

Gets the IEntity description.

# **Returns:**

The entity description.

# Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setDescription

```
public void setDescription(String value)
  throws StorageConnectorException
```

Sets the IEntity description.

### **Parameters:**

value - the entity description.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getSignificance

```
public String getSignificance()
  throws StorageConnectorException
```

Gets the IEntity significance.

#### **Returns:**

The entity significance or a null reference if no entity significance is set.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setSignificance

```
public void setSignificance(String value)
  throws StorageConnectorException
```

Sets the IEntity significance.

## **Parameters:**

value - the entity significance, a null reference to reset entity significance to inherited value or an empty string to explicitly clear the entity significance value.

#### Throws.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getStatus

```
public String getStatus()
  throws StorageConnectorException
```

Gets the IEntity status.

#### **Returns:**

The entity status.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## setStatus

```
public void setStatus(String value)
  throws StorageConnectorException
```

Sets the IEntity status.

**Note:** Use this method on new unsaved entities only. Change status of existing entities with IArchive.setEntityStatus(EntityIdKind, String, String) method.

### **Parameters:**

value - the entity status or a null reference to clear the entity status to inherited value.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on saved entity is not allowed.
- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

# getType

```
public EntityType getType()
   throws StorageConnectorException
```

Gets the entity type identifier.

### **Returns:**

An enumerator value that represents the entity type.

#### Throws:

 ${\tt StorageConnectorException-if} \ an \ IMiS/Storage \ Connector \ error \ occurs:$ 

• Operation on closed entity is not allowed.

# getMode

```
public AccessMode getMode()
    throws StorageConnectorException
```

Gets the entity access mode.

## **Returns:**

The entity access mode.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# created

```
public Calendar created()
  throws StorageConnectorException
```

Gets the entity creation timestamp.

## **Returns:**

The date and time when the entity was created.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# modified

```
public Calendar modified()
  throws StorageConnectorException
```

Gets the entity last modification timestamp.

## **Returns:**

The date and time when the entity was last modified.

# **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getModifiedBy

```
public IDirectoryEntity getModifiedBy()
    throws StorageConnectorException
```

Gets the last modifier directory entity.

#### **Returns:**

The last modifier directory entity or a null reference, if this instance has no last modifier directory entity.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

## accessed

```
public Calendar accessed()
  throws StorageConnectorException
```

Gets the entity last access timestamp.

#### Returns

The date and time when the entity was last accessed.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# opened

```
public Calendar opened()
  throws StorageConnectorException
```

Gets the entity status opened time-stamp.

#### **Returns:**

The date and time when the entity status was set to opened or a null reference if entity has no status.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# closed

```
public Calendar closed()
  throws StorageConnectorException
```

Gets the entity status closed time-stamp.

# **Returns:**

The date and time when the entity status was set to closed or a null reference if entity has no status.

# Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# **isPermanent**

```
public boolean isPermanent()
    throws StorageConnectorException
```

Gets a value indicating whether the entity is permanent.

### **Returns:**

true if the entity is permanent; otherwise false.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# hasAIP

```
public boolean hasAIP()
  throws StorageConnectorException
```

Gets a value indicating whether or not the entity has AIP.

#### Returns:

true if the entity is has AIP; otherwise false.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# hasDraft

```
public boolean hasDraft()
  throws StorageConnectorException
```

Gets the value indicating whether or not the entity has a draft.

### **Returns:**

true if the entity has a draft; otherwise false.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getDraftId

```
public String getDraftId()
  throws StorageConnectorException
```

Gets the entity's draft identifier.

### **Returns:**

The entity's draft identifier.

# Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getDraftCreator

```
public IDirectoryEntity getDraftCreator()
    throws StorageConnectorException
```

Gets the entity's draft creator.

#### **Returns:**

The entity's draft creator.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting directory member on archive.

# hasVersions

```
public boolean hasVersions()
  throws StorageConnectorException
```

Gets the value indicating whether or not the entity has versions.

### **Returns:**

true if the entity has versions; otherwise false.

# Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getVersionSequence

```
public Integer getVersionSequence()
  throws StorageConnectorException
```

Gets the entity version sequence.

# **Returns:**

The entity version sequence.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getVersionLabel

```
public String getVersionLabel()
  throws StorageConnectorException
```

Gets the label of the entity version.

#### **Returns:**

A string that represents the label of the entity version.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getVersionComment

```
public String getVersionComment()
  throws StorageConnectorException
```

Gets the entity check in comment.

#### **Returns:**

The entity check in comment.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## **isClosed**

```
public boolean isClosed()
```

Gets a value indicating whether the entity is closed.

### **Returns:**

true if the entity is closed; otherwise false.

# subEntityCount

```
public long subEntityCount()
   throws StorageConnectorException
```

Gets the absolute sub-entity count.

### Returns

The number of all immediate sub-entities.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getACL

```
public IACL getACL()
    throws StorageConnectorException
```

Gets the entity IACL.

The IACL property provides access to an IACL instance containing ACL entries which define access rights for different entity operations.

#### **Returns:**

A IACL instance.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting ACL entries.

# getEffectiveRights

```
public IReadOnlyEntityRights getEffectiveRights()
    throws StorageConnectorException
```

Gets the users effective rights on the IEntity.

### **Returns:**

The read-only set of rights describing users effective rights on the IEntity.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getSecurityClass

```
public String getSecurityClass()
  throws StorageConnectorException
```

Gets the IEntity security class.

### **Returns:**

The IEntity security class system attribute enumeration value or a null reference if security class is inherited from parent entity or to clear the entity security class.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setSecurityClass

```
public void setSecurityClass(String value)
    throws StorageConnectorException
```

Sets the IEntity security class.

**Note:** Use this method on new unsaved entities only. Change security class of existing entities with IArchive.setEntitySecurityClass(EntityIdKind, String, String) method.

### **Parameters:**

value - the IEntity security class system attribute enumeration value or a null reference to clear the entity security class to inherited value.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on saved entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

## getArchive

```
public IArchive getArchive()
```

Gets the IArchive where the entity is stored.

### **Returns:**

The IArchive where the entity is stored.

# getParent

Gets the parent IEntityStub.

### **Returns:**

The parent IEntityStub.

## Throws:

CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting parent entity stub.

IOException - if an I/O error occurs.

# getCreator

```
public IDirectoryEntity getCreator()
  throws StorageConnectorException
```

Gets the creator IDirectoryEntity.

### **Returns:**

The creator  ${\tt IDirectoryEntity}.$ 

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getOwner

```
public IDirectoryEntity getOwner()
  throws StorageConnectorException
```

Gets the owner IDirectoryEntity.

### **Returns:**

The owner IDirectoryEntity or a null reference, if this instance has no owner IDirectoryEntity.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## setOwner

```
public void setOwner( IDirectoryEntity value)
    throws StorageConnectorException
```

Gets the owner IDirectoryEntity.

## **Parameters:**

value - the owner IDirectoryEntity or a null reference, if this instance has no owner IDirectoryEntity.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getSaveLog

Gets the read-only list of strings containing commit log reports for IEntity in XML format encoded per XML processing instruction.

#### Returns:

A read-only list of strings containing commit log reports in XML format encoded per XML processing instruction.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

IOException - if an I/O error occurs.

# getSecurityClassChangeDetails

```
public com.imis.util.IReadOnlyList getSecurityClassChangeDetails()
    throws StorageConnectorException
```

Gets the read-only list of security class change details for the IEntity.

## **Returns:**

A read-only list of  ${\tt ISecurityClassChangeDetails}$  objects.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getMoveDetails

```
public com.imis.util.IReadOnlyList getMoveDetails()
    throws StorageConnectorException
```

Gets the read-only list of move details for the IEntity.

#### **Returns:**

A read-only list of IMoveDetails objects.

### Throws:

 ${\tt StorageConnectorException-if} \ an \ IMiS/Storage \ Connector \ error \ occurs:$ 

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getEmailEntity

```
public IEmailEntity getEmailEntity()
    throws StorageConnectorException
```

Gets the email properties of this IEntity.

### **Returns:**

An IEmailEntity instance or a null reference if there are no email properties present.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getPhysicalEntity

```
public IPhysicalEntity getPhysicalEntity()
    throws StorageConnectorException
```

Gets the physical entity properties of this IEntity.

## **Returns:**

An IPhysicalEntity instance or a null reference if there are no physical entity properties present.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# ${\bf get Transfer Details}$

```
public ITransferDetails getTransferDetails()
    throws StorageConnectorException
```

Gets the transferred details properties of this IEntity.

### **Returns:**

An ITransferDetails instance or a null reference if there are no transferred details properties present.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getTemplate

```
public ITemplate getTemplate()
    throws StorageConnectorException
```

Gets the IEntity template identifier.

### **Returns:**

An ITemplate that represents the entity template.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getAuditLog

```
public AuditLog getAuditLog()
   throws StorageConnectorException
```

Gets the audit log object from the owning Archive.

This property provides access to the AuditLog interface which provides a facility for notify archiving system about the cause for operations on entities executed from this IEntity instance.

### **Returns:**

The AuditLog instance.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed review is not allowed.

### See Also:

AuditLog

# getArchivalInformationalPackage

Gets the IEntity archival informational package encoded in base 64 format.

### **Returns:**

An input stream containing entity archival informational package encoded in base 64 format.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting archival informational package.

IOException - if an I/O error occurs.

# getEvidenceRecords

Gets the IEntity read-only list of evidence records encoded in base 64 format.

#### **Returns:**

A read-only list of InputStream objects containing entity evidence records encoded in base 64 format.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting evidence records.

IOException - if an I/O error occurs.

# getKeywords

```
public com.imis.util.IReadOnlyList getKeywords()
    throws StorageConnectorException
```

Gets the list of entity keywords.

## **Returns:**

The list of entity keywords.

## Throws:

 $\underline{\texttt{StorageConnectorException}} \text{- if an IMiS/Storage Connector error occurs:}$ 

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setKeywords

```
public void setKeywords(List value)
  throws StorageConnectorException
```

Sets the list of entity keywords.

## **Parameters:**

value - the list of entity keywords.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getExternalIds

```
public com.imis.util.IReadOnlyList getExternalIds()
  throws StorageConnectorException
```

Gets the list of entity unique external identifiers.

### **Returns:**

The list of entity external identifiers.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setExternalIds

```
public void setExternalIds(List value)
  throws StorageConnectorException
```

Sets the list of external entity identifiers.

### Parameters:

value - the list of entity external identifiers.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getCategories

```
public com.imis.util.IReadOnlyList getCategories()
    throws StorageConnectorException
```

Gets the list of entity categories.

## **Returns:**

The list of entity categories.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setCategories

```
public void setCategories(List value)
  throws StorageConnectorException
```

Sets the list of entity categories.

### **Parameters:**

value - the list of entity categories.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getSystemProperties

```
public com.imis.util.IReadOnlyMap getSystemProperties()
    throws StorageConnectorException
```

Gets the read-only map of read-only system properties sorted by SystemProperty enum values.

## **Returns:**

The read-only map of IReadOnlyProperty objects sorted by SystemProperty enum values.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.

# getProperties

```
public com.imis.util.IReadOnlyMap getProperties()
    throws StorageConnectorException
```

Gets the read-only map of properties sorted by property unique names.

This method provides access to collection of properties assigned to the entity. You can iterate and access the different fields of property values with this method. The collection is read-only whereas collection items are not.

If the property is part of a group, a 'group namespace' prefix is used in property name. See IReadOnlyProperty.getName() method for further info.

### **Returns:**

The read-only map of IProperty objects sorted by property unique names.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.

### See Also:

**IProperty** 

# getSubEntityTemplates

```
public com.imis.util.IReadOnlyList getSubEntityTemplates()
    throws StorageConnectorException
```

Gets the read-only list of templates that represent the IEntity sub-entity creation templates.

### **Returns:**

The read-only list of ITemplate objects that represent the entity sub-entity creation templates.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

## hasReferences

```
public boolean hasReferences()
  throws StorageConnectorException
```

Gets the value indicating whether or not the entity has references.

### **Returns:**

true if the entity has references; otherwise false.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# getReferences

Gets the read-only list of IReadOnlyEntityReference objects.

### **Returns:**

The read-only list of IReadOnlyEntityReference objects.

```
CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.

IOException - if an I/O error occurs.

# getRetention

Gets the retention for the entity.

Note: This operation allows user to pass a reason for opening retention. Reason can be passed through AuditLog message.

#### **Parameters:**

mode - the retention access mode.

### **Returns:**

An IRetention instance.

### **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while opening entity retention.

IOException - if an I/O error occurs.

# createStringMaxValue

Creates a new IStringMaxValue which represents a new unbounded string property value assigned to no owner.

This instance must be set to the IProperty values using the property setValue() or setValues() methods. IEntity must also be committed to the archive using the save() method otherwise this value is lost.

The following code example demonstrates how to create a string value on a class property.

```
// Open a class specified by classification code from an archive instance
   com.imis.storageconnector.entitymodel.IClass cls =
archive.openClass(EntityIdKind.CLASSIFICATION_CODE,
   id, AccessMode.READ_WRITE);

// Open a class property named "strmaxl"
   com.imis.storageconnector.entitymodel.IProperty property =
cls.getProperties().get("strmaxl");

// Create a string value, open data stream, write data, close data stream
   com.imis.storageconnector.entitymodel.IStringMaxValue strmax =
cls.createStringMaxValue();
...

// Set a string value to the property
property.setValue(strmax);

// Save class changes
cls.save();
```

### **Returns:**

A new IStringMaxValue instance.

### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while creating string value.

 ${\tt IOException-if\ an\ I/O\ error\ occurs.}$ 

## See Also:

IEntity IProperty PropertyType.STRINGMAX

# createBinaryValue

Creates a new IBinaryValuewith no owner which represents a new binary value assigned to no owner.

This instance must be set to the IProperty values using the property setValue() or setValues() methods. IEntity must also be committed to the archive using the save() method otherwise this value is lost.

The binary value content types used are taken from the list of IANA-registered content types.

The following code example demonstrates how to create a binary value on a class property.

```
// Open a class specified by classification code from an archive instance
    com.imis.storageconnector.entitymodel.IClass cls =
archive.openClass(EntityIdKind.CLASSIFICATION_CODE,
    id, AccessMode.READ_WRITE);

// Open a class property named "binl"
    com.imis.storageconnector.entitymodel.IProperty property =
cls.getProperties().get("binl");

// Create a binary value, open data stream, write data, close data stream
    com.imis.storageconnector.entitymodel.IBinaryValue binary =
archive.createBinaryValue("image/tiff");
...

// Set a binary value to the property
property.setValue(binary);

// Save class changes
cls.save();
```

### **Parameters:**

contentType - the binary value content type.

### **Returns:**

A new IBinaryValue instance.

### Throws:

CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while creating binary value.

IOException - if an I/O error occurs.

## See Also:

IEntity
IProperty
PropertyType.BINARY

# getSubEntities

Gets the read-only collection of child entity stubs of the entity using the specified entity filter, sort keys and a collection of property names used for categorization.

#### **Parameters:**

```
filter - the entity filter or a null reference.
sortKeys - the collection of EntitySortKey objects.
categorizationPropertyNames - the collection of property names used for categorization.
```

### **Returns:**

The read-only collection of IEntityStub objects representing the entity children.

### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed entity is not allowed.
- Error occurred while getting entity child entities on archive.

IOException - if an I/O error occurs.

### See Also:

EntityTypeFilter EntitySortKey

# getSystemProperty

```
 \begin{array}{ccc} \text{public} & \underline{\text{IReadOnlyProperty}} & \underline{\text{getSystemProperty}} & \underline{\text{SystemProperty}} \\ & \text{throws} & \underline{\text{StorageConnectorException}} \end{array}
```

Gets the read-only property for the specified system property.

### **Parameters:**

systemProperty - the system property.

### **Returns:**

The read-only property for the specified system property.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## areValuesInherited

```
public boolean areValuesInherited(SystemProperty systemProperty)
  throws StorageConnectorException
```

Gets the value indicating whether the specified system property values are inherited.

#### **Parameters:**

systemProperty - the system property.

### **Returns:**

true if the specified system property values are inherited; otherwise false.

### Throws:

```
IllegalArgumentException - if invalid system property. StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getPickListValues

```
\label{eq:public_com_imis_util_IReadOnlyList} \begin{array}{l} \textbf{getPickListValues} ( \\ \underline{ \textbf{SystemProperty}} \\ \textbf{systemProperty} \end{array} \\ \textbf{systemProperty} \\ \textbf{throws StorageConnectorException} \end{array}
```

Gets the read-only list of the pick-list values for the specified system property.

### **Parameters:**

systemProperty - the system property.

### **Returns:**

The read-only list of IPickListValue objects representing the pick-list values for the specified system property.

```
IllegalArgumentException - if invalid system property. StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed entity is not allowed.
- Property is not present in template properties.
- Property is not a pick-list property.

## search

Searches for child entity stubs of the entity using the specified entity search filter, sort keys, search options, expression string and a collection of property names used for categorization.

### **Parameters:**

```
filter - the entity search filter or a null reference.
sortKeys - the collection of EntitySortKey objects.
options - the search options.
searchExpression - the search expression string.
categorizationPropertyNames - the collection of property names used for categorization.
maxElements - the number of elements the resulting collection should be truncated to.
```

### **Returns:**

The read-only collection of ISearchedEntityStub objects representing the search results.

#### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed entity is not allowed.
- Operation on unsaved new entity is not allowed.
- Error occurred while performing search on entity.

IOException - if an I/O error occurs.

# getReport

```
public InputStream getReport(ReportType type)
  throws StorageConnectorException
```

Gets the specified report data stream.

**Note:** Valid report type on IEntity is:

• ReportType.ENTITY\_SAVE

### **Parameters:**

type - the report type.

### **Returns:**

The report data stream.

## Throws:

 ${\tt UnsupportedOperationException-if\ report\ not\ supported}.$ 

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on unsaved new entity is not allowed.
- Error occurred while getting entity report.

### save

Saves the changes and reopens the entity in read-only mode.

Calling this method is same as calling save(boolean) with false parameter.

Note: This operation allows user to pass a reason for saving entity. Reason can be passed through AuditLog message.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while committing entity changes on archive.

IOException - if an I/O error occurs.

### save

```
\begin{array}{c} \text{public void } \textbf{save} (\text{boolean close}) \\ \text{throws } \frac{\text{StorageConnectorException}}{\text{IOException}}, \end{array}
```

Saves the changes and optionally closes the entity or reopens the entity in read-only mode.

Call to this method commits all changes made to this entity instance after it was opened in write mode or created.

getId() method can be used after completion of this routine to access entity unique identifier.

Note: This operation allows user to pass a reason for saving entity. Reason can be passed through AuditLog message.

**Note:** IEntity is closed after call to this method and needs to be reopened if the caller wants to continue to access methods and properties which depend on the opened instance of an entity.

### **Parameters:**

close - true to close entity after save; otherwise false.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while committing entity changes on archive.

IOException - if an I/O error occurs.

# close

Closes the entity and releases all its resources.

**Note:** Any uncommitted changes are lost. Caller cannot use methods or properties which depend on an opened instance of the object.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while closing entity on archive.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IEntityACLEntry

public interface **IEntityACLEntry** extends

Represents an Access Control List entry, a set of rights attached to a subject.

The <code>IEntityACLEntry</code> object represents ACL entry bound to the subject of the owner <code>IEntity</code>. It provides access to the inherited and explicit set of rights defined for the subject. It also enables subjects with <code>ChangeRights</code> right to modify the set of rights of the <code>IEntity</code>, its validity period and have the option of deleting the entry from the set of rights. See Also:

IACL, IEntity

Method Summary		
void	delete() Deletes the ACL entry from the owner IACL.	
IReadOnlyEntityRights	<pre>getEffectiveRights() Gets the users effective rights on the IEntity to which ACL entry is bound to.</pre>	
<u>IEntityRights</u>	<pre>getExplicitAllowRights() Gets the Explicit Allow set of rights for the subject in question.</pre>	
<u>IEntityRights</u>	getExplicitDenyRights()  Gets the Explicit Deny set of rights for the subject in question.	
IReadOnlyEntityRights	getInheritedAllowRights()  Gets the Inherited Allow set of rights for the subject in question.	
IReadOnlyEntityRights	getInheritedDenyRights()  Gets the Inherited Deny set of rights for the subject in question.	
IACL	getOwner()  Gets the owner IACL.	
String	getSubject ()  Gets the subject to which ACL entry is bound to.	
ACLEntrySubjectType	getSubjectType()  Gets the ACL entry subject type.	

# Methods

# getOwner

public IACL getOwner()

Gets the owner IACL.

**Note:** This property never changes its value after IEntityACLEntry is instantiated.

**Returns:** 

A owner IACL instance.

# getSubjectType

```
public ACLEntrySubjectType getSubjectType()
```

Gets the ACL entry subject type.

## **Returns:**

The ACL entry subject type.

# getSubject

```
public String getSubject()
```

Gets the subject to which ACL entry is bound to.

### **Returns:**

The ACL entry subject.

## getInheritedDenyRights

```
public IReadOnlyEntityRights getInheritedDenyRights()
   throws StorageConnectorException
```

Gets the Inherited Deny set of rights for the subject in question.

### **Returns:**

The IReadOnlyEntityRights to the Inherited Deny set of rights.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

### See Also:

getSubject()

# getInheritedAllowRights

```
public IReadOnlyEntityRights getInheritedAllowRights()
    throws StorageConnectorException
```

Gets the Inherited Allow set of rights for the subject in question.

### **Returns:**

The IReadOnlyEntityRights to the Inherited Allow set of rights.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

## See Also:

getSubject()

# getExplicitDenyRights

```
public IEntityRights getExplicitDenyRights()
    throws StorageConnectorException
```

Gets the Explicit Deny set of rights for the subject in question.

Caller must have ChangeRights right to the owner entity to be allowed to modify set of rights.

#### **Returns:**

The IEntityRights to the Explicit Deny set of rights.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while adding ExplicitDeny ACL entry to the entity.

#### See Also:

getSubject()

# getExplicitAllowRights

```
public IEntityRights getExplicitAllowRights()
    throws StorageConnectorException
```

Gets the Explicit Allow set of rights for the subject in question.

Caller must have ChangeRights right to the owner entity to be allowed to modify set of rights.

## **Returns:**

The IEntityRights to the Explicit Allow set of rights.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while adding ExplicitAllow ACL entry to the entity.

## See Also:

getSubject()

# getEffectiveRights

Gets the users effective rights on the IEntity to which ACL entry is bound to.

### **Returns:**

The users effective rights on the IEntity to which ACL entry is bound to or a null reference if none available.

### Throws:

CancellationException - if an operation was canceled by the user.

 $\label{loginException} \begin{tabular}{ll} LoginException - if a login error occurs. \\ \hline {\tt StorageConnectorException} - if an IMiS/Storage Connector error occurs: \\ \hline \end{tabular}$ 

- Operation on closed entity is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.

IOException - if an I/O error occurs.

## delete

```
public void delete()
  throws StorageConnectorException
```

Deletes the ACL entry from the owner IACL.

**Note:** Removal is not committed to the Archive unless the owner entity of the owner IACL object is committed to the archive using <a href="IEntity.save()">IEntity.save()</a> method. Caller must have ChangeRights right to the owner entity to be allowed to call this method.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while removing set of rights.

### See Also:

IACL
getOwner()

# com.imis.storageconnector.entitymodel Interface IEntityCollection

public interface **IEntityCollection** extends com.imis.util.ILargeReadOnlyList

Represents a read-only collection of entity stubs.

### **Parameters:**

E - the type of the element in the entity collection.

Method Summary		
long	getAccessibleCount()  Gets available entity collection element count.	
com.imis.util.IReadOn lyMap	getCategories ( )  Gets available entity collection elements per category.	
String	getCategory()  Gets the effective entity collection category.	
com.imis.util.IReadOn lyList	getTemplates()  Gets the entity collection element templates.	
boolean	isTruncated()  Gets a value indicating whether or not the collection was truncated to the specified number of elements.	
void	<pre>setCategory(String value) Sets the effective entity collection category.</pre>	

## Methods inherited from interface com.imis.util.ILargeReadOnlyList

contains, containsAll, equals, get, hashCode, indexOf, isEmpty, iterator, lastIndexOf, listIterator, listIterator, size, subList, toArray, toArray

## ${\bf Methods\ inherited\ from\ interface\ {\tt com.imis.util.ILargeReadOnlyCollection}}$

contains, containsAll, equals, hashCode, isEmpty, iterator, size, toArray, toArray

## Methods inherited from interface java.lang.Iterable

iterator

# Methods

# getTemplates

public com.imis.util.IReadOnlyList getTemplates()

Gets the entity collection element templates.

### **Returns:**

The read-only list of entity collection element templates.

### **Throws:**

IllegalStateException - if entity collection is closed.

# getCategory

```
public String getCategory()
```

Gets the effective entity collection category.

### **Returns:**

The effective entity collection category or a null reference to use uncategorized entity collection.

# setCategory

```
public void setCategory(String value)
  throws StorageConnectorException
```

Sets the effective entity collection category.

### **Parameters:**

value - the effective entity collection category or a null reference to use uncategorized entity collection.

### Throws:

```
IllegalStateException - if entity collection is closed. StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Category is not valid category for this entity collection.

# getCategories

```
public com.imis.util.IReadOnlyMap getCategories()
```

Gets available entity collection elements per category.

### **Returns:**

The read-only map of entity collection element count sorted by category.

## Throws:

IllegalStateException - if entity collection is closed.

# getAccessibleCount

Gets available entity collection element count.

### **Returns:**

The number of elements in collection available to the caller.

```
\label{local-state-exception} \begin{array}{l} {\tt IllegalStateException - if entity collection is closed.} \\ {\tt \underline{StorageConnectorException} - if an IMiS/Storage Connector error occurs.} \\ {\tt IOException - if an I/O error occurs.} \end{array}
```

# isTruncated

public boolean isTruncated()

Gets a value indicating whether or not the collection was truncated to the specified number of elements.

## **Returns:**

true if collection was truncated; otherwise false.

## **Throws:**

 ${\tt IllegalStateException-if\ entity\ collection\ is\ closed}.$ 

# com.imis.storageconnector.entitymodel Interface IEntityReference

public interface **IEntityReference** extends

Defines the entity reference.

Method Summary		
void	close () Closes the entity reference and releases all its resources.	
Calendar	<pre>created() Gets the creation time-stamp of the entity reference.</pre>	
IACL	getACL()  Gets the entity reference IACL.	
<u>IDirectoryEntity</u>	<pre>getCreator() Gets the creator IDirectoryEntity of the entity reference.</pre>	
String	<pre>getDescription() Gets the description of the entity reference.</pre>	
IReadOnlyEntityRights	getEffectiveRights()  Gets the users effective rights on the entity reference.	
String	getId()  Gets the identifier of the entity reference.	
<u>IDirectoryEntity</u>	getModifiedBy()  Gets the last modifier directory entity.	
com.imis.util.IReadOn lyList	getReferenceIds()  Gets the referenced entities identifiers.	
String	<pre>getTitle() Gets the title of the entity reference.</pre>	
Calendar	modified()  Gets the last modification time-stamp of the entity reference.	
void	Saves the changes and reopens the entity reference in read-write mode.	
void	Saves the entity reference changes and optionally closes the entity reference or reopens the entity reference in read-write mode.	
void	<pre>setDescription(String value) Sets the description of the entity reference.</pre>	
void	Sets the referenced entities identifiers.	

void

setTitle(String value)

Sets the title of the entity reference.

# Methods

# getId

```
public String getId()
  throws StorageConnectorException
```

Gets the identifier of the entity reference.

### **Returns:**

A string that represents the identifier the entity reference.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Operation on unsaved new entity reference is not allowed.
- Error occurred while getting entity reference identifier.

# getTitle

```
public String getTitle()
  throws StorageConnectorException
```

Gets the title of the entity reference.

### **Returns:**

The title of the entity reference.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## setTitle

```
public void setTitle(String value)
  throws StorageConnectorException
```

Sets the title of the entity reference.

## **Parameters:**

value - the title of the entity reference.

### Throws

NullPointerException - if value is a null reference.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the description of the entity reference.

#### **Returns:**

The description of the entity reference.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setDescription

```
public void setDescription(String value)
    throws StorageConnectorException
```

Sets the description of the entity reference.

### **Parameters:**

value - the description of the entity reference.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

## created

```
public Calendar created()
  throws StorageConnectorException
```

Gets the creation time-stamp of the entity reference.

### Returns

The date and time when the entity reference was created.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity reference is not allowed.

# getCreator

```
public IDirectoryEntity getCreator()
  throws StorageConnectorException
```

Gets the creator IDirectoryEntity of the entity reference.

### **Returns:**

The creator IDirectoryEntity of the entity reference.

#### Throws.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## modified

```
public Calendar modified()
  throws StorageConnectorException
```

Gets the last modification time-stamp of the entity reference.

### **Returns:**

The date and time when the describing entity was last modified.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getModifiedBy

```
public IDirectoryEntity getModifiedBy()
  throws StorageConnectorException
```

Gets the last modifier directory entity.

### **Returns:**

The last modifier directory entity or a null reference, if this instance has no last modifier directory entity.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getEffectiveRights

```
public IReadOnlyEntityRights getEffectiveRights()
    throws StorageConnectorException
```

Gets the users effective rights on the entity reference.

**Note:** The following rights are not applicable on entity references: MoveAccess, CreateSubEntities, ChangeSecurityClass, ChangeStatus, ChangeRetention and CreateReferences.

### **Returns:**

The read-only set of rights describing users effective rights on the entity reference.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity reference is not allowed.

# getACL

```
public IACL getACL()
  throws StorageConnectorException
```

Gets the entity reference IACL.

The IACL property provides access to an IACL instance containing ACL entries which define access rights for different entity reference operations.

**Note:** The following rights are not applicable on entity references: MoveAccess, CreateSubEntities, ChangeSecurityClass, ChangeStatus, ChangeRetention and CreateReferences.

### **Returns:**

A IACL instance.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while getting ACL entries.

# getReferenceIds

```
public com.imis.util.IReadOnlyList getReferenceIds()
    throws StorageConnectorException
```

Gets the referenced entities identifiers.

### **Returns:**

The read-only list of referenced entities identifiers.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## setReferenceIds

```
public void setReferenceIds(List value)
  throws StorageConnectorException
```

Sets the referenced entities identifiers.

#### **Parameters:**

value - the list of referenced entities identifiers.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

### save

Saves the changes and reopens the entity reference in read-write mode.

**Note:** This operation allows user to pass a reason for saving entity reference. Reason can be passed through <a href="Multi-Log"><u>AuditLog</u></a> message.

### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while committing entity reference changes on archive.

IOException - if an I/O error occurs.

### save

Saves the entity reference changes and optionally closes the entity reference or reopens the entity reference in read-write mode.

**Note:** This operation allows user to pass a reason for saving entity reference. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

### **Parameters:**

close - true to close the entity reference after save; otherwise false.

```
CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity reference is not allowed.
- Error occurred while committing entity reference changes on archive.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

# close

```
\begin{array}{c} \text{public void } \textbf{close()} \\ \text{throws} \quad & \underline{\text{StorageConnectorException}} \,, \\ \hline \text{IOException} \end{array}
```

Closes the entity reference and releases all its resources.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while closing entity reference on archive.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IEntityRights

**All Superinterfaces:** 

IReadOnlyEntityRights

public interface **IEntityRights** extends IReadOnlyEntityRights

Allows the caller to access the set of rights for a certain subject in a read-write fashion.

The following rights are defined:

Right	Description
ReadAccess	Subject has read access to entity metadata attributes and other properties.
WriteAccess	Subject has write access to entity metadata attributes and other properties.
DeleteAccess	Subject has the right to delete the entity from the archive.
ChangeRights	Subject has the right to modify the entity explicit security descriptor.
CreateSubEntities	Subject has the right to create new IEntity sub-entities.
ChangeSecurityClass	Subject has the right to set the entity security class.
ChangeStatus	Subject has the right to set the entity status.
ChangeRetention	Subject has the right to change the entity retention.
CreateReferences	Subject has the right to create entity references on the entity.

## See Also:

 $\underline{\textbf{IEntity,}}\,\underline{\textbf{IEntityACLEntry,}}\,\underline{\textbf{IReadOnlyEntityRights}}$ 

Method Summary		
void	<pre>delete()     Removes this set of rights from the owning IEntityACLEntry.</pre>	
void	Sets the value indicating whether the subject has the right to change the current entity retention.	
void	Sets the value indicating whether the subject has the right to modify explicit ACL entries bound to the owning entity.	
void	Sets the value indicating whether the subject has the right to change the current entity security class.	
void	setChangeStatus (boolean value)  Sets the value indicating whether the subject has the right to change the current entity status.	
void	Sets the value indicating whether the subject has the right to create entity references.	

void	Sets the value indicating whether the subject has the right to create sub-entities relative to the current entity.
void	Sets the value indicating whether the subject has the right to delete the owning entity from the archive.
void	Sets the value indicating whether the subject has the right to move the current entity.
void	<u>setPropagated</u> (boolean propagated) Sets the value indicating whether or not the entry is propagated.
void	Sets the value indicating whether the subject has the right to access (read) entity metadata attributes and other properties.
void	Sets the Calendar after which this entry is valid when calculating the set of rights for the owning entity.
void	Sets the Calendar before which this entry is valid when calculating the set of rights for the owning entity.
void	Sets the value indicating whether the subject has the right to add or modify entity metadata attributes and other properties.

Methods inherited from interface com.imis.storageconnector.entitymodel.IReadOnlyEntityRights

changeRetention, changeRights, changeSecurityClass, changeStatus, createReferences,
createSubEntities, deleteAccess, getOwner, isPropagated, moveAccess, readAccess,
validFrom, validTo, writeAccess

# Methods

## setReadAccess

public void setReadAccess(boolean value)
 throws StorageConnectorException

Sets the value indicating whether the subject has the right to access (read) entity metadata attributes and other properties.

### **Parameters:**

value - true to grant ReadAccess right; otherwise false.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of ReadAccess right.

### See Also:

IEntityACLEntry.getSubject()

## setWriteAccess

```
public void setWriteAccess(boolean value)
  throws StorageConnectorException
```

Sets the value indicating whether the subject has the right to add or modify entity metadata attributes and other properties.

#### **Parameters:**

value - true to grant WriteAccess right; otherwise false.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of WriteAccess right.

### See Also:

IEntityACLEntry.getSubject()

## setMoveAccess

```
public void setMoveAccess(boolean value)
  throws StorageConnectorException
```

Sets the value indicating whether the subject has the right to move the current entity.

**Note:** This right is not applicable on entity references.

### **Parameters:**

value - true if the MoveAccess right is granted; otherwise false.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of MoveAccess right.

### See Also:

IEntityACLEntry.getSubject()

## setDeleteAccess

```
public void setDeleteAccess(boolean value)
  throws StorageConnectorException
```

Sets the value indicating whether the subject has the right to delete the owning entity from the archive.

### **Parameters:**

value - true to grant DeleteAccess right; otherwise false.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of DeleteAccess right.

### See Also:

IEntityACLEntry.getSubject()

# setChangeRights

```
public void setChangeRights(boolean value)
  throws StorageConnectorException
```

Sets the value indicating whether the subject has the right to modify explicit ACL entries bound to the owning entity.

### **Parameters:**

value - true to grant ChangeRights right; otherwise false.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of ChangeRights right.

### See Also:

IEntityACLEntry.getSubject()

### **setCreateSubEntities**

```
public void setCreateSubEntities(boolean value)
  throws StorageConnectorException
```

Sets the value indicating whether the subject has the right to create sub-entities relative to the current entity.

**Note:** This right is not applicable on entity references.

### **Parameters:**

value - true to grant CreateSubEntities right; otherwise false.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of CreateSubEntities right.

### See Also:

IEntityACLEntry.getSubject()

# setChangeSecurityClass

public void setChangeSecurityClass(boolean value)
 throws StorageConnectorException

Sets the value indicating whether the subject has the right to change the current entity security class.

**Note:** This right is not applicable on entity references.

### **Parameters:**

value - true if the ChangeSecurityClass right is granted; otherwise false.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of ChangeSecurityClass right.

### See Also:

IEntityACLEntry.getSubject()

# setChangeStatus

public void setChangeStatus(boolean value)
 throws StorageConnectorException

Sets the value indicating whether the subject has the right to change the current entity status.

**Note:** This right is not applicable on entity references.

### **Parameters:**

value - true if the ChangeStatus right is granted; otherwise false.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of ChangeStatus right.

### See Also:

IEntityACLEntry.getSubject()

# setChangeRetention

public void setChangeRetention(boolean value)
 throws StorageConnectorException

Sets the value indicating whether the subject has the right to change the current entity retention.

**Note:** This right is not applicable on entity references.

### **Parameters:**

value - true if the ChangeRetention right is granted; otherwise false.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of ChangeRetention right.

### See Also:

IEntityACLEntry.getSubject()

### setCreateReferences

```
public void setCreateReferences(boolean value)
  throws StorageConnectorException
```

Sets the value indicating whether the subject has the right to create entity references.

Note: This right is not applicable on entity references.

#### Parameters:

value - true if the CreateReferences right is granted; otherwise false.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of CreateReferences right.

### See Also:

IEntityACLEntry.getSubject()

### setValidFrom

```
public void setValidFrom(Calendar value)
  throws StorageConnectorException
```

Sets the Calendar after which this entry is valid when calculating the set of rights for the owning entity.

### **Parameters:**

value - a Calendar value that represents the entry validity start timestamp.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting Calendar value for set of rights.

### setValidTo

```
public void setValidTo(Calendar value)
  throws StorageConnectorException
```

Sets the Calendar before which this entry is valid when calculating the set of rights for the owning entity.

#### **Parameters:**

value - a Calendar value that represents the entry validity end timestamp.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting Calendar value for set of rights.

# setPropagated

```
public void setPropagated(boolean propagated)
  throws StorageConnectorException
```

Sets the value indicating whether or not the entry is propagated.

### **Parameters:**

propagated - the propagated value.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.

### delete

```
public void delete()
  throws StorageConnectorException
```

Removes this set of rights from the owning IEntityACLEntry.

Removal is not committed to the archive unless owning IEntity is committed to the Archive instance using IEntity.save() method.

Caller must have ChangeRights right to the owner entity to be allowed to call this method.

### Throws:

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while removing set of rights.

### See Also:

**IEntityACLEntry** 

# com.imis.storageconnector.entitymodel Interface IEntityStub

All Subinterfaces:

ISearchedEntityStub

# public interface **IEntityStub** extends

Defines an IEntity descriptor.

An IEntityStub defines an IEntity descriptor containing the entity identifier and type, public metadata attributes, its position in the entity tree (parent and children), callers effective rights on the entity object, etc. It also enables a caller to open a full-feature IEntity object using the open() method. Accessing IEntityStub properties and methods other than open() will not be recorded in the archive's AuditLog records.

**Note:** Instance is automatically recycled after the last reference is released. **See Also:** 

**IEntity** 

Method Summary	
Calendar	accessed()  Gets the describing IEntity last access timestamp.
boolean	<u>areValuesInherited(SystemProperty</u> systemProperty)  Gets the value indicating whether the specified system property values are inherited.
String	<pre>checkOut ( ) Checks out the entity.</pre>
Calendar	<pre>closed() Gets the describing IEntity status closed time-stamp.</pre>
Calendar	<pre>created() Gets the describing IEntity creation timestamp.</pre>
void	<pre>delete() Deletes the describing IEntity and associated resources.</pre>
void	<pre>delete(String description) Deletes the describing IEntity and associated resources.</pre>
<u>IArchive</u>	<pre>getArchive() Gets the IArchive where the describing IEntity is stored.</pre>
com.imis.util.IReadOn lyList	<pre>getCategories() Gets the list of the describing IEntity categories.</pre>
String	<pre>getClassificationCode() Gets the describing IEntity classification code in canonical format.</pre>
<u>IReadOnlyContent</u>	<pre>getContent() Gets the describing IEntity read-only content.</pre>

<u>IDirectoryEntity</u>	<pre>getCreator() Gets the describing IEntity creator IDirectoryEntity.</pre>
com.imis.util.IReadOn lyMap	<pre>getCustomContents() Gets the describing IEntity read-only custom contents.</pre>
String	<pre>getDescription() Gets the describing IEntity description.</pre>
<u>IDirectoryEntity</u>	getDraftCreator()  Gets the entity's draft creator.
String	getDraftId()  Gets the entity's draft identifier.
IDraftStub	<pre>getDraftInfo() Queries archiving server for draft public properties (metadata attributes) and other specifics which can be accessed without opening a draft.</pre>
IReadOnlyEntityRights	<pre>getEffectiveRights() Gets the users effective rights on the describing IEntity.</pre>
com.imis.util.IReadOn lyList	<pre>getExternalIds() Gets the list of the describing IEntity unique external identifiers.</pre>
String	<pre>getId() Gets the describing IEntity unique identifier.</pre>
com.imis.util.IReadOn lyList	<pre>getKeywords() Gets the describing IEntity list of keywords.</pre>
<u>IDirectoryEntity</u>	getModifiedBy()  Gets the last modifier directory entity.
<u>IDirectoryEntity</u>	<pre>getOwner()  Gets the describing IEntity owner IDirectoryEntity.</pre>
<u>IEntityStub</u>	<pre>Gets the describing IEntity parent IEntityStub.</pre>
com.imis.util.IReadOn lyList	getPickListValues(SystemProperty systemProperty)  Gets the read-only list of the pick-list values for the specified system property.
com.imis.util.IReadOn lyMap	getProperties()  Gets the entity public metadata attributes.
String	<u>getPublicClassificationCode()</u> Gets the describing IEntity classification code in public format.
com.imis.util.IReadOn lyList	getReferences()  Gets the read-only list of IReadOnlyEntityReference objects.
InputStream	Gets the specified report data stream for the describing IEntity.
IRetention	Gets the retention for the entity.
String	<pre>getSecurityClass() Gets the IEntity security class.</pre>

String	getSignificance()  Gets the describing IEntity significance.
String	getStatus()  Gets the describing IEntity status.
<u>IEntityCollection</u>	<pre>getSubEntities(EntityFilter filter, Collection sortKeys, Collection categorizationPropertyNames)</pre> Gets the read-only collection of child entity stubs of the describing IEntity using the specified entity filter, sort keys and a collection of property names used for categorization.
com.imis.util.IReadOn lyList	<pre>getSubEntityTemplates() Gets the read-only list of templates that represent the describing IEntity sub-entity creation templates.</pre>
com.imis.util.IReadOn lyMap	<pre>getSystemProperties() Gets the read-only map of read-only system properties sorted by SystemProperty enum values.</pre>
IReadOnlyProperty	<pre>getSystemProperty(SystemProperty systemProperty) Gets the read-only property for the specified system property.</pre>
<u>ITemplate</u>	<pre>getTemplate() Gets the describing IEntity template.</pre>
String	<pre>getTitle() Gets the describing IEntity title.</pre>
EntityType	<pre>getType() Gets the describing IEntity type identifier.</pre>
String	getVersionComment()  Gets the entity check in comment.
String	<pre>getVersionLabel() Gets the label of the entity version.</pre>
com.imis.util.IReadOn lyList	getVersions()  Gets the read-only list of entity versions.
Integer	getVersionSequence()  Gets the entity version sequence.
boolean	hasAIP() Gets a value indicating whether or not the describing IEntity has AIP.
boolean	hasDraft ()  Gets the value indicating whether or not the entity has a draft.
boolean	hasReferences ( ) Gets the value indicating whether or not the entity has references.
boolean	hasVersions()  Gets the value indicating whether or not the entity has versions.
boolean	isChildClassificationCodeGenerated()  Gets a value indicating whether or not classification codes of describing IEntity children are auto generated.

boolean	isPermanent()  Gets a value indicating whether or not the describing IEntity is permanent.
Calendar	modified()   Gets the describing IEntity last modification timestamp.
void	<pre>Move (IEntityStub parent) Moves the describing IEntity under the specified parent entity.</pre>
<u>IEntity</u>	open (AccessMode mode) Opens an IEntity described by this IEntityStub using a specified entity access mode.
Calendar	opened()  Gets the describing IEntity status opened time-stamp.
<u>IEntityCollection</u>	<pre>search(EntityFilter filter, Collection sortKeys, Set options, String searchExpression, Collection categorizationPropertyNames, Long maxElements)  Searches for child entity stubs of the describing IEntity using the specified entity search filter, sort keys, search options, expression string and a collection of property names used for categorization.</pre>
void	setSecurityClass(String securityClass)  Sets the security class of the describing IEntity.
void	Sets the status of the describing IEntity.
long	subEntityCount()  Gets the absolute sub-entity count.

# Methods

# getId

public String getId()

Gets the describing  ${\tt IEntity}$  unique identifier.

### **Returns:**

A string that represents the describing IEntity identifier.

# ${\bf get Classification Code}$

public String getClassificationCode()

Gets the describing IEntity classification code in canonical format.

### **Returns:**

A string that represents the describing  ${\tt IEntity}$  classification code.

# get Public Classification Code

public String getPublicClassificationCode()

Gets the describing IEntity classification code in public format.

The entity classification code in canonical format is converted to entity public classification code by replacing the entity type prefix and classification hierarchy delimiter with the respective entity type hierarchy delimiters.

#### **Returns:**

A string that represents the describing IEntity public classification code.

### isChildClassificationCodeGenerated

```
public boolean isChildClassificationCodeGenerated()
```

Gets a value indicating whether or not classification codes of describing IEntity children are auto generated.

**Note:** Operation supported for entities of type CLASS and FOLDER only.

#### **Returns:**

true if children classification codes are auto generated; otherwise false.

### **Throws:**

UnsupportedOperationException - if unsupported entity type.

# getTitle

```
public String getTitle()
  throws StorageConnectorException
```

Gets the describing IEntity title.

#### **Returns:**

The describing IEntity title.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

Property is not present in template properties.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the describing IEntity description.

### **Returns:**

The describing IEntity description.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getSignificance

```
public String getSignificance()
  throws StorageConnectorException
```

Gets the describing IEntity significance.

### **Returns:**

The describing IEntity significance.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getStatus

```
public String getStatus()
  throws StorageConnectorException
```

Gets the describing IEntity status.

### **Returns:**

The describing IEntity status.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getType

```
public EntityType getType()
```

Gets the describing IEntity type identifier.

### **Returns:**

An enumerator value that represents the describing IEntity type.

### created

```
public Calendar created()
```

Gets the describing IEntity creation timestamp.

### Returns:

The date and time when the describing entity was created.

### modified

```
public Calendar modified()
```

Gets the describing IEntity last modification timestamp.

### **Returns:**

The date and time when the describing entity was last modified.

# getModifiedBy

```
public IDirectoryEntity getModifiedBy()
```

Gets the last modifier directory entity.

### **Returns:**

The last modifier directory entity or a null reference, if this instance has no last modifier directory entity.

### accessed

```
public Calendar accessed()
```

Gets the describing IEntity last access timestamp.

#### **Returns:**

The date and time when the describing entity was last accessed.

# opened

```
public Calendar opened()
  throws StorageConnectorException
```

Gets the describing IEntity status opened time-stamp.

### **Returns:**

The date and time when the describing IEntity status was set to opened or a null reference if entity has no value.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

### closed

```
public Calendar closed()
  throws StorageConnectorException
```

Gets the describing IEntity status closed time-stamp.

### **Returns:**

The date and time when the describing IEntity status was set to closed or a null reference if entity has no value.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

### **isPermanent**

```
public boolean isPermanent()
```

Gets a value indicating whether or not the describing IEntity is permanent.

### **Returns:**

true if the describing IEntity is permanent; otherwise false.

# hasAIP

```
public boolean hasAIP()
```

Gets a value indicating whether or not the describing IEntity has AIP.

#### Returns:

true if the describing IEntity has AIP; otherwise false.

### hasDraft

```
public boolean hasDraft()
```

Gets the value indicating whether or not the entity has a draft.

#### **Returns:**

true if the entity has a draft; otherwise false.

# getDraftId

```
public String getDraftId()
```

Gets the entity's draft identifier.

#### **Returns:**

The entity's draft identifier.

# getDraftInfo

Queries archiving server for draft public properties (metadata attributes) and other specifics which can be accessed without opening a draft. The returned IDraftStub object describes the public information about the draft which was queried.

### **Returns:**

An IDraftStub object.

### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Draft identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.

IOException - if an I/O error occurs.

# getDraftCreator

```
public IDirectoryEntity getDraftCreator()
    throws StorageConnectorException
```

Gets the entity's draft creator.

### **Returns:**

The entity's draft creator.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while getting directory member on archive.

### hasVersions

```
public boolean hasVersions()
```

Gets the value indicating whether or not the entity has versions.

### **Returns:**

true if the entity has versions; otherwise false.

# getVersionSequence

```
public Integer getVersionSequence()
```

Gets the entity version sequence.

### **Returns:**

The entity version sequence.

# getVersionLabel

```
public String getVersionLabel()
  throws StorageConnectorException
```

Gets the label of the entity version.

### Returns

A string that represents the label of the entity version.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getVersionComment

```
public String getVersionComment()
  throws StorageConnectorException
```

Gets the entity check in comment.

### **Returns:**

The entity check in comment.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getVersions

```
public com.imis.util.IReadOnlyList getVersions()
```

Gets the read-only list of entity versions.

### **Returns:**

The read-only list of IEntityStub objects that represent the entity versions.

# subEntityCount

```
public long subEntityCount()
```

Gets the absolute sub-entity count.

#### **Returns:**

The number of all immediate sub-entities.

# getEffectiveRights

```
public IReadOnlyEntityRights getEffectiveRights()
```

Gets the users effective rights on the describing IEntity.

### **Returns:**

The read-only set of rights describing users effective rights on the describing IEntity.

# getSecurityClass

```
public String getSecurityClass()
  throws StorageConnectorException
```

Gets the IEntity security class.

### **Returns:**

The string value from SecurityClass system attribute enumeration representing the IEntity security class or null value if not defined.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getArchive

```
public IArchive getArchive()
```

Gets the IArchive where the describing IEntity is stored.

### **Returns:**

The IArchive where the describing IEntity is stored.

# getParent

Gets the describing IEntity parent IEntityStub.

#### Returns:

The parent IEntityStub or a null reference, if this instance is a root IEntityStub.

### **Throws:**

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while getting entity stub parent.

IOException - if an I/O error occurs.

# getCreator

```
public IDirectoryEntity getCreator()
    throws StorageConnectorException
```

Gets the describing IEntity creator IDirectoryEntity.

### **Returns:**

The creator IDirectoryEntity.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getOwner

```
public IDirectoryEntity getOwner()
  throws StorageConnectorException
```

Gets the describing IEntity owner IDirectoryEntity.

### **Returns:**

The creator IDirectoryEntity or a null reference, if this instance has no owner IDirectoryEntity.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getTemplate

```
public ITemplate getTemplate()
```

Gets the describing IEntity template.

### **Returns:**

A string value that represents the entity template.

# getKeywords

```
public com.imis.util.IReadOnlyList getKeywords()
  throws StorageConnectorException
```

Gets the describing IEntity list of keywords.

#### **Returns:**

The describing IEntity list of keywords.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getExternalIds

```
public com.imis.util.IReadOnlyList getExternalIds()
  throws StorageConnectorException
```

Gets the list of the describing IEntity unique external identifiers.

### **Returns:**

A list of String objects that represents the describing IEntity external identifiers.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getCategories

```
public com.imis.util.IReadOnlyList getCategories()
    throws StorageConnectorException
```

Gets the list of the describing IEntity categories.

### **Returns:**

A list of String objects that represents the describing IEntity categories.

### Throws:

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

• Property is not present in template properties.

# getSystemProperties

```
public com.imis.util.IReadOnlyMap getSystemProperties()
```

Gets the read-only map of read-only system properties sorted by SystemProperty enum values.

#### Returns

The read-only map of IReadOnlyProperty objects sorted by SystemProperty enum values.

# getProperties

```
public com.imis.util.IReadOnlyMap getProperties()
```

Gets the entity public metadata attributes.

### **Returns:**

The read-only map of IReadOnlyProperty objects sorted by the property names.

### See Also:

IReadOnlyProperty

# getContent

```
public IReadOnlyContent getContent()
  throws StorageConnectorException
```

Gets the describing IEntity read-only content.

### **Returns:**

The IReadOnlyContent object.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getCustomContents

```
public com.imis.util.IReadOnlyMap getCustomContents()
```

Gets the describing IEntity read-only custom contents.

### **Returns:**

A read-only map of IReadOnlyContent objects sorted by the content names.

### See Also:

IDocument

IReadOnlyContent

# getSubEntityTemplates

```
public com.imis.util.IReadOnlyList getSubEntityTemplates()
```

Gets the read-only list of templates that represent the describing IEntity sub-entity creation templates.

### **Returns:**

The read-only list of ITemplate objects that represent the entity sub-entity creation templates.

# hasReferences

```
public boolean hasReferences()
```

Gets the value indicating whether or not the entity has references.

#### **Returns:**

true if the entity has references; otherwise false.

# getReferences

Gets the read-only list of IReadOnlyEntityReference objects.

### **Returns:**

The read-only list of IReadOnlyEntityReference objects.

#### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.

IOException - if an I/O error occurs.

# getRetention

Gets the retention for the entity.

Note: This operation allows user to pass a reason for opening retention. Reason can be passed through AuditLog message.

### **Parameters:**

mode - the retention access mode.

### **Returns:**

An IRetention instance.

### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while opening entity retention.

IOException - if an I/O error occurs.

### setStatus

Sets the status of the describing IEntity.

**Note:** This operation allows user to pass a reason for changing entity status. Reason can be passed through <a href="AuditLog">AuditLog</a> message.

### **Parameters:**

status - the describing IEntity status or a null reference to reset status to inherited value.

### **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Property is not a pick-list property.
- Property value is not allowed based on the current template settings.
- Error occurred while setting status to value.

IOException - if an I/O error occurs.

# setSecurityClass

Sets the security class of the describing IEntity.

**Note:** This operation requires user to pass a reason for changing entity security class. Reason must be passed through AuditLog message.

### **Parameters:**

securityClass - the describing IEntity security class or a null reference to reset security class to inherited value.

### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Property is not a pick-list property.
- Property value is not allowed based on the current template settings.
- Error occurred while setting security class to value.

IOException - if an I/O error occurs.

# getSubEntities

Gets the read-only collection of child entity stubs of the describing IEntity using the specified entity filter, sort keys and a collection of property names used for categorization.

#### **Parameters:**

```
filter - the entity filter or a null reference.
sortKeys - the collection of EntitySortKey objects.
categorizationPropertyNames - the collection of property names used for categorization.
```

### **Returns:**

The read-only collection of IEntityStub objects representing the entity children.

#### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while getting entity child entities on archive.

IOException - if an I/O error occurs.

#### See Also:

```
EntityFilter
EntitySortKey
```

# getSystemProperty

```
 \begin{array}{ccc} \texttt{public} & \underline{\texttt{IReadOnlyProperty}} & \textbf{getSystemProperty} \\ \texttt{throws} & \underline{\texttt{StorageConnectorException} \end{array} \\ \end{array}
```

Gets the read-only property for the specified system property.

### **Parameters:**

```
systemProperty - the system property.
```

### **Returns:**

The read-only property for the specified system property.

### Throws:

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

### areValuesInherited

```
public boolean areValuesInherited(SystemProperty systemProperty)
    throws StorageConnectorException
```

Gets the value indicating whether the specified system property values are inherited.

#### **Parameters:**

systemProperty - the system property.

### **Returns:**

true if the specified system property values are inherited; otherwise false.

#### Throws:

```
IllegalArgumentException - if invalid system property. StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Property is not present in template properties.

# getPickListValues

```
\label{eq:public_com.imis.util.IReadOnlyList} \textbf{getPickListValues} ( \underline{ \textbf{SystemProperty} } \text{ systemProperty}) \\ \text{throws StorageConnectorException}
```

Gets the read-only list of the pick-list values for the specified system property.

#### **Parameters:**

systemProperty - the system property.

#### **Returns:**

The read-only list of IPickListValue objects representing the pick-list values for the specified system property.

#### Throws:

```
IllegalArgumentException - if invalid system property.
StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

### search

Searches for child entity stubs of the describing IEntity using the specified entity search filter, sort keys, search options, expression string and a collection of property names used for categorization.

### **Parameters:**

```
filter - the entity search filter or a null reference.
sortKeys - the collection of EntitySortKey objects.
options - the search options.
searchExpression - the search expression string.
categorizationPropertyNames - the collection of property names used for categorization.
maxElements - the number of elements the resulting collection should be truncated to.
```

### **Returns:**

The read-only collection of ISearchedEntityStub objects representing the search results.

### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMis/Storage Connector error occurs:
```

• Error occurred while performing search on entity.

IOException - if an I/O error occurs.

# getReport

```
public InputStream getReport(ReportType type)
```

Gets the specified report data stream for the describing IEntity.

**Note:** Valid report types on IEntityStub are:

- ReportType.ENTITY\_MOVE
- ReportType.ENTITY\_STATUS
- ReportType.ENTITY\_SECURITY\_CLASS

### **Parameters:**

type - the report type.

### **Returns:**

The report data input stream or null if report not available.

### Throws

UnsupportedOperationException - if report not supported.

# open

Opens an IEntity described by this IEntityStub using a specified entity access mode.

Note: This operation allows user to pass a reason for opening entity. Reason can be passed through AuditLog message.

### **Parameters:**

mode - the entity access mode.

### **Returns:**

An opened IEntity instance.

### Throws:

CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.

IOException - if an I/O error occurs.

### move

Moves the describing IEntity under the specified parent entity.

Note: This operation allows user to pass a reason for moving entity. Reason can be passed through AuditLog message.

#### **Parameters:**

parent - the new parent entity.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while moving entity on archive.

IOException - if an I/O error occurs.

# delete

Deletes the describing IEntity and associated resources.

Use this method to remove all resources associated with the entity and the entity itself. Delete right is required for this operation to succeed.

This operation requires user to pass reason for deleting entity Reason must be passed through AuditLog message.

This operation requires description for deleted entity. This method will fail if the entity does not have its own description.

This operation is irreversible. Entity will not be accessible after a successful call is completed.

### Throws:

```
CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while removing entity on archive.

IOException - if an I/O error occurs.

### delete

Deletes the describing IEntity and associated resources.

Use this method to remove all resources associated with the entity and the entity itself. Delete right is required for this operation to succeed.

This operation requires user to pass reason for deleting entity Reason must be passed through AuditLog message.

This operation requires description for deleted entity. If one is not provided via description parameter, this method will fail if the entity does not have its own description.

This operation is irreversible. Entity will not be accessible after a successful call is completed.

#### **Parameters:**

description - a custom description for deleted entity in case delete agent wants to specify it or a null reference to use existing entity description.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while removing entity on archive.

IOException - if an I/O error occurs.

### checkOut

Checks out the entity.

This operation allows user to pass reason for checking out entity. Reason can be passed through AuditLog message.

### Returns:

The entity draft identifier.

### Throws:

```
{\tt CancellationException - if an operation was canceled by the user.} \\ {\tt LoginException - if a login error occurs}.
```

# $\underline{\texttt{StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$

- Operation on non document entity is not allowed.
  Operation on closed archive is not allowed.
  Error occurred while opening a session on server.
  Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while checking out entity on archive.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IFolder

All Superinterfaces:

**IEntity** 

public interface **IFolder** extends **IEntity** 

Defines a IFolder entity.

A IFolder entity represents a file folder which may contain metadata attributes, has its inherited and explicit ACL entries and can contain additional sub-folders and/or documents as sub-entities.

Current implementation inherits from the base IEntity and adds factory methods for creating new instances of sub-entities which can be either IFolder or IDocument instances.

See Also:

IEntity, IDocument

Method Summary		
IDocument	<u>createDocument</u> (String templateId)  Creates a new IDocument entity instance.	
<u>IFolder</u>	<u>createFolder</u> (String templateId)  Creates a new IFolder or sub-folder entity instance.	
boolean	isChildClassificationCodeGenerated()  Gets a value indicating whether or not child classification code is auto generated.	
void	Sets a value indicating whether or not child classification code is auto generated.	

### Methods inherited from interface com.imis.storageconnector.entitymodel.IEntity

accessed, areValuesInherited, close, closed, createBinaryValue, created, createStringMaxValue, getACL, getArchivalInformationalPackage, getArchive, getAuditLog, getCategories, getClassificationCode, getCreator, getDescription, getDraftCreator, getDraftId, getEffectiveRights, getEmailEntity, getEvidenceRecords, getExternalIds, getId, getKeywords, getMode, getModifiedBy, getMoveDetails, getOwner, getParent, getPhysicalEntity, getPickListValues, getProperties, getPublicClassificationCode, getReferences, getReport, getRetention, getSaveLog, getSecurityClass, getSecurityClassChangeDetails, getSignificance, getStatus, getSubEntities, getSubEntityTemplates, getSystemProperties, getSystemProperty, getTemplate, getTitle, getTransferDetails, getType, getVersionComment, getVersionLabel, getVersionSequence, hasAIP, hasDraft, hasReferences, hasVersions, isClosed, isPermanent, modified, opened, save, save, search, setCategories, setClassificationCode, setDescription, setExternalIds, setKeywords, setOwner, setSecurityClass, setSignificance, setStatus, setTitle, subEntityCount

Methods inherited from interface com.imis.IAutoCloseable	
close	

# Methods

# isChildClassificationCodeGenerated

```
public boolean isChildClassificationCodeGenerated()
    throws StorageConnectorException
```

Gets a value indicating whether or not child classification code is auto generated.

#### **Returns:**

true if child classification code is auto generated; otherwise false.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while getting child classification code generated value.

### setChildClassificationCodeGenerated

```
public void setChildClassificationCodeGenerated(boolean value)
  throws StorageConnectorException
```

Sets a value indicating whether or not child classification code is auto generated.

### **Parameters:**

value - true if child classification code is auto generated; otherwise false.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while setting child classification code generated value.

### createFolder

Creates a new IFolder or sub-folder entity instance.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

Note: This operation allows user to pass a reason for creating folder. Reason can be passed through AuditLog message.

### **Parameters**:

templateId - the folder template identifier from the templates inventory.

### **Returns:**

A new IFolder instance.

### **Throws:**

NullPointerException - if templateId is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

### createDocument

Creates a new IDocument entity instance.

**Note:** The instance is committed to the archive only if <u>IEntity.save()</u> method is used on the new instance, otherwise it is discarded.

**Note:** This operation allows user to pass a reason for creating document. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

### **Parameters:**

templateId - the document template identifier from the templates inventory.

### **Returns:**

A new IDocument instance.

### Throws:

NullPointerException - if templateId is a null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on closed archive is not allowed.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IMoveDetails

public interface **IMoveDetails** extends

Defines an IEntity relocation details.

See Also:

**IEntity** 

Method Summary	
<u>IDirectoryEntity</u>	getAgent()  Gets the relocated IEntity agent.
String	getClassificationCode()  Gets the relocated IEntity classification code in canonical format.
String	getPublicClassificationCode()  Gets the relocated IEntity classification code in public format.
String	getReason()  Gets the reason for relocating the IEntity.
Calendar	moved()  Gets the IEntity relocation date and time.

# Methods

# getClassificationCode

public String getClassificationCode()

Gets the relocated IEntity classification code in canonical format.

### **Returns:**

A string that represents the moved IEntity classification code.

# getPublicClassificationCode

public String getPublicClassificationCode()

Gets the relocated  ${\tt IEntity}$  classification code in public format.

### **Returns:**

A string that represents the moved IEntity public classification code.

# getAgent

public IDirectoryEntity getAgent()

Gets the relocated IEntity agent.

### **Returns:**

The user who relocated the IEntity.

# getReason

```
public String getReason()
```

Gets the reason for relocating the  ${\tt IEntity}.$ 

### **Returns:**

A reason for relocating the <code>IEntity</code>.

# moved

```
public Calendar moved()
```

Gets the IEntity relocation date and time.

### **Returns:**

The date and time when the <code>IEntity</code> was relocated.

# com.imis.storageconnector.entitymodel Interface IPhysicalEntity

public interface **IPhysicalEntity** extends

Describes a physical entity.

Method Summary	
String	getCurrentLocation()  Gets the physical entity current location.
String	getCustodian()  Gets the physical entity current custodian.
String	getDescription()  Gets the physical entity description.
String	<pre>getHomeLocation() Gets the physical entity home location.</pre>
String	getId()  Gets the physical entity identifier.
String	getStatus()  Gets the physical entity status.
Calendar	returnDue()  Gets the date and time when CheckedOut physical entity is due to be CheckedIn.
void	<pre>setCurrentLocation(String value) Sets the physical entity current location.</pre>
void	<pre>setCustodian(String value) Sets the physical entity current custodian.</pre>
void	<pre>setDescription(String value) Sets the physical entity description.</pre>
void	Sets the physical entity home location.
void	<pre>setId(String value) Sets the physical entity identifier.</pre>
void	Sets the date and time when CheckedOut physical entity is due to be CheckedIn.
void	Sets the physical entity status.
Calendar	StatusChange ( )  Gets the last date and time when status changed its value.

# Methods

# getId

```
public String getId()
  throws StorageConnectorException
```

Gets the physical entity identifier.

#### **Returns:**

A string that represents the physical entity identifier.

#### Throws.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setId

```
public void setId(String value)
  throws StorageConnectorException
```

Sets the physical entity identifier.

### **Parameters:**

value - a string that represents the physical entity identifier.

### **Throws**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the physical entity description.

### **Returns:**

The physical entity description.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setDescription

```
public void setDescription(String value)
  throws StorageConnectorException
```

Sets the physical entity description.

#### **Parameters:**

value - the physical entity description.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getStatus

```
public String getStatus()
  throws StorageConnectorException
```

Gets the physical entity status.

### **Returns:**

The physical entity status.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setStatus

```
public void setStatus(String value)
  throws StorageConnectorException
```

Sets the physical entity status.

### **Parameters:**

value - the physical entity status.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Error occurred while clearing property values.
- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

# statusChange

```
public Calendar statusChange()
  throws StorageConnectorException
```

Gets the last date and time when status changed its value.

#### **Returns:**

The last date and time when status changed its value or a null reference if initial status has not changed.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getHomeLocation

```
public String getHomeLocation()
  throws StorageConnectorException
```

Gets the physical entity home location.

### **Returns:**

The physical entity home location.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setHomeLocation

```
public void setHomeLocation(String value)
  throws StorageConnectorException
```

Sets the physical entity home location.

### **Parameters:**

value - the physical entity home location.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getCurrentLocation

```
public String getCurrentLocation()
  throws StorageConnectorException
```

Gets the physical entity current location.

#### **Returns:**

The physical entity current location.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setCurrentLocation

```
public void setCurrentLocation(String value)
  throws StorageConnectorException
```

Sets the physical entity current location.

### **Parameters:**

value - the physical entity current location.

### Throws:

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getCustodian

```
public String getCustodian()
  throws StorageConnectorException
```

Gets the physical entity current custodian.

The physical entity custodian is internal personnel, if status is CheckedIn (normally owner) or external if status is CheckedOut.

#### **Returns:**

The physical entity current custodian.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setCustodian

```
public void setCustodian(String value)
  throws StorageConnectorException
```

Sets the physical entity current custodian.

The physical entity custodian is internal personnel, if status is CheckedIn (normally owner) or external if status is CheckedOut.

#### **Parameters:**

value - the physical entity current custodian.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

### returnDue

```
public Calendar returnDue()
  throws StorageConnectorException
```

Gets the date and time when CheckedOut physical entity is due to be CheckedIn.

### **Returns:**

The date and time when CheckedOut physical entity is due to be CheckedIn or a null reference if the date and time is not set.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## setReturnDue

public void setReturnDue(Calendar value)
 throws StorageConnectorException

Sets the date and time when CheckedOut physical entity is due to be CheckedIn.

### **Parameters:**

value - the date and time when CheckedOut physical entity is due to be CheckedIn or a null reference if the date and time is not set.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

## com.imis.storageconnector.entitymodel Interface IPickListValue

public interface **IPickListValue** extends

Represents the pick-list property value.

Method Summary	
String	<pre>getKey() Gets the generic culture insensitive key of the pick-list property value.</pre>
String	<pre>Gets the culture sensitive key of the pick-list property value or the culture insensitive key if pick-list value key is not localized into the specified Locale.</pre>
Object	getValue()  Gets the value of the pick-list property value.
boolean	<pre>isDefault() Gets the value indicating whether the value is the default one for the owning pick-list value list.</pre>

## Methods

## getKey

public String getKey()

Gets the generic culture insensitive key of the pick-list property value.

### **Returns:**

The key of the pick-list property value or a null reference.

## getValue

public Object getValue()

Gets the value of the pick-list property value.

### **Returns:**

The value of the pick-list property value.

## isDefault

public boolean isDefault()

Gets the value indicating whether the value is the default one for the owning pick-list value list.

### **Returns:**

true if value is the default pick-list value; otherwise false.

## getKey

public String getKey(Locale locale)

Gets the culture sensitive key of the pick-list property value or the culture insensitive key if pick-list value key is not localized into the specified Locale.

### **Parameters:**

locale - a locale of the localized key to get.

### **Returns:**

The localized key of the pick-list property value.

## com.imis.storageconnector.entitymodel Interface IProperty

All Superinterfaces:

**IReadOnlyProperty** 

public interface **IProperty** extends **IReadOnlyProperty** 

Defines a property of an IEntity.

A IProperty interface prescribes a way with which an application can interface with IEntity metadata attribute in read-write fashion. Each property is contained within an IEntity in a appropriate container. Since properties can be multi-valued, the interface provides and accepts a collection of property values, which need to be of same type. Convenience methods are also provided for single-value access. If the property type is a "complex" one, value factory methods are provided to instantiate new instances of complex values.

**Note:** Any changes made to the property value(s) are committed to the archive at <code>IEntity</code> commit stage by using <code>IEntity.save()</code> method. If this method is not called, any changes made to the properties are discarded. **See Also:** 

IReadOnlyProperty, IEntity

Method Summary	У
void	clear () Clears the property values.
void	<pre>clear(boolean resetToInheritedValues) Clears the property values.</pre>
int	<pre>committedValueCount() Gets the property committed value count.</pre>
void	<pre>setValue(Class type, Object value) Sets the property value.</pre>
void	<pre>setValue(String value) Sets the property value using its equivalent string representation.</pre>
void	<pre>setValue(String value, java.text.Format format) Sets the property value using its equivalent string representation using the specified format.</pre>
void	<pre>setValues(Class type, List values) Sets the list of property values.</pre>
void	<pre>setValues(List values) Sets the list of property values in its equivalent string representation.</pre>
void	<u>setValues</u> (List values, java.text.Format format) Sets the list of property values in its equivalent string representation using the specified format.
void	Sets the property value using its equivalent XML string representation.

void

setXmlValues(List values)

Sets the list of property values in its equivalent XML string representation.

Methods inherited from interface com.imis.storageconnector.entitymodel.IReadOnlyProperty

areValuesInherited, getDescription, getEffectiveRights, getLabel, getName, getPickListValues, getType, getValue, getValue, getValue, getValues, getValues, getValues, getValues, getValues, getValues, isAppendOnly, isIncludedInAIP, isInherited, isMultiValue, isNonEmpty, isPickList, isPublic, isReadOnly, isReadOnlyAfterCheckIn, isReadOnlyAfterCreate, isRequired, isSearchable, isUnique, isVersionable, valueCount

## Methods

## committedValueCount

public int committedValueCount()

Gets the property committed value count.

### **Returns:**

The property committed value count.

### setValue

Sets the property value using its equivalent string representation.

**Note:** Communication with archive is needed when property type is STRINGMAX.

**Note:** This operation allows user to pass a reason for setting STRINGMAX property value. Reason can be passed through AuditLog message.

### **Parameters:**

value - the property value in its equivalent string representation.

### Throws:

UnsupportedOperationException - if values for property cannot be set through strings. CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

## setValue

Sets the property value using its equivalent string representation using the specified format.

Note: Communication with archive is needed when property type is STRINGMAX.

**Note:** This operation allows user to pass a reason for setting STRINGMAX property value. Reason can be passed through AuditLog message.

### **Parameters:**

```
value - the property value in its equivalent string representation.

format - an object that supplies locale-sensitive formatting information.
```

#### Throws

UnsupportedOperationException - if values for property cannot be set through strings. CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

## setXmlValue

Sets the property value using its equivalent XML string representation.

Note: Communication with archive is needed when property type is STRINGMAX.

**Note:** This operation allows user to pass a reason for setting STRINGMAX property value. Reason can be passed through AuditLog message.

## **Parameters:**

value - the property value in its equivalent string XML representation.

### Throws:

```
UnsupportedOperationException - if unsupported property type.
CancellationException - if an operation was canceled by the user.
LoginException - if a login error occurs.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

### setValue

Sets the property value.

The property value type must be selected according to the PropertyType.

This method provides a means of setting new property value, to modify it or to delete it. The discrete value type is set by using the appropriate native type as generic parameter. Implementation will use the value instance directly. It copies it to the property internal container so you can modify or discard it after it's set.

### **Parameters:**

```
type - the type that interfaces with <u>PropertyType</u>. value - the property value.
```

### Throws:

UnsupportedOperationException - if unsupported property type. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Generic argument type is not compatible with property type.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.
- Generic argument value of type T should be copied into a new BinaryValue or StringMaxValue, compatible with underlying storage.
- Error occurred while setting property values.

## setValues

Sets the list of property values in its equivalent string representation.

Note: Communication with archive is needed when property type is STRINGMAX.

**Note:** This operation allows user to pass a reason for setting STRINGMAX property values. Reason can be passed through AuditLog message.

### **Parameters:**

values - the list of property values in its equivalent string representation.

### Throws:

UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

## setValues

Sets the list of property values in its equivalent string representation using the specified format.

Note: Communication with archive is needed when property type is STRINGMAX.

**Note:** This operation allows user to pass a reason for setting STRINGMAX property values. Reason can be passed through AuditLog message.

### **Parameters:**

values - the list of property values in its equivalent string representation. format - an object that supplies locale-sensitive formatting information.

### Throws:

NullPointerException - if values is a null reference.

UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

## setXmlValues

Sets the list of property values in its equivalent XML string representation.

**Note:** Communication with archive is needed when property type is STRINGMAX.

**Note:** This operation allows user to pass a reason for setting STRINGMAX property values. Reason can be passed through AuditLog message.

#### **Parameters:**

values - the list of property values in its equivalent XML string representation.

### Throws:

NullPointerException - if values is a null reference.

UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

## setValues

Sets the list of property values.

The property value type must be selected according to the PropertyType.

This method provides a means of setting new property values, to modify them or to delete them. The discrete values type is set by using the appropriate native type as generic parameter.

The list of values suggests their sequence and will be stored in such order. If the passed generic type parameter is not compatible with the property type an exception is thrown. Implementation will not use the container directly but rather copy the values from it.

### **Parameters:**

```
type - the type that interfaces with <u>PropertyType</u>. values - the list of property values.
```

### Throws:

```
NullPointerException - if values is a null reference.
UnsupportedOperationException - if unsupported property type.
```

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Generic argument type is not compatible with property type.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.
- Generic argument value of type T should be copied into a new BinaryValue or StringMaxValue, compatible with underlying storage.
- Error occurred while setting property values.

## clear

```
public void clear()
  throws StorageConnectorException
```

Clears the property values.

This method does nothing if the property had no values. On inherited property this method resets property values to inherited values if set on parent entity.

**Note:** Cleared properties are committed to the archive at IEntity commit stage by using <u>IEntity.save()</u> method. If this method is not called, any changes made to the property are discarded.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Error occurred while clearing property values.

## clear

```
public void clear(boolean resetToInheritedValues)
  throws StorageConnectorException
```

Clears the property values.

This method does nothing if the property had no values.

**Note:** Cleared properties are committed to the archive at IEntity commit stage by using <u>IEntity.save()</u> method. If this method is not called, any changes made to the property are discarded.

### **Parameters:**

resetToInheritedValues - true resets property values on inherited property to inherited values if set on parent entity; otherwise false.

### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Error occurred while clearing property values.

## com.imis.storageconnector.entitymodel Interface IPropertyACLEntry

public interface **IPropertyACLEntry** extends

Represents an Access Control List entry for a property attached to a subject.

The IPropertyACLEntry object represents ACL entry bound to the subject for the owner IEntity. It provides access to the inherited and explicit set of rights defined for the subject. It also enables subjects with ChangeRights right to modify the set of rights of the IEntity, its validity period and have the option of deleting the entry from the set of rights. See Also:

IACL, IEntity

Method Summary	
void	delete() Deletes the ACL entry from the owner IACL.
IReadOnlyPropertyRigh ts	getEffectiveRights()  Gets the users effective rights on the IProperty to which ACL entry is bound to.
<u>IPropertyRights</u>	<pre>getExplicitAllowRights() Gets the Explicit Allow set of rights for the subject in question.</pre>
<u>IPropertyRights</u>	<pre>getExplicitDenyRights() Gets the Explicit Deny set of rights for the subject in question.</pre>
IReadOnlyPropertyRigh ts	<pre>getInheritedAllowRights() Gets the Inherited Allow set of rights for the subject in question.</pre>
IReadOnlyPropertyRigh ts	getInheritedDenyRights()  Gets the Inherited Deny set of rights for the subject in question.
IACL	getOwner()  Gets the owner IACL.
String	<pre>getPropertyName() Gets the property name which uniquely identifies the IProperty.</pre>
String	getSubject ()  Gets the subject to which the ACL entry is bound to.
ACLEntrySubjectType	getSubjectType() Gets the ACL entry subject type.

## Methods

## getOwner

public IACL getOwner()

Gets the owner IACL.

**Note:** This property never changes its value after IPropertyACLEntry is instantiated.

### **Returns:**

A owner IACL instance.

## getSubjectType

```
public ACLEntrySubjectType getSubjectType()
```

Gets the ACL entry subject type.

### **Returns:**

The ACL entry subject type.

## getSubject

```
public String getSubject()
```

Gets the subject to which the ACL entry is bound to.

### **Returns:**

The ACL entry subject.

## getPropertyName

```
public String getPropertyName()
```

Gets the property name which uniquely identifies the IProperty.

### **Returns:**

A string that represents the property name.

## getInheritedDenyRights

```
\begin{array}{ccc} public & \underline{IReadOnlyPropertyRights} & \textbf{getInheritedDenyRights()} \\ & throws & \underline{StorageConnectorException} \end{array}
```

Gets the Inherited Deny set of rights for the subject in question.

### **Returns:**

The IReadOnlyPropertyRights to the Inherited Deny set of rights.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

### See Also:

getSubject()

## getInheritedAllowRights

```
public IReadOnlyPropertyRights getInheritedAllowRights()
    throws StorageConnectorException
```

Gets the Inherited Allow set of rights for the subject in question.

### **Returns:**

The IReadOnlyPropertyRights to the Inherited Allow set of rights.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

### See Also:

getSubject()

## getExplicitDenyRights

```
public IPropertyRights getExplicitDenyRights()
    throws StorageConnectorException
```

Gets the Explicit Deny set of rights for the subject in question.

Caller must have ChangeRights right to the owner entity to be allowed to modify set of rights.

### **Returns:**

The IPropertyRights to the Explicit Deny set of rights.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while adding ExplicitDeny ACL entry to the entity.

### See Also:

getSubject()

## getExplicitAllowRights

```
public IPropertyRights getExplicitAllowRights()
    throws StorageConnectorException
```

Gets the Explicit Allow set of rights for the subject in question.

Caller must have ChangeRights right to the owner entity to be allowed to modify set of rights.

### **Returns:**

The IPropertyRights to the Explicit Allow set of rights.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Error occurred while adding ExplicitAllow ACL entry to the entity.

### See Also:

getSubject()

## getEffectiveRights

Gets the users effective rights on the IProperty to which ACL entry is bound to.

### **Returns:**

The users effective rights on the IProperty to which ACL entry is bound to or a null reference if none available.

### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Operation on closed entity is not allowed.

IOException - if an I/O error occurs.

## delete

```
public void delete()
  throws StorageConnectorException
```

Deletes the ACL entry from the owner IACL.

**Note:** Removal is not committed to the Archive unless the owner entity of the owner IACL object is committed to the archive using <a href="IEntity.save">IEntity.save</a>() method. Caller must have ChangeRights right to the owner entity to be allowed to call this method.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while removing set of rights.

### See Also:

IACL

## com.imis.storageconnector.entitymodel Interface IPropertyRights

## **All Superinterfaces:**

IRead Only Property Rights

public interface **IPropertyRights** extends IReadOnlyPropertyRights

Allows the caller to access the set of rights on a property for a certain subject in a read-write fashion.

The following rights are defined:

Right	Description
CreateAccess	Subject has the right to add values to an empty property metadata attribute.
ReadAccess	Subject has read access to property metadata attribute.
WriteAccess	Subject has write access to property metadata attribute.
DeleteAccess	Subject has the right to empty out the values of a property metadata attribute.

## See Also:

IPropertyACLEntry, IReadOnlyEntityRights

Method Summary	y
void	<pre>delete()     Removes the property set of rights from the owning IPropertyACLEntry.</pre>
void	Sets the value indicating whether the subject has the right to add new values to a previously empty property metadata attribute.
void	Sets the value indicating whether the subject has the right to empty out the values of the property metadata attribute.
void	<pre>setPropagated(boolean propagated) Sets the value indicating whether or not the entry is propagated.</pre>
void	<u>setReadAccess</u> (boolean value) Sets the value indicating whether the subject has the right to access (read) values of the property metadata attribute.
void	Sets the Calendar which this entry is valid when calculating the set of rights for the owning entity.
void	Sets the Calendar value)  Sets the Calendar before which this entry is valid when calculating the set of rights for the owning entity.
void	Sets the value indicating whether the subject has the right to modify the values of the property metadata attribute.

Methods inherited from interface com.imis.storageconnector.entitymodel.IReadOnlyPropertyRights

createAccess, deleteAccess, getOwner, isPropagated, readAccess, validFrom, validTo,
writeAccess

## Methods

### setCreateAccess

public void setCreateAccess(boolean value)
 throws StorageConnectorException

Sets the value indicating whether the subject has the right to add new values to a previously empty property metadata attribute.

### **Parameters:**

value - true to grant CreateAccess right; otherwise false.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of right.

### See Also:

IPropertyACLEntry.getSubject()
IPropertyACLEntry.getPropertyName()

## setReadAccess

public void setReadAccess(boolean value)
 throws StorageConnectorException

Sets the value indicating whether the subject has the right to access (read) values of the property metadata attribute.

### **Parameters:**

value - true to grant ReadAccess right; otherwise false.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of right.

### See Also:

IPropertyACLEntry.getSubject()
IPropertyACLEntry.getPropertyName()

### setWriteAccess

public void setWriteAccess(boolean value)
 throws StorageConnectorException

Sets the value indicating whether the subject has the right to modify the values of the property metadata attribute.

### **Parameters:**

value - true to grant WriteAccess right; otherwise false.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of right.

### See Also:

```
IPropertyACLEntry.getSubject()
IPropertyACLEntry.getPropertyName()
```

### setDeleteAccess

```
public void setDeleteAccess(boolean value)
  throws StorageConnectorException
```

Sets the value indicating whether the subject has the right to empty out the values of the property metadata attribute.

### **Parameters:**

value - true to grant DeleteAccess right; otherwise false.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting granted value of right.

### See Also:

```
IPropertyACLEntry.getSubject()
IPropertyACLEntry.getPropertyName()
```

## setPropagated

```
public void setPropagated(boolean propagated)
  throws StorageConnectorException
```

Sets the value indicating whether or not the entry is propagated.

### **Parameters:**

propagated - the propagated value.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.

## setValidFrom

public void setValidFrom(Calendar value)
 throws StorageConnectorException

Sets the Calendar after which this entry is valid when calculating the set of rights for the owning entity.

#### **Parameters:**

value - a Calendar value that represents the entry validity start timestamp or null if there is no lower limit.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting Calendar value for set of rights.

## setValidTo

public void setValidTo(Calendar value)
 throws StorageConnectorException

Sets the Calendar before which this entry is valid when calculating the set of rights for the owning entity.

### **Parameters:**

value - a Calendar value that represents the entry validity end timestamp or null if there is no upper limit.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while setting Calendar value for set of rights.

## delete

public void delete()
 throws StorageConnectorException

Removes the property set of rights from the owning IPropertyACLEntry.

Removal is not committed to the archive unless owning IEntity is committed to the Archive instance using IEntity.save() method.

Caller must have ChangeRights right to the owner entity to be allowed to call this method.

### Throws:

 ${\tt StorageConnectorException-if} \ an \ IMiS/Storage \ Connector \ error \ occurs:$ 

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while removing set of rights.

### See Also:

IPropertyACLEntry

## com.imis.storageconnector.entitymodel Interface IReadOnlyContent

All Subinterfaces:

**IContent** 

## public interface **IReadOnlyContent** extends

Defines a collection of the IContentPart objects.

A IReadOnlyContent describes a collection of content parts assigned to an entity. It represents a digital (binary) collection of chapters. It has its attributes and methods for accessing the subsequent binary parts in read-only fashion. **See Also:** 

IEntity, IDocument

Method Summary		
IReadOnlyPropertyRigh ts	getEffectiveRights()  Gets the effective rights on the content if content has ACL defined.	
String	getName ( )  Gets the content unique name.	
com.imis.util.IReadOn lyList	getParts()  Gets the read-only list of IContentPart objects.	
boolean	isPublic()  Gets a value indicating whether the property is public.	
boolean	isReadOnly()  Gets a value indicating whether the property is read-only.	
boolean	isReadOnlyAfterCheckIn()  Gets a value indicating whether the property is read-only after entity has been checked in.	
boolean	isReadOnlyAfterCreate()  Gets a value indicating whether the property is read-only after entity has been created.	
boolean	isVersionable()  Gets a value indicating whether the property is versionable.	
int	partsCount()  Gets the content parts count.	

## Methods

## getName

public String getName()

Gets the content unique name.

**Returns:** 

A string that represents the content unique name.

## getEffectiveRights

```
public IReadOnlyPropertyRights getEffectiveRights()
```

Gets the effective rights on the content if content has ACL defined.

### **Returns:**

The read-only set of rights describing users effective rights on the content or a null reference if none available.

## partsCount

```
public int partsCount()
```

Gets the content parts count.

### **Returns:**

The number of content parts.

## getParts

```
public com.imis.util.IReadOnlyList getParts()
```

Gets the read-only list of IContentPart objects.

This method provides access to the ordered collection of content parts assigned to this content instance.

### **Returns:**

A read-only list of IContentPart objects.

### See Also:

IContentPart

## isReadOnly

```
public boolean isReadOnly()
```

Gets a value indicating whether the property is read-only.

Read-only properties cannot be modified. Any attempt made to modify such a property will cause <a href="IEntity.save()">IEntity.save()</a> method to fail.

### **Returns:**

true if the property is read-only; otherwise false.

## **isReadOnlyAfterCreate**

```
public boolean isReadOnlyAfterCreate()
```

Gets a value indicating whether the property is read-only after entity has been created.

Read-only properties cannot be modified after entity has been created. Any attempt made to modify such a property will cause  $\underline{\mathtt{IEntity.save()}}$  method to fail.

### **Returns:**

true if the property is read-only after create; otherwise false.

## is Read Only After Check In

public boolean isReadOnlyAfterCheckIn()

Gets a value indicating whether the property is read-only after entity has been checked in.

Read-only properties cannot be modified after entity has been checked in. Any attempt made to modify such a property will cause IEntity.save() method to fail.

### **Returns:**

true if the property is read-only after check in; otherwise false.

## isVersionable

public boolean isVersionable()

Gets a value indicating whether the property is versionable.

### **Returns:**

true if the property is versionable; otherwise false.

## **isPublic**

public boolean isPublic()

Gets a value indicating whether the property is public.

Public properties can be accessed by any authenticated user regardless if the entity ACL allows it or not.

### **Returns:**

true if the property is public; otherwise false.

## com.imis.storageconnector.entitymodel Interface IReadOnlyEntityReference

 $\label{eq:public_interface} \textbf{public interface } \textbf{IReadOnlyEntityReference} \\ \textbf{extends}$ 

Defines the read-only entity reference.

Method Summary		
Calendar	<u>created()</u> Gets the creation time-stamp of the entity reference.	
void	delete() Deletes the entity reference and associated resources.	
<u> IEntityReference</u>	edit() Opens an entity reference in read-write mode.	
<u>IDirectoryEntity</u>	<pre>getCreator() Gets the creator IDirectoryEntity of the entity reference.</pre>	
String	<pre>getDescription() Gets the description of the entity reference.</pre>	
IReadOnlyEntityRights	getEffectiveRights()  Gets the users effective rights on the entity reference.	
String	getId()  Gets the identifier of the entity reference.	
<u>IDirectoryEntity</u>	getModifiedBy()  Gets the last modifier directory entity.	
com.imis.util.IReadOn lyList	getReferenceIds()  Gets the referenced entities identifiers.	
String	getTitle()  Gets the title of the entity reference.	
Calendar	modified()  Gets the last modification time-stamp of the entity reference.	

## Methods

## getId

public String getId()

Gets the identifier of the entity reference.

### Returns

A string that represents the identifier the entity reference.

## getTitle

```
public String getTitle()
  throws StorageConnectorException
```

Gets the title of the entity reference.

#### Returns

The title of the entity reference.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the description of the entity reference.

### Returns

The description of the entity reference.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## created

```
public Calendar created()
  throws StorageConnectorException
```

Gets the creation time-stamp of the entity reference.

### **Returns:**

The date and time when the entity reference was created.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## getCreator

```
public <u>IDirectoryEntity</u> getCreator()
    throws <u>StorageConnectorException</u>
```

Gets the creator IDirectoryEntity of the entity reference.

### **Returns:**

The creator IDirectoryEntity of the entity reference.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## modified

```
public Calendar modified()
  throws StorageConnectorException
```

Gets the last modification time-stamp of the entity reference.

#### Returns:

The date and time when the describing entity was last modified.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## getModifiedBy

```
public IDirectoryEntity getModifiedBy()
    throws StorageConnectorException
```

Gets the last modifier directory entity.

### **Returns:**

The last modifier directory entity or a null reference, if this instance has no last modifier directory entity.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## getEffectiveRights

```
public IReadOnlyEntityRights getEffectiveRights()
```

Gets the users effective rights on the entity reference.

**Note:** The following rights are not applicable on entity references: MoveAccess, CreateSubEntities, ChangeSecurityClass, ChangeStatus, ChangeRetention and CreateReferences.

### **Returns:**

The read-only set of rights describing users effective rights on the entity reference.

## getReferenceIds

```
public com.imis.util.IReadOnlyList getReferenceIds()
    throws StorageConnectorException
```

Gets the referenced entities identifiers.

### **Returns:**

The read-only list of the referenced entities identifiers.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## edit

Opens an entity reference in read-write mode.

**Note:** This operation allows user to pass a reason for opening entity reference. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

### **Returns:**

An IEntityReference instance.

#### Throws

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.

IOException - if an I/O error occurs.

## delete

Deletes the entity reference and associated resources.

Use this method to remove all resources associated with the entity reference and the entity reference itself. Delete right is required for this operation to succeed.

**Note:** This operation allows user to pass a reason for deleting entity reference. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

This operation requires description for deleted entity reference. This method will fail if the entity reference does not have its own description.

This operation is irreversible. Entity reference will not be accessible after a successful call is completed.

### Throws:

```
CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.
```

 $\underline{ \begin{tabular}{l} \textbf{StorageConnectorException} \\ \textbf{StorageConnectorException} \end{tabular} \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{StorageConnectorException} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{StorageConnectorException} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{StorageConnectorException} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{StorageConnectorException} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{StorageConnectorException} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{Storage Connector error occurs:} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{Storage Connector error occurs:} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{Storage Connector error occurs:} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{Storage Connector error occurs:} \\ \textbf{- if an IMiS/Storage Connector error occurs:} \\ \\ \underline{ \begin{tabular}{l} \textbf{Storage Connector error occurs:} \\ \\ \underline{ \begin{ta$ 

- Operation on unsaved new entity is not allowed.
  Error occurred while closing entity on archive.
  Error occurred while removing entity on archive.

 ${\tt IOException}$  - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IReadOnlyEntityRights

## All Subinterfaces:

**IEntityRights** 

## public interface **IReadOnlyEntityRights** extends

Allows the caller to access the set of rights for a certain subject identified by the subject in a read-only fashion.

The following rights are defined:

Right	Description
ReadAccess	Subject has read access to entity metadata attributes and other properties.
WriteAccess	Subject has write access to entity metadata attributes and other properties.
MoveAccess	Subject has the right to move the entity within the archive.
DeleteAccess	Subject has the right to delete the entity from the archive.
ChangeRights	Subject has the right to modify the entity explicit security descriptor.
CreateSubEntities	Subject has the right to create new IEntity sub-entities.
ChangeSecurityClass	Subject has the right to set the entity security class.
ChangeStatus	Subject has the right to set the entity status.
ChangeRetention	Subject has the right to change the entity retention.
CreateReferences	Subject has the right to create entity references on the entity.

### See Also:

IEntity, IEntityRights

Method Summary	y
boolean	<pre>changeRetention()</pre>
	Gets the value indicating whether the subject has the right to change the current entity retention.
boolean	changeRights()
	Gets the value indicating whether the subject has the right to modify explicit ACL entries bound to the owning entity.
boolean	changeSecurityClass()
	Gets the value indicating whether the subject has the right to change the current entity security class.
boolean	changeStatus()
	Gets the value indicating whether the subject has the right to change the current entity status.
boolean	createReferences()
	Gets the value indicating whether the subject has the right to create entity reference.
boolean	<pre>createSubEntities()</pre>
	Gets the value indicating whether the subject has the right to create sub-entities relative to the current entity.

boolean	deleteAccess()  Gets the value indicating whether the subject has the right to delete the owning entity from the archive.
<u>IEntityACLEntry</u>	<pre>getOwner() Gets the owner IEntityACLEntry.</pre>
boolean	isPropagated()  Gets the value indicating whether or not the entry is propagated.
boolean	<u>moveAccess</u> ()  Gets the value indicating whether the subject has the right to move the current entity.
boolean	readAccess()  Gets the value indicating whether the subject has the right to access (read) entity metadata attributes and other properties.
Calendar	<u>validFrom()</u> Gets the Calendar after which this entry is valid when calculating the set of rights for the owning entity.
Calendar	<u>validTo</u> ()  Gets the Calendar before which this entry is valid when calculating the set of rights for the owning entity.
boolean	writeAccess()  Gets the value indicating whether the subject has the right to add or modify entity metadata attributes and other properties.

## Methods

## getOwner

public <u>IEntityACLEntry</u> getOwner()

Gets the owner  ${\tt IEntityACLEntry}.$ 

The return value never changes after entity rights is instantiated.

### **Returns:**

The owner <code>IEntityACLEntry</code> or a null reference if this is a read-only entity rights.

## readAccess

public boolean readAccess()

Gets the value indicating whether the subject has the right to access (read) entity metadata attributes and other properties.

### Returns

true if the ReadAccess right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

## writeAccess

public boolean writeAccess()

Gets the value indicating whether the subject has the right to add or modify entity metadata attributes and other properties.

### **Returns:**

true if the WriteAccess right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

### moveAccess

```
public boolean moveAccess()
```

Gets the value indicating whether the subject has the right to move the current entity.

**Note:** This right is not applicable on entity references.

### **Returns:**

true if the MoveAccess right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

## deleteAccess

```
public boolean deleteAccess()
```

Gets the value indicating whether the subject has the right to delete the owning entity from the archive.

### **Returns:**

true if the DeleteAccess right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

## changeRights

```
public boolean changeRights()
```

Gets the value indicating whether the subject has the right to modify explicit ACL entries bound to the owning entity.

### Returns

true if the ChangeRights right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

## createSubEntities

```
public boolean createSubEntities()
```

Gets the value indicating whether the subject has the right to create sub-entities relative to the current entity.

**Note:** This right is not applicable on entity references.

### **Returns:**

true if the CreateSubEntities right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

## changeSecurityClass

public boolean changeSecurityClass()

Gets the value indicating whether the subject has the right to change the current entity security class.

**Note:** This right is not applicable on entity references.

### **Returns:**

true if the ChangeSecurityClass right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

## changeStatus

public boolean changeStatus()

Gets the value indicating whether the subject has the right to change the current entity status.

**Note:** This right is not applicable on entity references.

### **Returns:**

true if the ChangeStatus right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

## changeRetention

public boolean changeRetention()

Gets the value indicating whether the subject has the right to change the current entity retention.

**Note:** This right is not applicable on entity references.

### **Returns:**

true if the ChangeRetention right is granted; otherwise false.

### See Also:

IEntityACLEntry.getSubject()

## createReferences

```
public boolean createReferences()
```

Gets the value indicating whether the subject has the right to create entity reference.

**Note:** This right is not applicable on entity references.

### **Returns:**

 ${\tt true} \ if \ the \ {\tt CreateReferences} \ right \ is \ granted; \ otherwise \ {\tt false}.$ 

### See Also:

IEntityACLEntry.getSubject()

## isPropagated

```
public boolean isPropagated()
```

Gets the value indicating whether or not the entry is propagated.

### **Returns:**

true if the entry is propagated; otherwise false.

## validFrom

```
public Calendar validFrom()
```

Gets the Calendar after which this entry is valid when calculating the set of rights for the owning entity.

### **Returns:**

A Calendar value that represents the entry validity start timestamp or null if there is no lower limit.

## validTo

```
public Calendar validTo()
```

Gets the Calendar before which this entry is valid when calculating the set of rights for the owning entity.

### **Returns:**

A Calendar value that represents the entry validity end timestamp or null if there is no upper limit.

## com.imis.storageconnector.entitymodel Interface IReadOnlyProperty

All Subinterfaces:

**IProperty** 

## public interface **IReadOnlyProperty** extends

Defines a read-only property of an entity.

A IReadOnlyProperty interface prescribes a way with which an application can interface with IEntity metadata attribute in a read-only fashion. Each property is contained within an IEntity in a appropriate container. Since IReadOnlyProperty can be multi-valued, the interface provides access to the collection of property values, which are of the same type. Convenience methods are also provided for single-value access.

See Also:

IProperty, IEntity

Method Summary		
boolean	areValuesInherited()  Gets the value indicating whether or not the property values are inherited from hierarchy.	
String	getDescription()  Gets the property description.	
IReadOnlyPropertyRigh ts	getEffectiveRights ( )  Gets the users effective rights on the property if the property has ACL defined.	
String	getLabel ( )  Gets the property label.	
String	getName()  Gets the property unique name.	
com.imis.util.IReadOn lyList	getPickListValues()  Gets the read-only list of pick-list property values.	
PropertyType	getType()  Gets the property type.	
String	getValue()  Gets the property value as its equivalent string representation.	
Object	getValue(Class type)  Gets the property value.	
String	getValue(java.text.Format format)  Gets the property value as its equivalent string representation using the specified format.	
com.imis.util.IReadOn lyList	getValues()  Gets the read-only list of property values in its equivalent string representation.	
com.imis.util.IReadOn lyList	getValues(Class type)  Gets the read-only list of property values.	

com.imis.util.IReadOn lyList	getValues(java.text.Format format)  Gets the read-only list of property values in its equivalent string representation using the specified format.
String	getXmlValue()  Gets the property value as its equivalent XML string representation.
com.imis.util.IReadOn lyList	getXmlValues()  Gets the read-only list of property values in its equivalent XML string representation.
boolean	isAppendOnly()  Gets a value indicating whether the property value is append-only.
boolean	isIncludedInAIP()  Gets a value indicating whether the property value is included in Archive Informational Package (AIP).
boolean	isInherited()  Gets a value indicating whether the property value is inherited.
boolean	isMultiValue()  Gets a value indicating whether the property can hold more than one value.
boolean	isNonEmpty()  Gets a value indicating whether the property is non-empty.
boolean	isPickList()  Gets a value indicating whether the property values are predefined and can be chosen from a list of values.
boolean	isPublic()  Gets a value indicating whether the property is public.
boolean	isReadOnly()  Gets a value indicating whether the property is read-only.
boolean	isReadOnlyAfterCheckIn()  Gets a value indicating whether the property is read-only after entity has been checked in.
boolean	isReadOnlyAfterCreate()  Gets a value indicating whether the property is read-only after entity has been created.
boolean	isRequired()  Gets a value indicating whether the property is required.
boolean	isSearchable()  Gets a value indicating whether the property value is indexed.
boolean	isUnique()  Gets a value indicating whether the property is unique.
boolean	isVersionable()  Gets a value indicating whether the property is versionable.
int	valueCount()   Gets the number of values in the property value container.

## Methods

## getName

```
public String getName()
```

Gets the property unique name.

### **Returns:**

The property unique name.

## getDescription

```
public String getDescription()
```

Gets the property description.

### **Returns:**

The property description or an empty string.

## getLabel

```
public String getLabel()
```

Gets the property label.

### **Returns:**

The property label or an empty string.

## getType

```
public PropertyType getType()
```

Gets the property type.

### **Returns:**

The property type.

## **isPublic**

```
public boolean isPublic()
```

Gets a value indicating whether the property is public.

Public properties can be accessed by any authenticated user regardless if the entity ACL allows it or not.

## **Returns:**

true if the property is public; otherwise false.

## isMultiValue

```
public boolean isMultiValue()
```

Gets a value indicating whether the property can hold more than one value.

### **Returns:**

true if the property is can hold more than one value; otherwise false.

## isRequired

```
public boolean isRequired()
```

Gets a value indicating whether the property is required.

Required properties need to have a value assigned to them at IEntity.save() stage otherwise the method will fail.

### **Returns:**

true if the property is required; otherwise false.

## isNonEmpty

```
public boolean isNonEmpty()
```

Gets a value indicating whether the property is non-empty.

Non-empty properties cannot have empty values. Saving such a property with an empty value will cause IEntity.save() method to fail.

### **Returns:**

true if the property is non-empty; otherwise false.

## isReadOnly

```
public boolean isReadOnly()
```

Gets a value indicating whether the property is read-only.

Read-only properties cannot be modified. Any attempt made to modify such a property will cause <a href="IEntity.save()">IEntity.save()</a> method to fail.

### **Returns:**

true if the property is read-only; otherwise false.

## **isReadOnlyAfterCreate**

```
public boolean isReadOnlyAfterCreate()
```

Gets a value indicating whether the property is read-only after entity has been created.

Read-only properties cannot be modified after entity has been created. Any attempt made to modify such a property will cause IEntity.save() method to fail.

## **Returns:**

true if the property is read-only; otherwise false.

## is Read Only After Check In

```
public boolean isReadOnlyAfterCheckIn()
```

Gets a value indicating whether the property is read-only after entity has been checked in.

Read-only properties cannot be modified after entity has been checked in. Any attempt made to modify such a property will cause IEntity.save() method to fail.

### **Returns:**

true if the property is read-only; otherwise false.

## isVersionable

```
public boolean isVersionable()
```

Gets a value indicating whether the property is versionable.

### **Returns:**

true if the property is versionable; otherwise false.

### isInherited

```
public boolean isInherited()
```

Gets a value indicating whether the property value is inherited.

### **Returns:**

true if the property is inherited; otherwise false.

## **isAppendOnly**

```
public boolean isAppendOnly()
```

Gets a value indicating whether the property value is append-only.

### **Returns:**

true if the property is append-only; otherwise false.

## **isIncludedInAIP**

```
public boolean isIncludedInAIP()
```

Gets a value indicating whether the property value is included in Archive Informational Package (AIP).

### **Returns:**

true if the property is included in AIP; otherwise false.

## isSearchable

```
public boolean isSearchable()
```

Gets a value indicating whether the property value is indexed.

Indexed values can be included in entity searches.

### **Returns:**

true if the property is indexed; otherwise false.

## isUnique

```
public boolean isUnique()
```

Gets a value indicating whether the property is unique.

Unique properties must be assigned a property-wide unique value or the <u>IEntity.save()</u> method will fail. In case of multi-value property all values must be unique.

### **Returns:**

true if the property is unique; otherwise false.

#### **isPickList**

```
public boolean isPickList()
```

Gets a value indicating whether the property values are predefined and can be chosen from a list of values.

Custom values cannot be assigned to pick-list properties. Such attempts will fail when the client attempts to commit such changes with the IEntity.save() method.

#### **Returns:**

true if the property can be picked from a list of values; otherwise false.

### areValuesInherited

```
public boolean areValuesInherited()
```

Gets the value indicating whether or not the property values are inherited from hierarchy.

#### **Returns:**

true if the property values are inherited from hierarchy; otherwise false (defined explicitly).

# getPickListValues

```
public com.imis.util.IReadOnlyList getPickListValues()
  throws StorageConnectorException
```

Gets the read-only list of pick-list property values.

#### **Returns:**

The read-only list of IPickListValue objects representing pick-list property values.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not a pick-list property.

# getEffectiveRights

```
public IReadOnlyPropertyRights getEffectiveRights()
```

Gets the users effective rights on the property if the property has ACL defined.

#### **Returns:**

The read-only set of rights describing users effective rights on the property or a null reference if none available.

# valueCount

```
public int valueCount()
```

Gets the number of values in the property value container.

#### **Returns:**

The number of values in the property value container.

# getValue

Gets the property value as its equivalent string representation.

**Note:** For template properties this method returns non-null result for pick-list properties only.

Note: Communication with archive is needed when property type is STRINGMAX or BINARY.

#### Returns:

A string representation of the property value or a null reference if no value is available.

#### Throws:

UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

IOException - if an I/O error occurs.

# getValue

Gets the property value as its equivalent string representation using the specified format.

**Note:** For template properties this method returns non-null result for pick-list properties only.

Note: Communication with archive is needed when property type is STRINGMAX OR BINARY.

#### **Parameters:**

format - an object that supplies locale-sensitive formatting information.

#### **Returns:**

A string representation of the property value as specified by format or a null reference if no value is available.

#### Throws:

UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

# getXmlValue

Gets the property value as its equivalent XML string representation.

Note: For template properties this method returns non-null result for pick-list properties only.

Note: Communication with archive is needed when property type is STRINGMAX or BINARY.

#### **Returns:**

An XML string representation of the property value or a null reference if no value is available.

#### Throws:

UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

IOException - if an I/O error occurs.

# getValue

```
public Object getValue(Class type)
  throws StorageConnectorException
```

Gets the property value.

This method provides read-only access to the property value. The discrete value type can be determined using the returned value of the getType() method. If the requested generic type is not compatible with the property type an exception is thrown.

**Note:** For template properties the only allowed discrete value type is String and this method returns non-null result for pick-list properties only.

#### **Parameters:**

type - the type that interfaces with <a href="PropertyType">PropertyType</a>.

#### Returns

The property value of appropriate type or a null reference if no value is available.

#### **Throws:**

 $\label{thm:constraint} \begin{tabular}{ll} Unsupported Operation Exception - if unsupported property type. \\ \underline{StorageConnectorException} - if an IMiS/Storage Connector error occurs: \\ \end{tabular}$ 

- Generic argument type is not compatible with property type.
- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

# getValues

Gets the read-only list of property values in its equivalent string representation.

Note: For template properties this method returns non-empty result for pick-list properties only.

Note: Communication with archive is needed when property type is STRINGMAX or BINARY.

#### **Returns:**

The read-only list of property values in its string representation.

#### Throws:

UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

IOException - if an I/O error occurs.

# getValues

Gets the read-only list of property values in its equivalent string representation using the specified format.

**Note:** For template properties this method returns non-empty result for pick-list properties only.

Note: Communication with archive is needed when property type is STRINGMAX or BINARY.

#### **Parameters:**

format - an object that supplies locale-sensitive formatting information.

#### Returns:

The read-only list of property values in its string representation as specified by format.

```
UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

IOException - if an I/O error occurs.

# getXmlValues

Gets the read-only list of property values in its equivalent XML string representation.

**Note:** For template properties this method returns non-empty result for pick-list properties only.

Note: Communication with archive is needed when property type is STRINGMAX or BINARY.

#### Returns

The read-only list of property values in its XML string representation.

#### Throws:

UnsupportedOperationException - if unsupported property type.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

IOException - if an I/O error occurs.

# getValues

```
public com.imis.util.IReadOnlyList getValues(Class type)
   throws StorageConnectorException
```

Gets the read-only list of property values.

This method provides read-only access to the property values. The discrete values type can be determined using the returned value of the getType() method. If the requested generic type is not compatible with the property type an exception is thrown.

**Note:** For template properties the only allowed discrete value type is String and this method returns non-empty result for pick-list properties only.

#### **Parameters:**

type - the type that interfaces with PropertyType.

#### **Returns:**

The read-only list of property values of appropriate type.

#### Throws

UnsupportedOperationException - if unsupported property type.

# $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$

- Generic argument type is not compatible with property type.
  Property is not present in template properties.
  Pick-list values are not supported for property type.
  Error occurred while verifying property value.

- Property value is not allowed based on the current template settings.

# com.imis.storageconnector.entitymodel Interface IReadOnlyPropertyRights

### All Subinterfaces:

**IPropertyRights** 

# public interface **IReadOnlyPropertyRights** extends

Allows the caller to access the set of rights on a property for a certain subject in a read-only fashion.

The following rights are defined:

Right	Description
CreateAccess	Subject has the right to add values to an empty property metadata attribute.
ReadAccess	Subject has read access to property metadata attribute.
WriteAccess	Subject has write access to property metadata attribute.
DeleteAccess	Subject has the right to empty out the values of a property metadata attribute.

### See Also:

IPropertyACLEntry, IPropertyRights

Method Summary	У
boolean	CreateAccess()  Gets the value indicating whether the subject has the right to add new values of the property metadata attribute.
boolean	deleteAccess()  Gets the value indicating whether the subject has the right to empty out the values of the property metadata attribute.
IPropertyACLEntry	getOwner()  Gets the owner IPropertyACLEntry.
boolean	isPropagated()  Gets the value indicating whether or not the entry is propagated.
boolean	readAccess()  Gets the value indicating whether the subject has the right to access (read) values of the property metadata attribute.
Calendar	validFrom()  Gets the Calendar after which this entry is valid when calculating the set of rights for the owning entity.
Calendar	walidTo()  Gets the Calendar before which this entry is valid when calculating the set of rights for the owning entity.
boolean	WriteAccess()  Gets the value indicating whether the subject has the right to modify the values of the property metadata attribute.

# Methods

# getOwner

```
public IPropertyACLEntry getOwner()
```

Gets the owner IPropertyACLEntry.

The return value never changes after property rights is instantiated.

#### **Returns:**

The owner IPropertyACLEntry or a null reference if this is a read-only property rights.

### createAccess

```
public boolean createAccess()
```

Gets the value indicating whether the subject has the right to add new values of the property metadata attribute.

#### **Returns:**

true if the CreateAccess right is granted; otherwise false.

#### See Also:

```
IPropertyACLEntry.getSubject()
IPropertyACLEntry.getPropertyName()
```

# readAccess

```
public boolean readAccess()
```

Gets the value indicating whether the subject has the right to access (read) values of the property metadata attribute.

#### **Returns:**

true if the ReadAccess right is granted; otherwise false.

### See Also:

```
IPropertyACLEntry.getSubject()
IPropertyACLEntry.getPropertyName()
```

### writeAccess

```
public boolean writeAccess()
```

Gets the value indicating whether the subject has the right to modify the values of the property metadata attribute.

#### **Returns:**

true if the WriteAccess right is granted; otherwise false.

#### See Also

```
IPropertyACLEntry.getSubject()
IPropertyACLEntry.getPropertyName()
```

### deleteAccess

```
public boolean deleteAccess()
```

Gets the value indicating whether the subject has the right to empty out the values of the property metadata attribute.

#### **Returns:**

true if the DeleteAccess right is granted; otherwise false.

#### See Also:

```
IPropertyACLEntry.getSubject()
IPropertyACLEntry.getPropertyName()
```

# **isPropagated**

```
public boolean isPropagated()
```

Gets the value indicating whether or not the entry is propagated.

#### **Returns:**

true if the entry is propagated; otherwise false.

# validFrom

```
public Calendar validFrom()
```

Gets the Calendar after which this entry is valid when calculating the set of rights for the owning entity.

#### **Returns:**

A Calendar value that represents the entry validity start timestamp or null if there is no lower limit.

# validTo

```
public Calendar validTo()
```

Gets the Calendar before which this entry is valid when calculating the set of rights for the owning entity.

#### **Returns:**

A Calendar value that represents the entry validity end timestamp or null if there is no upper limit.

# com.imis.storageconnector.entitymodel Interface IReadOnlyRetentionPolicyContext

#### All Subinterfaces:

IRetentionPolicyContext

# public interface IReadOnlyRetentionPolicyContext extends

Allows the caller to access the retention policy context in a read-only fashion.

Method Summary	
Set	<pre>getFilter() Gets the retention policy filter.</pre>
RetentionPolicyScope	getScope()  Gets the retention policy scope.
boolean	isEffective()  Gets a value indicating whether or not the retention entry context is effective for the owning entity.

# Methods

### isEffective

public boolean isEffective()

Gets a value indicating whether or not the retention entry context is effective for the owning entity.

#### **Returns:**

true if the retention entry context is effective for the owning entity; otherwise false.

# getScope

```
public RetentionPolicyScope getScope()
  throws StorageConnectorException
```

Gets the retention policy scope.

#### **Returns:**

A RetentionPolicyScope value.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while getting retention policy entry scope value.

# getFilter

```
public Set getFilter()
  throws StorageConnectorException
```

Gets the retention policy filter.

#### **Returns:**

A RetentionPolicyFilter value.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while getting retention policy entry filter value.

# com.imis.storageconnector.entitymodel Interface IRetention

public interface **IRetention** extends com.imis.IAutoCloseable

Represents a Retention object, a collection of retention policy and disposition hold entries attached to an IEntity. See Also:

**IEntity** 

Method Summar	Method Summary	
IDispositionHoldEntry	addDispositionHoldEntry(IDispositionHold hold)  Adds a new IDispositionHoldEntry specified with the identifier of the IDispositionHoldDefinition.	
IRetentionPolicyEntry	Adds a new IRetentionPolicyEntry for the specified retention policy.	
IRetentionPolicyEntry	addPolicyEntry(IRetentionPolicy policy, RetentionPolicyScope scope, Set filter)  Adds a new IRetentionPolicyEntry specified with the identifier of the IRetentionPolicyDefinition.	
void	close() Closes the retention and releases all its resources.	
com.imis.util.IReadOn lyMap	getDispositionHoldEntries()  Gets the read-only map of IDispositionHoldEntry objects assigned to the owner IEntity.	
AccessMode	getMode()  Gets the retention access mode.	
com.imis.util.IReadOn lyMap	<pre>Gets the read-only map of IRetentionPolicyEntry objects assigned to the owner IEntity.</pre>	
void	Saves the changes and reopens retention in read-only mode.	
void	Saves the changes and optionally closes retention or reopens retention in read-only mode.	

Methods inherited from interface com.imis.IAutoCloseable

close

# Methods

# getMode

public AccessMode getMode()
 throws StorageConnectorException

Gets the retention access mode.

#### **Returns:**

The retention access mode.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed retention is not allowed.

# getPolicyEntries

```
public com.imis.util.IReadOnlyMap getPolicyEntries()
    throws StorageConnectorException
```

Gets the read-only map of IRetentionPolicyEntry objects assigned to the owner IEntity.

#### Returns:

A read-only map of IRetentionPolicyEntry objects sorted by IRetentionPolicy unique identifiers.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed retention is not allowed.
- Error occurred while reading retention entries.

# getDispositionHoldEntries

```
public com.imis.util.IReadOnlyMap getDispositionHoldEntries()
    throws StorageConnectorException
```

Gets the read-only map of IDispositionHoldEntry objects assigned to the owner IEntity.

### **Returns:**

A read-only map of IDispositionHoldEntry objects assigned to the owner IEntity.

#### Throws:

 $\underline{\texttt{StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

- Operation on closed retention is not allowed.
- Error occurred while reading retention entries.

# addPolicyEntry

```
public IRetentionPolicyEntry addPolicyEntry(IRetentionPolicy policy)
    throws StorageConnectorException
```

Adds a new IRetentionPolicyEntry for the specified retention policy.

#### **Parameters:**

policy - the retention policy.

#### **Returns:**

An IRetentionPolicyEntry instance.

#### Throws:

NullPointerException - if policy is a null reference. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed retention is not allowed.
- Error occurred while reading retention entries.
- Retention policy entry already exists.
- Error occurred while adding retention entry.

# addPolicyEntry

```
\begin{array}{c} \text{public} \quad \underline{\frac{\text{IRetentionPolicyEntry}}{\text{RetentionPolicyScope}}} \quad \underline{\frac{\text{RetentionPolicyScope}}{\text{Set filter})}} \quad \text{scope,} \\ \quad \text{throws} \quad \underline{\frac{\text{StorageConnectorException}}{\text{StorageConnectorException}}} \end{array}
```

Adds a new IRetentionPolicyEntry specified with the identifier of the IRetentionPolicyDefinition.

#### **Parameters:**

```
policy - the retention policy.
scope - the retention policy scope.
filter - the retention policy filter.
```

#### Returns

An IRetentionPolicyEntry instance.

#### Throws:

NullPointerException - if policy is a null reference. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed retention is not allowed.
- Error occurred while reading retention entries.
- Retention policy entry already exists.
- Error occurred while adding retention entry.

# addDispositionHoldEntry

```
public <u>IDispositionHoldEntry</u> addDispositionHoldEntry(<u>IDispositionHold</u> hold)
    throws <u>StorageConnectorException</u>
```

Adds a new IDispositionHoldEntry specified with the identifier of the IDispositionHoldDefinition.

#### **Parameters:**

hold - the disposition hold.

#### **Returns:**

An IDispositionHoldEntry instance.

#### Throws:

NullPointerException - if hold is a null reference.

 $\underline{\texttt{StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

- Operation on closed retention is not allowed.
- Error occurred while reading retention entries.
- Disposition hold entry already exists.
- Error occurred while adding retention entry.

#### save

Saves the changes and reopens retention in read-only mode.

Note: This operation allows user to pass a reason for saving retention. Reason can be passed through AuditLog message.

#### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed retention is not allowed.
- Error occurred while closing entity retention.

IOException - if an I/O error occurs.

#### save

Saves the changes and optionally closes retention or reopens retention in read-only mode.

Note: This operation allows user to pass a reason for saving retention. Reason can be passed through AuditLog message.

#### **Parameters:**

close - true to close the retention after save; otherwise false.

#### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed retention is not allowed.
- Error occurred while closing entity retention.

IOException - if an I/O error occurs.

#### close

Closes the retention and releases all its resources.

Note: This operation allows user to pass a reason for closing retention. Reason can be passed through AuditLog message.

#### **Throws:**

StorageConnectorException - if

• Error occurred while closing entity retention.

 ${\tt IOException}$  - if an  ${\tt I/O}$  error occurs.

# com.imis.storageconnector.entitymodel Interface IRetentionPolicy

public interface **IRetentionPolicy** extends

Represents a retention policy.

Method Summary	
Calendar	accessed()  Gets the retention policy access time-stamp.
Calendar	<u>created()</u> Gets the retention policy creation time-stamp.
String	getAction()  Gets the retention policy action.
<u>IDirectoryEntity</u>	getCreator()  Gets the retention policy creator.
String	getDescription()  Gets the retention policy description.
String	getDetailedDescription()  Gets the retention policy detailed description.
String	getId()  Gets the retention policy internal identifier.
IReadOnlyContent	getMandate()  Gets the retention policy mandate.
String	getName ( )  Gets the retention policy name.
String	getReason()  Gets the retention policy reason.
String	getTrigger()  Gets the retention policy trigger.
Calendar	modified()  Gets the retention policy modification time-stamp.

# Methods

# getId

public String getId()

Gets the retention policy internal identifier.

#### **Returns:**

A string that represents the retention policy internal identifier.

# getName

```
public String getName()
  throws StorageConnectorException
```

Gets the retention policy name.

#### **Returns:**

A string that represents the retention policy name.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getDescription

```
public String getDescription()
   throws StorageConnectorException
```

Gets the retention policy description.

#### **Returns:**

A string that represents the retention policy description.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getCreator

```
public IDirectoryEntity getCreator()
  throws StorageConnectorException
```

Gets the retention policy creator.

#### **Returns:**

A IDirectoryEntity that represents the creator of the retention policy.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

#### created

```
public Calendar created()
```

Gets the retention policy creation time-stamp.

#### **Returns:**

The date and time when the retention policy was created.

# modified

```
public Calendar modified()
```

Gets the retention policy modification time-stamp.

#### **Returns:**

The date and time when the retention policy was modified.

#### accessed

```
public Calendar accessed()
```

Gets the retention policy access time-stamp.

#### **Returns:**

The date and time when the retention policy was accessed.

# getTrigger

```
public String getTrigger()
  throws StorageConnectorException
```

Gets the retention policy trigger.

#### **Returns:**

A string that represents the retention policy trigger.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getAction

```
public String getAction()
  throws StorageConnectorException
```

Gets the retention policy action.

#### **Returns:**

A string that represents the retention policy action.

#### Throws:

 ${\tt StorageConnectorException-if} \ an \ IMiS/Storage \ Connector \ error \ occurs:$ 

• Property is not present in template properties.

# getReason

```
public String getReason()
  throws StorageConnectorException
```

Gets the retention policy reason.

#### **Returns:**

A string that represents the retention policy reason.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getDetailedDescription

Gets the retention policy detailed description.

#### **Returns:**

A string that represents the retention policy detailed description.

#### **Throws:**

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Property is not present in template properties.
- Error occurred while opening string value data stream.

IOException - if an I/O error occurs.

# getMandate

```
public IReadOnlyContent getMandate()
  throws StorageConnectorException
```

Gets the retention policy mandate.

#### **Returns:**

A IReadOnlyContent value that represents the retention policy mandate.

#### Throws:

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

• Property is not present in template properties.

# com.imis.storageconnector.entitymodel Interface IRetentionPolicyContext

#### All Superinterfaces:

**IReadOnlyRetentionPolicyContext** 

# public interface **IRetentionPolicyContext** extends **IReadOnlyRetentionPolicyContext**

Allows the caller to access the retention policy context in a read-write fashion.

Method Summary	
IRetentionPolicyEntry	getOwner ( )  Gets the retention policy context owner.
void	<pre>setFilter(Set value) Sets the retention policy filter.</pre>
void	Sets the retention policy scope.

#### Methods inherited from interface

 $\verb|com.imis.storageconnector.entity| model.IReadOnlyRetentionPolicyContext|$ 

getFilter, getScope, isEffective

# Methods

# getOwner

public IRetentionPolicyEntry getOwner()

Gets the retention policy context owner.

#### **Returns:**

The retention policy context owner.

# setScope

public void setScope(RetentionPolicyScope throws StorageConnectorException

Sets the retention policy scope.

#### **Parameters:**

value - a RetentionPolicyScope value.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while setting retention policy entry scope value.

# setFilter

public void setFilter(Set value)
 throws StorageConnectorException

Sets the retention policy filter.

#### **Parameters:**

value - a RetentionPolicyFilter value.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while setting retention policy entry scope value.

# com.imis.storageconnector.entitymodel Interface IRetentionPolicyEntry

public interface **IRetentionPolicyEntry** extends

Represents a retention policy entry.

Method Summary	
void	delete() Deletes the explicit retention policy entry.
IRetentionPolicy	getDefinition()  Gets the retention policy definition.
IRetentionPolicyConte xt	getExplicitContext()  Gets the explicit retention policy context.
com.imis.util.IReadOn lyList	getInheritedContext()  Gets the read-only list of inherited retention policy contexts.

# Methods

# getDefinition

public IRetentionPolicy getDefinition()
 throws StorageConnectorException

Gets the retention policy definition.

#### **Returns:**

An IRetentionPolicy object.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.
- Error occurred trying to access Policies class.
- Error occurred while getting entity child entities on archive.

# getInheritedContext

public com.imis.util.IReadOnlyList getInheritedContext()

Gets the read-only list of inherited retention policy contexts.

#### **Returns:**

The read-only list of IReadOnlyRetentionPolicyContext objects.

# getExplicitContext

```
public IRetentionPolicyContext getExplicitContext()
```

Gets the explicit retention policy context.

#### **Returns:**

The IRetentionPolicyContext object.

# delete

```
public void delete()
  throws StorageConnectorException
```

Deletes the explicit retention policy entry.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed retention is not allowed.
- Error occurred while removing retention policy entry.
- Error occurred while reading retention entries.

# com.imis.storageconnector.entitymodel Interface IRetentionPolicySnapshot

public interface **IRetentionPolicySnapshot** extends

Represents a retention policy snapshot.

Method Summary	
Calendar	<pre>created() Gets the retention policy creation time-stamp.</pre>
String	getAction()  Gets the retention policy action.
<u>IDirectoryEntity</u>	getCreator()  Gets the retention policy creator.
String	getDescription()  Gets the retention policy description.
String	<pre>getDetailedDescription() Gets the retention policy detailed description.</pre>
<u>IReadOnlyContent</u>	getMandate()  Gets the retention policy mandate.
String	getName ( )  Gets the retention policy name.
IRetentionPolicy	getOriginal()  Gets the original retention policy.
String	getReason()  Gets the retention policy reason.
String	getTrigger()  Gets the retention policy trigger.

# Methods

# getName

```
public String getName()
  throws StorageConnectorException
```

Gets the retention policy name.

#### **Returns:**

A string that represents the retention policy name.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the retention policy description.

#### **Returns:**

A string that represents the retention policy description.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getCreator

```
public IDirectoryEntity getCreator()
    throws StorageConnectorException
```

Gets the retention policy creator.

#### **Returns:**

A IDirectoryEntity that represents the creator of the retention policy.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

#### created

```
public Calendar created()
```

Gets the retention policy creation time-stamp.

#### **Returns:**

The date and time when the retention policy was created.

# getTrigger

```
public String getTrigger()
  throws StorageConnectorException
```

Gets the retention policy trigger.

#### **Returns:**

A string that represents the retention policy trigger.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getAction

```
public String getAction()
  throws StorageConnectorException
```

Gets the retention policy action.

#### **Returns:**

A string that represents the retention policy action.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getReason

```
public String getReason()
  throws StorageConnectorException
```

Gets the retention policy reason.

#### **Returns:**

A string that represents the retention policy reason.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getDetailedDescription

Gets the retention policy detailed description.

#### Returns:

A string that represents the retention policy detailed description.

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Property is not present in template properties.
- Error occurred while opening string value data stream.

IOException - if an I/O error occurs.

# getMandate

```
public IReadOnlyContent getMandate()
  throws StorageConnectorException
```

Gets the retention policy mandate.

#### **Returns:**

A IReadOnlyContent value that represents the retention policy mandate.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getOriginal

Gets the original retention policy.

#### **Returns:**

An IRetentionPolicy that represents the original retention policy.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting entities info on archive.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface IReview

public interface **IReview** extends com.imis.IAutoCloseable

Represents a review folder.

Method Summary	
Calendar	accessed ( )  Gets the review last access time-stamp.
boolean	<u>areValuesInherited(SystemProperty</u> systemProperty)  Gets the value indicating whether the specified system property values are inherited.
void	close() Closes the review and releases all its resources.
Calendar	<pre>closed() Gets the review status closed time-stamp.</pre>
Calendar	<pre>created() Gets the review creation time-stamp.</pre>
IDocument	<pre>createDocument (String templateId) Creates a review document using the specified template identifier.</pre>
IACL	getACL()  Gets the review IACL.
String	getAction() Gets the review action.
InputStream	getArchivalInformationalPackage()  Gets the review archival informational package encoded in base 64 format.
IArchive	<pre>getArchive() Gets the IArchive where the review is stored.</pre>
AuditLog	<pre>getAuditLog() Gets the audit log object from the owning IArchive.</pre>
String	getClassificationCode()  Gets the review classification code in canonical format.
String	getComments ()  Gets the review comments.
<u>IDirectoryEntity</u>	getCreator()  Gets the review creator.
String	getDescription() Sets the review description.

com.imis.util.IReadOn lyList	getDocuments ( )  Gets the review list of documents.
IReadOnlyEntityRights	getEffectiveRights()  Gets the users effective rights on the review.
com.imis.util.IReadOn lyList	getEvidenceRecords()  Gets the review read-only list of evidence records encoded in base 64 format.
String	getId()  Gets the review unique identifier.
com.imis.util.IReadOn lyList	getKeywords()  Gets the review list of keywords.
com.imis.util.IReadOn lyList	getMembers()  Gets the list of members of the review.
String	getMessage()  Gets the review message.
AccessMode	getMode()  Gets the review access mode.
<u>IDirectoryEntity</u>	getModifiedBy()  Gets the last modifier directory entity.
<u>IDirectoryEntity</u>	<pre>getOwner() Gets the review owner IDirectoryEntity.</pre>
com.imis.util.IReadOn lyList	<u>getPickListValues(SystemProperty</u> systemProperty)  Gets the read-only list of the pick-list values for the specified system property.
String	getPublicClassificationCode()  Gets the review classification code in public format.
String	getQueryExpression()  Gets the query expression.
InputStream	Gets the specified report data stream.
com.imis.util.IReadOn lyList	getRetentionPolicies()  Gets the review list of retention policies.
IContent	getReviewedItems()  Gets the review reviewed items.
com.imis.util.IReadOn lyList	getSaveLog()  Gets the read-only list of strings containing commit log reports for IReview in XML format encoded per XML processing instruction.
<u>IReadOnlyContent</u>	getScheduledItems()  Gets the review scheduled items.
<u>IEntityStub</u>	getScope()  Gets the review scope entity.
String	getState()  Gets the review state.

String	getStatus()  Sets the review status.
IReviewStub	getStub()  Gets the describing IReview.
com.imis.util.IReadOn lyList	getSubEntityTemplates()  Gets the read-only list of templates that represent the review sub-entity creation templates.
com.imis.util.IReadOn lyMap	getSystemProperties()  Gets the read-only map of read-only system properties sorted by SystemProperty enum values.
IReadOnlyProperty	<u>getSystemProperty</u> ( <u>SystemProperty</u> systemProperty)  Gets the read-only property for the specified system property.
<u>ITemplate</u>	getTemplate()  Gets the review template identifier.
String	getTitle()  Gets the review title.
boolean	hasAIP() Gets a value indicating whether or not the review has AIP.
boolean	isClosed()  Gets a value indicating whether the review is closed.
Calendar	modified()  Gets the review last modification time-stamp.
Calendar	opened()  Gets the review status opened time-stamp.
void	Saves the changes and reopens the review in read-only mode.
void	Saves the changes and optionally closes the review or reopens the review in read-only mode.
void	<pre>setAction(String value) Sets the review action.</pre>
void	setComments (String value)  Sets the review comments.
void	Sets the review description.
void	setKeywords (List value) Sets the review list of keywords.
void	setMembers (List value) Sets the list of members of the review.
void	Sets the review owner IDirectoryEntity.

void	Sets the review status.
void	Sets the review title.

# Methods inherited from interface com.imis.IAutoCloseable close

# Methods

# getStub

```
public IReviewStub getStub()
```

Gets the describing IReview.

#### **Returns:**

The IReviewStub instance.

# getId

```
public String getId()
  throws StorageConnectorException
```

Gets the review unique identifier.

#### **Returns:**

A string that represents the review identifier.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on unsaved new review is not allowed.
- Error occurred while getting review identifier.

# getClassificationCode

```
public String getClassificationCode()
  throws StorageConnectorException
```

Gets the review classification code in canonical format.

#### Returns

A string that represents the review classification code.

#### **Throws:**

 ${\tt StorageConnectorException-if} \ an \ IMiS/Storage \ Connector \ error \ occurs:$ 

- Operation on closed review is not allowed.
- Error occurred while getting classification code.

# getPublicClassificationCode

```
public String getPublicClassificationCode()
  throws StorageConnectorException
```

Gets the review classification code in public format.

The classification code in canonical format is converted to public classification code by replacing the entity type prefix and classification hierarchy delimiter with the respective entity type hierarchy delimiters.

#### **Returns:**

A string that represents the review public classification code.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting public classification code

# getTitle

```
public String getTitle()
  throws StorageConnectorException
```

Gets the review title.

#### **Returns:**

The review title.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setTitle

```
public void setTitle(String value)
  throws StorageConnectorException
```

Sets the review title.

#### **Parameters:**

value - the review title.

#### **Throws:**

NullPointerException - if value is a null reference.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Sets the review description.

#### **Returns:**

The review description.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setDescription

```
public void setDescription(String value)
    throws StorageConnectorException
```

Sets the review description.

#### Parameters:

value - the review description.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getStatus

```
public String getStatus()
  throws StorageConnectorException
```

Sets the review status.

#### **Returns:**

The review status.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setStatus

```
public void setStatus(String value)
  throws StorageConnectorException
```

Sets the review status.

**Note:** Use this method on new unsaved reviews only.

#### **Parameters:**

value - the review status or a null reference to clear the review status to inherited value.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on saved review is not allowed.
- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

# getMode

```
public AccessMode getMode()
  throws StorageConnectorException
```

Gets the review access mode.

#### **Returns:**

The review access mode.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed review is not allowed.

# getState

```
public String getState()
  throws StorageConnectorException
```

Gets the review state.

#### **Returns:**

The review state.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getMessage

```
public String getMessage()
  throws StorageConnectorException
```

Gets the review message.

#### **Returns:**

The review message.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getAction

```
public String getAction()
  throws StorageConnectorException
```

Gets the review action.

#### **Returns:**

The review action.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

### setAction

```
public void setAction(String value)
  throws StorageConnectorException
```

Sets the review action.

#### **Parameters:**

value - the review action.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while setting property values.

# getQueryExpression

```
public String getQueryExpression()
  throws StorageConnectorException
```

Gets the query expression.

#### **Returns:**

The query expression.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed review is not allowed.

## getScope

```
public IEntityStub getScope()
   throws StorageConnectorException
```

Gets the review scope entity.

## **Returns:**

The review scope entity.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed review is not allowed.

## getMembers

```
public com.imis.util.IReadOnlyList getMembers()
    throws StorageConnectorException
```

Gets the list of members of the review.

## Returns:

The list of members of the review.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## setMembers

```
public void setMembers(List value)
  throws StorageConnectorException
```

Sets the list of members of the review.

#### **Parameters:**

value - the list of members of the review.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

## getComments

Gets the review comments.

## Returns:

The review comments.

## Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

IOException - if an I/O error occurs.

## setComments

Sets the review comments.

#### **Parameters:**

value - the review comments.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

IOException - if an I/O error occurs.

## created

```
public Calendar created()
  throws StorageConnectorException
```

Gets the review creation time-stamp.

#### **Returns:**

The date and time when the review was created.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

Operation on closed review is not allowed.

## accessed

```
public Calendar accessed()
  throws StorageConnectorException
```

Gets the review last access time-stamp.

#### **Returns:**

The date and time when the review was last accessed.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed review is not allowed.

## modified

```
public Calendar modified()
  throws StorageConnectorException
```

Gets the review last modification time-stamp.

## **Returns:**

The date and time when the review was last modified.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed review is not allowed.

# getModifiedBy

```
public IDirectoryEntity getModifiedBy()
    throws StorageConnectorException
```

Gets the last modifier directory entity.

#### Returns

The last modifier directory entity or a null reference, if this instance has no last modifier directory entity.

# opened

```
public Calendar opened()
  throws StorageConnectorException
```

Gets the review status opened time-stamp.

#### **Returns:**

The date and time when the review status was set to opened or a null reference if review has no status.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## closed

```
public Calendar closed()
  throws StorageConnectorException
```

Gets the review status closed time-stamp.

#### Returns:

The date and time when the review status was set to closed or a null reference if review has no status.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## isClosed

```
public boolean isClosed()
```

Gets a value indicating whether the review is closed.

#### Returns

true if the review is closed; otherwise false.

# getACL

```
public IACL getACL()
   throws StorageConnectorException
```

Gets the review IACL.

This method provides access to an IACL instance containing ACL entries which define access rights for different review operations.

## **Returns:**

An IACL instance.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting ACL entries.

## getEffectiveRights

```
public IReadOnlyEntityRights getEffectiveRights()
    throws StorageConnectorException
```

Gets the users effective rights on the review.

#### Returns

The read-only set of rights describing users effective rights on the review.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

· Operation on closed review is not allowed.

# getArchive

```
public IArchive getArchive()
```

Gets the IArchive where the review is stored.

## **Returns:**

The IArchive where the review is stored.

# getCreator

```
public IDirectoryEntity getCreator()
    throws StorageConnectorException
```

Gets the review creator.

#### **Returns:**

A IDirectoryEntity that represents the creator of the review.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getOwner

```
public IDirectoryEntity getOwner()
  throws StorageConnectorException
```

Gets the review owner IDirectoryEntity.

## **Returns:**

An IDirectoryEntity object representing the review owner or a null reference, if this review has no owner.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## setOwner

```
public void setOwner(IDirectoryEntity value)
    throws StorageConnectorException
```

Sets the review owner IDirectoryEntity.

## **Parameters:**

value - an IDirectoryEntity object representing the review owner or a null reference, if this review has no owner.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getSaveLog

Gets the read-only list of strings containing commit log reports for IReview in XML format encoded per XML processing instruction.

#### **Returns:**

A read-only list of strings containing commit log reports in XML format encoded per XML processing instruction.

#### **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

IOException - if an I/O error occurs.

## getTemplate

```
public ITemplate getTemplate()
   throws StorageConnectorException
```

Gets the review template identifier.

## **Returns:**

An ITemplate that represents the review template.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed review is not allowed.

## getAuditLog

```
public AuditLog getAuditLog()
    throws StorageConnectorException
```

Gets the audit log object from the owning IArchive.

## **Returns:**

The AuditLog instance.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

· Operation on closed review is not allowed.

## See Also:

AuditLog

# getArchivalInformationalPackage

```
\begin{array}{c} \text{public InputStream } \textbf{getArchivalInformationalPackage()} \\ \text{throws } & \frac{\text{StorageConnectorException}}{\text{IOException}}, \end{array}
```

Gets the review archival informational package encoded in base 64 format.

#### **Returns:**

An input stream containing review archival informational package encoded in base 64 format.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting archival informational package.

IOException - if an I/O error occurs.

# getEvidenceRecords

Gets the review read-only list of evidence records encoded in base 64 format.

#### Returns

A read-only list of InputStream objects containing review evidence records encoded in base 64 format.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting evidence records.

IOException - if an I/O error occurs.

## getKeywords

```
public com.imis.util.IReadOnlyList getKeywords()
    throws StorageConnectorException
```

Gets the review list of keywords.

## **Returns:**

The review list of keywords.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# setKeywords

```
public void setKeywords(List value)
  throws StorageConnectorException
```

Sets the review list of keywords.

## **Parameters:**

value - the review list of keywords.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while setting property values.

# getSubEntityTemplates

```
public com.imis.util.IReadOnlyList getSubEntityTemplates()
    throws StorageConnectorException
```

Gets the read-only list of templates that represent the review sub-entity creation templates.

#### Returns

The read-only list of ITemplate objects that the review sub-entity creation templates.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed review is not allowed.

# getScheduledItems

```
public IReadOnlyContent getScheduledItems()
    throws StorageConnectorException
```

Gets the review scheduled items.

## **Returns:**

An IReadOnlyContent object.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getReviewedItems

```
public IContent getReviewedItems()
  throws StorageConnectorException
```

Gets the review reviewed items.

#### **Returns:**

An IContent object.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## getRetentionPolicies

Gets the review list of retention policies.

#### **Returns:**

The list of IRetentionPolicySnapshot objects.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on unsaved new review is not allowed.
- Error occurred while getting entity child entities on archive.

IOException - if an I/O error occurs.

# getDocuments

Gets the review list of documents.

#### **Returns:**

The list of IEntityStub objects representing review documents.

## **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on unsaved new review is not allowed.
- Error occurred while getting entity child entities on archive.

IOException - if an I/O error occurs.

# getSystemProperties

```
public com.imis.util.IReadOnlyMap getSystemProperties()
    throws StorageConnectorException
```

Gets the read-only map of read-only system properties sorted by SystemProperty enum values.

#### **Returns:**

The read-only map of IReadOnlyProperty objects sorted by SystemProperty enum values.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.

# getSystemProperty

```
public IReadOnlyProperty getSystemProperty(SystemProperty systemProperty)
throws StorageConnectorException
```

Gets the read-only property for the specified system property.

#### Parameters:

systemProperty - the system property.

#### **Returns:**

The read-only property for the specified system property.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## areValuesInherited

```
public boolean areValuesInherited(SystemProperty systemProperty)
  throws StorageConnectorException
```

Gets the value indicating whether the specified system property values are inherited.

## **Parameters:**

systemProperty - the system property.

## **Returns:**

true if the specified system property values are inherited; otherwise false.

## Throws:

```
IllegalArgumentException - if invalid system property. 
StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Operation on closed review is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getPickListValues

 $\label{eq:public_com.imis.util.IReadOnlyList} \textbf{getPickListValues} ( \underline{\textbf{SystemProperty}} \ \ \textbf{systemProperty}) \\ \text{throws StorageConnectorException}$ 

Gets the read-only list of the pick-list values for the specified system property.

## **Parameters:**

systemProperty - the system property.

#### **Returns:**

The read-only list of IPickListValue objects representing the pick-list values for the specified system property.

#### **Throws:**

 ${\tt IllegalArgumentException - if invalid system property.} \\ {\tt StorageConnectorException - if an IMiS/Storage Connector error occurs:} \\$ 

- Operation on closed review is not allowed.
- Property is not present in template properties.
- Property is not a pick-list property.

## getReport

public InputStream getReport(ReportType type)
 throws StorageConnectorException

Gets the specified report data stream.

**Note:** Valid report type on IReview is:

• ReportType.REVIEW\_SAVE

#### **Parameters:**

type - the report type.

## **Returns:**

The report data stream.

## Throws:

UnsupportedOperationException - if report not supported. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- · Operation on unsaved new review is not allowed.
- Error occurred while getting review report.

## createDocument

Creates a review document using the specified template identifier.

#### **Parameters:**

templateId - the template identifier.

#### **Returns:**

An IDocument instance.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on unsaved new review is not allowed.
- Invalid template identifier for review document.
- Template identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while creating entity on archive.

IOException - if an I/O error occurs.

#### save

Saves the changes and reopens the review in read-only mode.

Calling this method is same as calling save(boolean) with false parameter.

Call to this method commits all changes made to this instance of review after it was opened in write mode or created. getId() method can be used after completion of this routine to access review unique identifier.

Note: This operation allows user to pass a reason for saving review. Reason can be passed through AuditLog message.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while committing review changes on archive.

IOException - if an I/O error occurs.

## save

Saves the changes and optionally closes the review or reopens the review in read-only mode.

Call to this method commits all changes made to this review instance after it was opened in write mode or created.

Call to this method commits all changes made to this instance of review after it was opened in write mode or created. getId() method can be used after completion of this routine to access review unique identifier.

Note: This operation allows user to pass a reason for saving review. Reason can be passed through AuditLog message.

#### **Parameters:**

close - true to close review after save; otherwise false.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed review is not allowed.
- Operation on review opened in read-only mode is not allowed.
- Error occurred while committing review changes on archive.

IOException - if an I/O error occurs.

## close

```
\begin{array}{c} \text{public void } \textbf{close()} \\ \text{throws} \quad & \underbrace{\text{StorageConnectorException}}_{\text{IOException}}, \end{array}
```

Closes the review and releases all its resources.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Error occurred while closing review on archive.

IOException - if an I/O error occurs.

## hasAIP

```
public boolean hasAIP()
  throws StorageConnectorException
```

Gets a value indicating whether or not the review has AIP.

### **Returns:**

true if the review is has AIP; otherwise false.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on closed entity is not allowed.

# com.imis.storageconnector.entitymodel Interface IReviewStub

# public interface **IReviewStub** extends

Defines an IReview descriptor.

An IReviewStub defines an IReview descriptor containing the review folder metadata and enables a caller to open a full-feature IReview object using the open() method.

**Note:** Instance is automatically recycled after the last reference is released. **See Also:** 

IReview

Method Summary	
Calendar	accessed()  Gets the describing IReview last access time-stamp.
boolean	<u>areValuesInherited(SystemProperty</u> systemProperty)  Gets the value indicating whether the specified system property values are inherited.
Calendar	<pre>closed() Gets the describing IReview status closed time-stamp.</pre>
Calendar	<pre>created() Gets the describing IReview creation time-stamp.</pre>
<u>IArchive</u>	<pre>getArchive() Gets the IArchive where the describing IReview is stored.</pre>
String	getClassificationCode()  Gets the describing IReview classification code in canonical format.
<u>IDirectoryEntity</u>	getCreator()  Gets the describing IReview creator.
String	<pre>getDescription() Gets the describing IReview description.</pre>
IReadOnlyEntityRights	<pre>getEffectiveRights() Gets the users effective rights on the describing IReview.</pre>
String	<pre>getId() Gets the describing IReview unique identifier.</pre>
com.imis.util.IReadOn lyList	getKeywords()  Gets the describing IReview list of keywords.
String	getMessage()  Gets the describing IReview message.
<u>IDirectoryEntity</u>	getModifiedBy()  Gets the last modifier directory entity.

IDirectoryEntity	<pre>getOwner() Gets the describing IReview owner IDirectoryEntity.</pre>
com.imis.util.IReadOn lyList	getPickListValues(SystemProperty systemProperty)  Gets the read-only list of the pick-list values for the specified system property.
String	getPublicClassificationCode()  Gets the describing IReview classification code in public format.
InputStream	Gets the specified report data stream for the describing IReview.
String	<pre>getState() Gets the describing IReview state.</pre>
String	getStatus()  Gets the describing IReview status.
com.imis.util.IReadOn lyList	getSubEntityTemplates()  Gets the read-only list of templates that represent the describing IReview sub-entity creation templates.
com.imis.util.IReadOn lyMap	<pre>getSystemProperties() Gets the read-only map of read-only system properties sorted by SystemProperty enum values.</pre>
IReadOnlyProperty	<u>getSystemProperty</u> ( <u>SystemProperty</u> systemProperty)  Gets the read-only property for the specified system property.
<u>ITemplate</u>	<pre>getTemplate() Gets the describing IReview template.</pre>
String	getTitle()  Gets the describing IReview title.
boolean	hasAIP()  Gets a value indicating whether or not the describing IReview has AIP.
Calendar	modified()  Gets the describing IReview last modification time-stamp.
IReview	open (AccessMode mode) Opens a review described by this IReviewStub using a specified review access mode.
Calendar	opened()  Gets the describing IReview status opened time-stamp.
void	Sets the status of the describing IReview.

# Methods

# getId

public String getId()

Gets the describing IReview unique identifier.

#### **Returns:**

A string that represents the review identifier.

# getClassificationCode

```
public String getClassificationCode()
```

Gets the describing IReview classification code in canonical format.

#### **Returns:**

A string that represents the review classification code.

## getPublicClassificationCode

```
public String getPublicClassificationCode()
```

Gets the describing IReview classification code in public format.

The classification code in canonical format is converted to public classification code by replacing the entity type prefix and classification hierarchy delimiter with the respective entity type hierarchy delimiters.

## **Returns:**

A string that represents the review public classification code.

## getTitle

```
public String getTitle()
  throws StorageConnectorException
```

Gets the describing IReview title.

## **Returns:**

The review title.

## Throws:

 ${\tt StorageConnectorException-if} \ an \ IMiS/Storage \ Connector \ error \ occurs:$ 

• Property is not present in template properties.

# getDescription

```
public String getDescription()
  throws StorageConnectorException
```

Gets the describing IReview description.

#### **Returns:**

The review description.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getStatus

```
public String getStatus()
  throws StorageConnectorException
```

Gets the describing IReview status.

### **Returns:**

The review status.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getState

```
public String getState()
  throws StorageConnectorException
```

Gets the describing IReview state.

#### **Returns:**

The review state.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getMessage

```
public String getMessage()
  throws StorageConnectorException
```

Gets the describing IReview message.

#### **Returns:**

The review message.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## created

```
public Calendar created()
```

Gets the describing IReview creation time-stamp.

## **Returns:**

The date and time when the review was created.

## modified

```
public Calendar modified()
```

Gets the describing IReview last modification time-stamp.

#### **Returns:**

The date and time when the review was last modified.

# getModifiedBy

```
public IDirectoryEntity getModifiedBy()
```

Gets the last modifier directory entity.

#### **Returns:**

The last modifier directory entity or a null reference, if this instance has no last modifier directory entity.

## accessed

```
public Calendar accessed()
```

Gets the describing IReview last access time-stamp.

#### **Returns:**

The date and time when the review was last accessed.

## opened

```
public Calendar opened()
  throws StorageConnectorException
```

Gets the describing IReview status opened time-stamp.

## **Returns:**

The date and time when the review status was set to opened or a null reference if entity has no status.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## closed

```
public Calendar closed()
  throws StorageConnectorException
```

Gets the describing IReview status closed time-stamp.

## **Returns:**

The date and time when the review status was set to closed or a null reference if entity has no status.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## getEffectiveRights

```
public IReadOnlyEntityRights getEffectiveRights()
```

Gets the users effective rights on the describing IReview.

#### **Returns:**

The read-only set of rights describing users effective rights on the review.

# getArchive

```
public IArchive getArchive()
```

Gets the IArchive where the describing IReview is stored.

#### **Returns:**

The IArchive where the review is stored.

# getCreator

```
public IDirectoryEntity getCreator()
    throws StorageConnectorException
```

Gets the describing IReview creator.

## **Returns:**

A IDirectoryEntity that represents the creator of the review.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getOwner

```
public <u>IDirectoryEntity</u> getOwner()
    throws <u>StorageConnectorException</u>
```

Gets the describing IReview owner IDirectoryEntity.

## **Returns:**

An IDirectoryEntity object representing the review owner or a null reference, if this review has no owner.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getTemplate

```
public ITemplate getTemplate()
```

Gets the describing IReview template.

#### **Returns:**

An ITemplate object that represents the describing review template.

## getKeywords

```
public com.imis.util.IReadOnlyList getKeywords()
  throws StorageConnectorException
```

Gets the describing IReview list of keywords.

## **Returns:**

The review list of keywords.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getSubEntityTemplates

```
public com.imis.util.IReadOnlyList getSubEntityTemplates()
```

Gets the read-only list of templates that represent the describing IReview sub-entity creation templates.

## **Returns:**

The read-only list of ITemplate objects that represent the review sub-entity creation templates.

## setStatus

Sets the status of the describing IReview.

**Note:** This operation allows user to pass a reason for changing review status. Reason can be passed through <a href="AuditLog"><u>AuditLog</u></a> message.

#### **Parameters:**

status - the describing IReview status or a null reference to reset status to inherited value.

#### **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Property value is not allowed based on the current template settings.
- Error occurred while getting properties.

IOException - if an I/O error occurs.

# getSystemProperties

```
public com.imis.util.IReadOnlyMap getSystemProperties()
```

Gets the read-only map of read-only system properties sorted by SystemProperty enum values.

#### **Returns:**

The read-only map of IReadOnlyProperty objects sorted by SystemProperty enum values.

# getSystemProperty

```
public IReadOnlyProperty getSystemProperty(SystemProperty systemProperty)
throws StorageConnectorException
```

Gets the read-only property for the specified system property.

#### **Parameters:**

systemProperty - the system property.

#### **Returns:**

The read-only property for the specified system property.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## areValuesInherited

```
public boolean areValuesInherited(SystemProperty)
    throws StorageConnectorException
```

Gets the value indicating whether the specified system property values are inherited.

## **Parameters:**

systemProperty - the system property.

## **Returns:**

true if the specified system property values are inherited; otherwise false.

## Throws:

```
IllegalArgumentException - if invalid system property. StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Property is not present in template properties.

## getPickListValues

```
\label{eq:public_com.imis.util.IReadOnlyList} \textbf{getPickListValues} ( \underline{\textbf{SystemProperty}} \ \ \textbf{systemProperty}) \\ \text{throws StorageConnectorException}
```

Gets the read-only list of the pick-list values for the specified system property.

## **Parameters:**

systemProperty - the system property.

## **Returns:**

The read-only list of IPickListValue objects representing the pick-list values for the specified system property.

## Throws:

IllegalArgumentException - if invalid system property. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Property is not present in template properties.
- Pick-list values are not supported for property type.
- Error occurred while verifying property value.
- Property value is not allowed based on the current template settings.

## getReport

```
public InputStream getReport(ReportType type)
```

Gets the specified report data stream for the describing IReview.

Note: Valid report type on IReviewStub is:

• ReportType.REVIEW\_STATUS

#### **Parameters:**

type - the report type.

#### **Returns:**

The report data input stream or null if report not available.

#### Throws:

UnsupportedOperationException - if report not supported.

## open

Opens a review described by this IReviewStub using a specified review access mode.

Note: This operation allows user to pass a reason for opening review. Reason can be passed through AuditLog message.

#### **Parameters:**

mode - the review access mode.

## **Returns:**

An opened IReview instance.

## **Throws:**

CancellationException - if an operation was canceled by the user. LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Entity identifier is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while opening entity on archive.

IOException - if an I/O error occurs.

# hasAIP

public boolean hasAIP()

Gets a value indicating whether or not the describing IReview has AIP.

## **Returns:**

true if the describing IReview has AIP; otherwise false.

# com.imis.storageconnector.entitymodel Interface ISearchedEntityStub

All Superinterfaces:

**IEntityStub** 

public interface **ISearchedEntityStub** extends **IEntityStub** 

Defines an IEntityStub for a searched entity.

# **Method Summary**

getContentDescriptions()

Gets the describing searched IEntity list of content descriptions.

Methods inherited from interface com.imis.storageconnector.entitymodel.IEntityStub

accessed, areValuesInherited, checkOut, closed, created, delete, delete, getArchive, getCategories, getClassificationCode, getContent, getCreator, getCustomContents, getDescription, getDraftCreator, getDraftId, getDraftInfo, getEffectiveRights, getExternalIds, getId, getKeywords, getModifiedBy, getOwner, getParent, getPickListValues, getProperties, getPublicClassificationCode, getReferences, getReport, getRetention, getSecurityClass, getSignificance, getStatus, getSubEntities, getSubEntityTemplates, getSystemProperties, getSystemProperty, getTemplate, getTitle, getType, getVersionComment, getVersionLabel, getVersions, getVersionSequence, hasAIP, hasDraft, hasReferences, hasVersions, isChildClassificationCodeGenerated, isPermanent, modified, move, open, opened, search, setSecurityClass, setStatus, subEntityCount

# Methods

## getContentDescriptions

public com.imis.util.IReadOnlyList getContentDescriptions()
 throws StorageConnectorException

Gets the describing searched IEntity list of content descriptions.

#### Returns

The describing searched IEntity list of content descriptions in case of full-text index searches and searches through content descriptions.

## **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# com.imis.storageconnector.entitymodel Interface ISecurityClassChangeDetails

# public interface ISecurityClassChangeDetails extends

Defines an IEntity security class change details.

An ISecurityClassChangeDetails defines an IEntity security class change details: agent, reason, date and time, and status attributes.

#### See Also:

**IEntity** 

Method Summary	
<u>IDirectoryEntity</u>	getAgent()  Gets the agent who changed the security class of the IEntity.
String	<pre>getReason() Gets the reason for changing the security class of the IEntity.</pre>
String	<pre>getSecurityClassFrom() Gets the IEntity security class before it was changed.</pre>
String	getSecurityClassTo()  Gets the IEntity security class after it was changed.
Calendar	modified()  Gets the IEntity security class modification date and time.

# Methods

## getAgent

```
public IDirectoryEntity getAgent()
```

Gets the agent who changed the security class of the IEntity.

#### Returns

The user who changed the security class of the IEntity.

# getReason

```
public String getReason()
```

Gets the reason for changing the security class of the  ${\tt IEntity}.$ 

#### Returns:

A reason for changing the security class of the IEntity.

## modified

```
public Calendar modified()
```

Gets the IEntity security class modification date and time.

## **Returns:**

The date and time when the IEntity security class was modified.

# getSecurityClassFrom

public String getSecurityClassFrom()

Gets the IEntity security class before it was changed.

## **Returns:**

The security class of the  ${\tt IEntity}$  before it was changed.

# getSecurityClassTo

public String getSecurityClassTo()

Gets the IEntity security class after it was changed.

## **Returns:**

The security class of the IEntity after it was changed.

# com.imis.storageconnector.entitymodel Interface IStringMaxValue

public interface **IStringMaxValue** extends

Represents an unlimited length string property, which has a read-write interface.

Method Summary	
String	getValue()  Gets the value of the IStringMaxValue as string.
InputStream	openDataInputStream() Opens the string value data InputStream.
OutputStream	openDataOutputStream(boolean append) Opens the string value data OutputStream.
void	Sets the value of the IStringMaxValue as string.

# Methods

# getValue

Gets the value of the IStringMaxValue as string.

**Note:** This operation allows user to pass a reason for opening string value data input stream. Reason can be passed through AuditLog message.

## **Returns:**

The string representing the value of the  ${\tt IStringMaxValue}$ .

## Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while opening string value data stream.

IOException - if an I/O error occurs.

## setValue

Sets the value of the IStringMaxValue as string.

**Note:** This operation allows user to pass a reason for opening string value data output stream. Reason can be passed through AuditLog message.

#### **Parameters:**

value - the string representing the value of the IStringMaxValue.

## Throws:

```
NullPointerException - if value is null reference.

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while opening string value data stream.

IOException - if an I/O error occurs.

## openDataInputStream

Opens the string value data InputStream.

This method enables the caller to open a data input stream from which value data can be read.

**Note:** This operation allows user to pass a reason for opening string value data input stream. Reason can be passed through AuditLog message.

## **Returns:**

A string value data InputStream.

## Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

• Error occurred while opening property value data input stream.

IOException - if an I/O error occurs.

# openDataOutputStream

Opens the string value data OutputStream.

This method enables the caller to open a data output stream to which value data can be written.

**Note:** This operation allows user to pass a reason for opening string value data output stream. Reason can be passed through AuditLog message.

## **Parameters:**

append - true to append data to the end of the output stream; otherwise false.

## **Returns:**

A string value data OutputStream.

## Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Cannot open property value in read-write mode on a read-only property.
- Error occurred while opening property value data output stream.

IOException - if an I/O error occurs.

# com.imis.storageconnector.entitymodel Interface ITemplate

# public interface ITemplate extends

Defines a template class on which an IEntity property structure is defined upon.

An ITemplate class defines and describes a property structure and constraints for an IEntity which has been based upon it.

Instance is automatically recycled after the last reference is released. See Also:

<u>IEntity</u>

Method Summary	
long	entityCount() Gets the template entity count.
<u>IReadOnlyContent</u>	getContent()  Gets the read-only content assigned to the template.
com.imis.util.IReadOn lyMap	Gets the read-only map of custom read-only contents sorted by content identifiers assigned to the template.
String	getDescription()  Gets the template description.
EntityType	getEntityType()  Gets the entity type which the template is defining.
String	getId()  Gets the template unique identifier.
String	getLabel ()  Gets the template label.
com.imis.util.IReadOn lyList	<u>getPickListValues</u> ( <u>SystemProperty</u> systemProperty)  Gets the read-only list of the pick-list values for the specified system property.
com.imis.util.IReadOn lyMap	getProperties()  Gets the read-only map of read-only properties sorted by property names representing the template metadata attributes.
com.imis.util.IReadOn lyList	<u>getPropertyList()</u> Gets the read-only list of read-only properties representing the template metadata attributes.
com.imis.util.IReadOn lyMap	<pre>Gets the read-only map of read-only system properties sorted by SystemProperty enum values representing the template system metadata attributes.</pre>
IReadOnlyProperty	<u>getSystemProperty</u> ( <u>SystemProperty</u> systemProperty)  Gets the read-only property for the specified system property.

boolean	isEmailArchivalCapable()  Gets the value indicating whether template can be used for email archival.
boolean	isVersionable()  Gets the value indicating whether template can be used for versioning.

# Methods

# getId

```
public String getId()
```

Gets the template unique identifier.

## **Returns:**

A string that represents the template unique identifier.

# getDescription

```
public String getDescription()
```

Gets the template description.

## **Returns:**

A string that represents the template description.

# getLabel

```
public String getLabel()
```

Gets the template label.

### **Returns:**

A string that represents the template label.

# getEntityType

```
public EntityType getEntityType()
```

Gets the entity type which the template is defining.

Only IEntity objects of this type can be created using this template.

#### Returns

An enumerator value that represents the entity type.

# **entityCount**

```
public long entityCount()
```

Gets the template entity count.

#### Returns

The number of entities created with this template.

# **isEmailArchivalCapable**

```
public boolean isEmailArchivalCapable()
```

Gets the value indicating whether template can be used for email archival.

#### **Returns:**

true if template can be used for email archival; otherwise false

## isVersionable

```
public boolean isVersionable()
```

Gets the value indicating whether template can be used for versioning.

#### **Returns:**

true if template can be used for versioning; otherwise false

# getPropertyList

```
public com.imis.util.IReadOnlyList getPropertyList()
```

Gets the read-only list of read-only properties representing the template metadata attributes.

#### **Returns:**

The read-only list of IReadOnlyProperty objects.

## getProperties

```
public com.imis.util.IReadOnlyMap getProperties()
```

Gets the read-only map of read-only properties sorted by property names representing the template metadata attributes.

## **Returns:**

The read-only map of IReadOnlyProperty objects sorted by property names.

## getContent

```
public IReadOnlyContent getContent()
  throws StorageConnectorException
```

Gets the read-only content assigned to the template. Note: This method is instantiated only for IDocument entities.

## **Returns:**

A IReadOnlyContent object.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

# getCustomContents

```
public com.imis.util.IReadOnlyMap getCustomContents()
```

Gets the read-only map of custom read-only contents sorted by content identifiers assigned to the template. **Note:** This method is instantiated only for IDocument entities.

## **Returns:**

A read-only map of IReadOnlyContent objects sorted by content identifiers.

## getSystemProperties

```
public com.imis.util.IReadOnlyMap getSystemProperties()
```

Gets the read-only map of read-only system properties sorted by SystemProperty enum values representing the template system metadata attributes.

## **Returns:**

The read-only map of IReadOnlyProperty objects sorted by SystemProperty enum values.

# getSystemProperty

```
\begin{array}{c} \text{public} \ \ \underline{\text{IReadOnlyProperty}} \ \ \text{\textbf{getSystemProperty}} \ \ \text{\textbf{SystemProperty}} \\ \text{throws} \ \ \underline{\text{StorageConnectorException}} \end{array}
```

Gets the read-only property for the specified system property.

#### **Parameters:**

systemProperty - the system property.

#### **Returns:**

The read-only property for the specified system property.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Property is not present in template properties.

## getPickListValues

```
\label{eq:public_com.imis.util.IReadOnlyList} \textbf{getPickListValues} ( \underline{\textbf{SystemProperty}} \ \ \textbf{systemProperty}) \\ \text{throws } \underline{\textbf{StorageConnectorException}}
```

Gets the read-only list of the pick-list values for the specified system property.

## **Parameters:**

 ${\tt systemProperty-the} \ system \ property.$ 

## **Returns:**

The read-only list of IPickListValue objects representing the pick-list values for the specified system property.

## **Throws:**

```
IllegalArgumentException - if invalid system property. StorageConnectorException - if an IMiS/Storage Connector error occurs:
```

- Property is not present in template properties.
- Property is not a pick-list property.

# com.imis.storageconnector.entitymodel Interface ITransferDetails

public interface **ITransferDetails** extends

Describes a IEntity transfer details.

Method Summary	
String	getAuditLog()  Gets the transferred entity audit log from previous archiving system.
String	getClassificationCode()  Gets the transferred entity classification code from previous archiving system.
String	getEvidence()  Gets the transferred entity evidence of authenticity.
com.imis.util.IReadOn lyList	getMoveAgents()  Gets the list of transferred entity move agents.
com.imis.util.IReadOn lyList	getMoveClassificationCodes()  Gets the list of transferred entity move classification codes.
com.imis.util.IReadOn lyList	getMoveDateTimes()  Gets the list of transferred entity move date and times.
com.imis.util.IReadOn lyList	getMoveReasons ( )  Gets the list of transferred entity move reasons.
String	getSystemId()  Gets the transferred entity unique identifier from previous archiving system.
Calendar	imported()  Gets the date and time when the transferred entity was imported into archive.

# Methods

# getAuditLog

Gets the transferred entity audit log from previous archiving system.

#### Returns

A string that represents the transferred entity audit log.

## Throws:

 ${\tt CancellationException - if an operation was canceled by the user.} \\ {\tt LoginException - if a login error occurs.}$ 

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while opening string value data stream.

IOException - if an I/O error occurs.

# getSystemId

```
public String getSystemId()
  throws StorageConnectorException
```

Gets the transferred entity unique identifier from previous archiving system.

#### Returns:

The transferred entity unique system identifier.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# getClassificationCode

```
public String getClassificationCode()
  throws StorageConnectorException
```

Gets the transferred entity classification code from previous archiving system.

## **Returns:**

The transferred entity classification code.

## Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# imported

```
public Calendar imported()
  throws StorageConnectorException
```

Gets the date and time when the transferred entity was imported into archive.

## **Returns:**

The transferred entity imported date and time.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

#### getEvidence

Gets the transferred entity evidence of authenticity.

#### **Returns:**

A string that represents the transferred evidence record of authenticity.

#### Throws:

```
CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMis/Storage Connector error occurs:
```

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.
- Error occurred while opening string value data stream.

IOException - if an I/O error occurs.

#### getMoveReasons

```
public com.imis.util.IReadOnlyList getMoveReasons()
    throws StorageConnectorException
```

Gets the list of transferred entity move reasons.

#### **Returns:**

A list of strings that represent the transferred entity move reasons.

#### Throws:

<u>StorageConnectorException</u> - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

#### getMoveAgents

```
public com.imis.util.IReadOnlyList getMoveAgents()
    throws StorageConnectorException
```

Gets the list of transferred entity move agents.

#### **Returns:**

A list of strings that represent the transferred entity move agents.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

#### getMoveDateTimes

```
public com.imis.util.IReadOnlyList getMoveDateTimes()
    throws StorageConnectorException
```

Gets the list of transferred entity move date and times.

#### **Returns:**

A list of strings that represent the transferred entity move date and times.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

## ${\bf get Move Classification Codes}$

```
public com.imis.util.IReadOnlyList getMoveClassificationCodes()
    throws StorageConnectorException
```

Gets the list of transferred entity move classification codes.

#### **Returns:**

A list of strings that represent the transferred entity move classification codes.

#### Throws

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed entity is not allowed.
- Operation on entity opened in read-only mode is not allowed.
- Error occurred while getting properties.
- Property is not present in template properties.

# com.imis.storageconnector.entitymodel Class LogType

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **LogType** extends Enum

Defines constants for different types of logs.

Field Summary	
public static final	Export logs.
public static final	IMPORT Import logs.

Method Summary	
static LogType	<pre>valueOf(String name)</pre>
static LogType[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

#### **IMPORT**

#### **EXPORT**

# Methods

#### values

public final static LogType[] values()

#### valueOf

public static LogType valueOf(String name)

# com.imis.storageconnector.entitymodel Class PropertyType

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **PropertyType** extends Enum

Represents the type of the IProperty. **See Also:** 

**IProperty** 

Field Summary	
public static final	BINARY Binary property type.
public static final	BOOL Logical boolean property type (true/false).
public static final	Date-only property type.
public static final	DATE_TIME Date and time property type.
public static final	DECIMAL1 Signed 64-bit floating-point property type with 1 decimal place.
public static final	DECIMAL10 Signed 64-bit floating-point property type with 10 decimal places.
public static final	DECIMAL2 Signed 64-bit floating-point property type with 2 decimal places.
public static final	DECIMAL3 Signed 64-bit floating-point property type with 3 decimal places.
public static final	DECIMAL4 Signed 64-bit floating-point property type with 4 decimal places.
public static final	DECIMAL5 Signed 64-bit floating-point property type with 5 decimal places.
public static final	DECIMAL6 Signed 64-bit floating-point property type with 6 decimal places.
public static final	DECIMAL7 Signed 64-bit floating-point property type with 7 decimal places.

public static final	DECIMAL8 Signed 64-bit floating-point property type with 8 decimal places.
public static final	DECIMAL9 Signed 64-bit floating-point property type with 9 decimal places.
public static final	DIRECTORY_ENTITY Directory entity property type.
public static final	DOUBLE 64-bit floating-point property type.
public static final	ENTITY_REFERENCE Entity reference property type.
public static final	INT128 Signed 128-bit integral property type.
public static final	INT16 Signed 16-bit integral property type.
public static final	INT32 Signed 32-bit integral property type.
public static final	INT64 Signed 64-bit integral property type.
public static final	INT8 Signed 8-bit integral property type.
public static final	STRING10 Up to 10 single byte (8-bit) character string property type.
public static final	STRING100 Up to 100 single byte (8-bit) character string property type.
public static final	STRING20 Up to 20 single byte (8-bit) character string property type.
public static final	STRING200 Up to 200 single byte (8-bit) character string property type.
public static final	STRING30 Up to 30 single byte (8-bit) character string property type.
public static final	STRING40 Up to 40 single byte (8-bit) character string property type.
public static final	STRING50 Up to 50 single byte (8-bit) character string property type.
public static final	STRINGMAX Unlimited length single byte (8-bit) character string property type.
public static final	TIME Time-only property type.
public static final	UINT128 Unsigned 128-bit integral property type.

public static final	UINT16 Unsigned 16-bit integral property type.
public static final	UINT32 Unsigned 32-bit integral property type.
public static final	UINT64 Unsigned 64-bit integral property type.
public static final	UINT8 Unsigned 8-bit integral property type.
public static final	UNKNOWN Unknown property type.

Method Summary		
static PropertyType	<pre>valueOf(String name)</pre>	
static PropertyType[]	values()	

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

#### **UNKNOWN**

public static final com.imis.storageconnector.entitymodel.PropertyType UNKNOWN

Unknown property type.

This value defines an invalid property type which is never returned on an coherent property.

#### **DIRECTORY\_ENTITY**

 $\verb|public static final com.imis.storage connector.entity model. Property Type \\ \verb|DIRECTORY_ENTITY| \\$ 

Directory entity property type.

Properties of this type use IDirectoryEntity to interface with its value.

#### BOOL

public static final com.imis.storageconnector.entitymodel.PropertyType BOOL

Logical boolean property type (true/false).

Properties of this type use java.lang.Boolean to interface with its value.

#### INT8

public static final com.imis.storageconnector.entitymodel.PropertyType INT8

Signed 8-bit integral property type.

Properties of this type use java.lang.Byte to interface with its value.

#### **UINT8**

public static final com.imis.storageconnector.entitymodel.PropertyType UINT8

Unsigned 8-bit integral property type.

Properties of this type use java.lang.Short to interface with its value.

#### INT<sub>16</sub>

public static final com.imis.storageconnector.entitymodel.PropertyType INT16

Signed 16-bit integral property type.

Properties of this type use java.lang.Short to interface with its value.

#### UINT16

public static final com.imis.storageconnector.entitymodel.PropertyType UINT16

Unsigned 16-bit integral property type.

Properties of this type use java.lang.Integer to interface with its value.

#### INT32

public static final com.imis.storageconnector.entitymodel.PropertyType INT32

Signed 32-bit integral property type.

Properties of this type use java.lang. Integer to interface with its value.

#### UINT32

public static final com.imis.storageconnector.entitymodel.PropertyType UINT32

Unsigned 32-bit integral property type.

Properties of this type use java.lang.Long to interface with its value.

#### INT64

public static final com.imis.storageconnector.entitymodel.PropertyType INT64

Signed 64-bit integral property type.

Properties of this type use java.lang.Long to interface with its value.

#### **UINT64**

public static final com.imis.storageconnector.entitymodel.PropertyType UINT64

Unsigned 64-bit integral property type.

Properties of this type use java.math.BigInteger to interface with its value.

#### **INT128**

public static final com.imis.storageconnector.entitymodel.PropertyType INT128

Signed 128-bit integral property type.

Properties of this type use java.math.BigInteger to interface with its value.

#### **UINT128**

public static final com.imis.storageconnector.entitymodel.PropertyType UINT128

Unsigned 128-bit integral property type.

Properties of this type use java.math.BigInteger to interface with its value.

#### **DOUBLE**

public static final com.imis.storageconnector.entitymodel.PropertyType DOUBLE

64-bit floating-point property type.

Properties of this type use java.lang.Double to interface with its value.

#### **DATE**

public static final com.imis.storageconnector.entitymodel.PropertyType DATE

Date-only property type.

Properties of this type use java.util.Calendar to interface with its value.

#### **TIME**

public static final com.imis.storageconnector.entitymodel.PropertyType TIME

Time-only property type.

Properties of this type use java.util.Calendar to interface with its value.

#### DATE TIME

public static final com.imis.storageconnector.entitymodel.PropertyType DATE\_TIME

Date and time property type.

Properties of this type use java.util.Calendar to interface with its value.

#### **STRINGMAX**

public static final com.imis.storageconnector.entitymodel.PropertyType STRINGMAX

Unlimited length single byte (8-bit) character string property type.

Properties of this type use IStringMaxValue object to interface with its value.

#### STRING10

public static final com.imis.storageconnector.entitymodel.PropertyType STRING10

Up to 10 single byte (8-bit) character string property type.

Properties of this type use java.lang.String to interface with its value.

#### STRING20

public static final com.imis.storageconnector.entitymodel.PropertyType STRING20

Up to 20 single byte (8-bit) character string property type.

Properties of this type use java.lang.String to interface with its value.

#### STRING30

public static final com.imis.storageconnector.entitymodel.PropertyType STRING30

Up to 30 single byte (8-bit) character string property type.

Properties of this type use java.lang.String to interface with its value.

#### STRING40

public static final com.imis.storageconnector.entitymodel.PropertyType STRING40

Up to 40 single byte (8-bit) character string property type.

Properties of this type use java.lang.String to interface with its value.

#### STRING50

public static final com.imis.storageconnector.entitymodel.PropertyType STRING50

Up to 50 single byte (8-bit) character string property type.

Properties of this type use java.lang.String to interface with its value.

#### STRING100

public static final com.imis.storageconnector.entitymodel.PropertyType STRING100

Up to 100 single byte (8-bit) character string property type.

Properties of this type use java.lang.String to interface with its value.

#### STRING200

public static final com.imis.storageconnector.entitymodel.PropertyType STRING200

Up to 200 single byte (8-bit) character string property type.

Properties of this type use java.lang.String to interface with its value.

#### ENTITY\_REFERENCE

 $\verb|public| static final com.imis.storage connector.entity model. Property Type \\ \textbf{ENTITY\_REFERENCE}|$ 

Entity reference property type.

Values of this type interface with java.lang.String type.

#### **DECIMAL1**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL1

Signed 64-bit floating-point property type with 1 decimal place.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **DECIMAL2**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL2

Signed 64-bit floating-point property type with 2 decimal places.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **DECIMAL3**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL3

Signed 64-bit floating-point property type with 3 decimal places.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **DECIMAL4**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL4

Signed 64-bit floating-point property type with 4 decimal places.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **DECIMAL5**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL5

Signed 64-bit floating-point property type with 5 decimal places.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **DECIMAL6**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL6

Signed 64-bit floating-point property type with 6 decimal places.

 $Properties \ of \ this \ type \ use \ {\tt java.math.BigDecimal} \ to \ interface \ with \ its \ value.$ 

#### **DECIMAL7**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL7

Signed 64-bit floating-point property type with 7 decimal places.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **DECIMAL8**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL8

Signed 64-bit floating-point property type with 8 decimal places.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **DECIMAL9**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL9

Signed 64-bit floating-point property type with 9 decimal places.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **DECIMAL10**

public static final com.imis.storageconnector.entitymodel.PropertyType DECIMAL10

Signed 64-bit floating-point property type with 10 decimal places.

Properties of this type use java.math.BigDecimal to interface with its value.

#### **BINARY**

public static final com.imis.storageconnector.entitymodel.PropertyType BINARY

Binary property type.

Properties of this type use IBinaryValue object to interface with its value.

#### Methods

#### values

public final static PropertyType[] values()

#### valueOf

public static PropertyType valueOf(String name)

# com.imis.storageconnector.entitymodel Class ReportType

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **ReportType** extends Enum

Defines constants for different types of reports.

Field Summary	
public static final	Entity move report in UTF8 format.
public static final	Entity save report in UTF8 format.
public static final	Entity security class report in UTF8 format.
public static final	ENTITY_STATUS Entity status report in UTF8 format.
public static final	REVIEW_SAVE Review save report in UTF8 format.
public static final	REVIEW_STATUS Review status report in UTF8 format.

Method Summary	
static ReportType	<pre>valueOf(String name)</pre>
static ReportType[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### ${\bf Methods\ inherited\ from\ interface\ {\tt java.lang.Comparable}}$

compareTo

## **Fields**

#### **ENTITY SAVE**

public static final com.imis.storageconnector.entitymodel.ReportType ENTITY\_SAVE

Entity save report in UTF8 format.

#### ENTITY\_MOVE

public static final com.imis.storageconnector.entitymodel.ReportType **ENTITY\_MOVE**Entity move report in UTF8 format.

#### ENTITY\_STATUS

public static final com.imis.storageconnector.entitymodel.ReportType **ENTITY\_STATUS**Entity status report in UTF8 format.

#### **ENTITY SECURITY CLASS**

 $\verb|public static final com.imis.storage connector.entity model.Report Type \\ \textbf{ENTITY\_SECURITY\_CLASS}|$ 

Entity security class report in UTF8 format.

#### REVIEW\_SAVE

public static final com.imis.storageconnector.entitymodel.ReportType REVIEW\_SAVE

Review save report in UTF8 format.

## **REVIEW\_STATUS**

public static final com.imis.storageconnector.entitymodel.ReportType REVIEW\_STATUS Review status report in UTF8 format.

## **Methods**

#### values

public final static ReportType[] values()

#### valueOf

public static ReportType valueOf(String name)

# com.imis.storageconnector.entitymodel Class RetentionPolicyFilter

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **RetentionPolicyFilter** extends Enum

Defines types of retention policy filter.

Field Summary	
public static final	CLASSES  Retention has effect on classes.
public static final	DOCUMENTS  Retention has effect on documents under classes.
public static final	FOLDERS  Retention has effect on folders.

Method Summary	
static RetentionPolicyFilter	<u>valueOf</u> (String name)
static RetentionPolicyFilter	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# **Fields**

#### **CLASSES**

 $\verb|public| static final com.imis.storage connector.entity model. Retention Policy Filter \\ \textbf{CLASSES}|$ 

Retention has effect on classes.

#### **FOLDERS**

 $\verb|public| static final com.imis.storage connector.entity model. Retention Policy Filter \\ \textbf{FOLDERS} \\$ 

Retention has effect on folders.

#### **DOCUMENTS**

 $\verb"public static final com.imis.storage connector.entity model. Retention Policy Filter \verb"pocuments"$ 

Retention has effect on documents under classes.

# Methods

#### values

public final static RetentionPolicyFilter[] values()

#### valueOf

public static RetentionPolicyFilter valueOf(String name)

# com.imis.storageconnector.entitymodel Class RetentionPolicyScope

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **RetentionPolicyScope** extends Enum

Defines enumeration for retention policy scope.

Field Summary	
public static final	ALLOW Allowed.
public static final	Denied.

Method Summary	
static RetentionPolicyScope	valueOf(String name)
static RetentionPolicyScope[	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# Fields

#### **ALLOW**

public static final com.imis.storageconnector.entitymodel.RetentionPolicyScope ALLOW

Allowed.

#### **DENY**

public static final com.imis.storageconnector.entitymodel.RetentionPolicyScope **DENY**Denied.

# Methods

#### values

public final static RetentionPolicyScope[] values()

## valueOf

public static RetentionPolicyScope valueOf(String name)

# com.imis.storageconnector.entitymodel Class SearchOptions

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **SearchOptions** extends Enum

Defines constants for different search options.

Using empty set of SearchOptions the search is performed on first level child entities.

Field Summary	
public static final	INHERITED_VALUES Search is performed on explicit and inherited values.
public static final	RECURSIVE Search is performed recursively on all child entity levels.

Method Summary	
static <u>SearchOptions</u>	<pre>valueOf(String name)</pre>
static SearchOptions[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# Fields

#### **RECURSIVE**

public static final com.imis.storageconnector.entitymodel.SearchOptions RECURSIVE

Search is performed recursively on all child entity levels.

#### INHERITED\_VALUES

 $\verb|public static final com.imis.storage connector.entity model.Search Options \\| \textbf{INHERITED\_VALUES}|\\|$ 

Search is performed on explicit and inherited values. If not set search is performed on explicit values only.

# Methods

#### values

public final static SearchOptions[] values()

#### valueOf

public static SearchOptions valueOf(String name)

# com.imis.storageconnector.entitymodel Class SystemProperty

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **SystemProperty** extends Enum

Defines constants for different system properties.

Field Summary	
public static final	CATEGORY Entity category.
public static final	CLASSIFICATION_CODE Classification code.
public static final	CLOSED Closed.
public static final	CONTENT Content.
public static final	CREATOR creator.
public static final	Deleted entity agent.
public static final	Deleted entity classification code.
public static final	Deleted entity removed date and time.
public static final	Deleted entity reason.
public static final	Deleted entity reference.
public static final	DESCRIPTION Description.
public static final	DISPOSITION_HOLD_REASON Retention policy reason.

public static final	EMAIL_ENTITY_DATETIME Email entity date and time.
public static final	EMAIL_ENTITY_FROM Email entity sender.
public static final	EMAIL_ENTITY_IS_SIGNED Email entity is signed value.
public static final	EMAIL_ENTITY_MESSAGE_ID Email entity message identifier.
public static final	EMAIL_ENTITY_PRIORITY Email entity delivery priority.
public static final	EMAIL_ENTITY_SUBJECT Email entity subject.
public static final	EMAIL_ENTITY_TO Email entity recipient.
public static final	EMAIL_ENTITY_TOBCC Email entity concealed recipients of copy.
public static final	EMAIL_ENTITY_TOCC Email entity recipients of copy.
public static final	External identifiers.
public static final	KEYWORDS Keywords.
public static final	Modified by.
public static final	MOVED_ENTITY_AGENT  Moved entity agent.
public static final	MOVED_ENTITY_CLASSIFICATION_CODE  Moved entity classification code.
public static final	MOVED_ENTITY_MOVE_DATETIME  Moved entity moved date and time.
public static final	MOVED_ENTITY_REASON  Moved entity reason.
public static final	OPENED Opened.
public static final	OWNER Owner.
public static final	PHYSICAL_ENTITY_CURRENT_LOCATION Physical entity current location.
public static final	PHYSICAL_ENTITY_CUSTODIAN Physical entity custodian.

public static final	PHYSICAL_ENTITY_DESCRIPTION Physical entity description.
public static final	PHYSICAL_ENTITY_HOME_LOCATION Physical entity home location.
public static final	PHYSICAL_ENTITY_IDENTIFIER Physical entity identifier.
public static final	PHYSICAL_ENTITY_RETURN_DUE_DATETIME Physical entity return due date and time.
public static final	PHYSICAL_ENTITY_STATUS Physical entity status.
public static final	PHYSICAL_ENTITY_STATUS_CHANGE_DATETIME Physical entity status changed date and time.
public static final	REFERENCE Entity reference.
public static final	RETENTION_POLICY_ACTION Retention policy action.
public static final	RETENTION_POLICY_DETAILED_DESCRIPTION  Retention policy detailed description.
public static final	RETENTION_POLICY_REASON Retention policy reason.
public static final	RETENTION_POLICY_REFERENCE Retention policy reference.
public static final	RETENTION_POLICY_TRIGGER Retention policy trigger.
public static final	REVIEW_ACTION Review action.
public static final	REVIEW_COMMENTS Review comments.
public static final	REVIEW_MEMBERS Review members.
public static final	REVIEW_MESSAGE Review message.
public static final	REVIEW_QUERY_EXPRESSION Review query expression.
public static final	REVIEW_SCHEDULED_ITEMS Review entity lists.
public static final	REVIEW_SCHEDULES Review schedules.
public static final	REVIEW_SCOPE Review scope entity identifier.

public static final	REVIEW_STATE Review state.
public static final	Save log.
public static final	SECURITY_CLASS Security class.
public static final	SECURITY_CLASS_CHANGE_AGENT Security class change agent.
public static final	SECURITY_CLASS_CHANGE_FROM Security class prior to change.
public static final	SECURITY_CLASS_CHANGE_MODIFIED_DATETIME Security class modification date and time.
public static final	SECURITY_CLASS_CHANGE_REASON Security class change reason.
public static final	SECURITY_CLASS_CHANGE_TO Security class after the change.
public static final	Significance.
public static final	STATUS Status.
public static final	TITLE Title.
public static final	TRANSFERRED_ENTITY_AUDIT_LOG Transferred entity audit log.
public static final	TRANSFERRED_ENTITY_CLASSIFICATION_CODE  Transferred entity classification code.
public static final	TRANSFERRED_ENTITY_EVIDENCE Transferred entity evidence of authenticity.
public static final	TRANSFERRED_ENTITY_IMPORT_DATETIME  Transferred entity imported date and time.
public static final	TRANSFERRED_ENTITY_MOVE_AGENT Transferred entity move agent.
public static final	TRANSFERRED_ENTITY_MOVE_CLASSIFICATION_CODE  Transferred entity move classification code.
public static final	TRANSFERRED_ENTITY_MOVE_DATETIME
public static final	TRANSFERRED_ENTITY_MOVE_REASON Transferred entity move reason.
public static final	TRANSFERRED_ENTITY_SYSTEM_ID Transferred entity system identifier.

public static final	VERSION_SERIES_ID Version series identifier.
public static final	VERSIONING_COMMENT  Versioning check in comment.
public static final	VERSIONING_LABEL Versioning series label.

Method Summary	
static SystemProperty	<pre>valueOf(String name)</pre>
static SystemProperty[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

## **Fields**

#### **CLASSIFICATION\_CODE**

 $\verb|public static final com.imis.storage connector.entity model. System Property \\ \textbf{CLASSIFICATION\_CODE}|$ 

Classification code.

#### **TITLE**

#### **DESCRIPTION**

public static final com.imis.storageconnector.entitymodel.SystemProperty **DESCRIPTION**Description.

#### **STATUS**

public static final com.imis.storageconnector.entitymodel.SystemProperty STATUS

Status.

#### **OPENED**

public static final com.imis.storageconnector.entitymodel.SystemProperty **OPENED**Opened.

#### **CLOSED**

public static final com.imis.storageconnector.entitymodel.SystemProperty **CLOSED**Closed.

#### **SIGNIFICANCE**

public static final com.imis.storageconnector.entitymodel.SystemProperty **SIGNIFICANCE**Significance.

#### **CREATOR**

#### **OWNER**

public static final com.imis.storageconnector.entitymodel.SystemProperty **OWNER**Owner.

#### MODIFIED\_BY

public static final com.imis.storageconnector.entitymodel.SystemProperty MODIFIED\_BY Modified by.

#### **KEYWORDS**

public static final com.imis.storageconnector.entitymodel.SystemProperty **KEYWORDS**Keywords.

#### **EXTERNAL IDS**

public static final com.imis.storageconnector.entitymodel.SystemProperty **EXTERNAL\_IDS**External identifiers.

#### CONTENT

public static final com.imis.storageconnector.entitymodel.SystemProperty **CONTENT**Content.

#### **SAVE LOG**

public static final com.imis.storageconnector.entitymodel.SystemProperty SAVE\_LOG Save log.

#### SECURITY CLASS

 $\verb|public static final com.imis.storage connector.entity model. System Property \\ \textbf{SECURITY\_CLASS}|$ 

Security class.

#### REFERENCE

public static final com.imis.storageconnector.entitymodel.SystemProperty REFERENCE Entity reference.

#### **CATEGORY**

public static final com.imis.storageconnector.entitymodel.SystemProperty CATEGORY

Entity category.

#### SECURITY\_CLASS\_CHANGE\_AGENT

public static final com.imis.storageconnector.entitymodel.SystemProperty
SECURITY CLASS CHANGE AGENT

Security class change agent.

#### SECURITY\_CLASS\_CHANGE\_REASON

public static final com.imis.storageconnector.entitymodel.SystemProperty
SECURITY\_CLASS\_CHANGE\_REASON

Security class change reason.

#### SECURITY CLASS CHANGE MODIFIED DATETIME

public static final com.imis.storageconnector.entitymodel.SystemProperty
SECURITY\_CLASS\_CHANGE\_MODIFIED\_DATETIME

Security class modification date and time.

#### SECURITY\_CLASS\_CHANGE\_FROM

public static final com.imis.storageconnector.entitymodel.SystemProperty
SECURITY\_CLASS\_CHANGE\_FROM

Security class prior to change.

#### SECURITY\_CLASS\_CHANGE\_TO

public static final com.imis.storageconnector.entitymodel.SystemProperty
SECURITY\_CLASS\_CHANGE\_TO

Security class after the change.

#### MOVED\_ENTITY\_AGENT

public static final com.imis.storageconnector.entitymodel.SystemProperty
MOVED ENTITY AGENT

Moved entity agent.

#### MOVED\_ENTITY\_REASON

 ${\tt public static final com.imis.storage connector.entity model. System Property} \\ {\tt MOVED\_ENTITY\_REASON}$ 

Moved entity reason.

#### MOVED\_ENTITY\_MOVE\_DATETIME

public static final com.imis.storageconnector.entitymodel.SystemProperty
MOVED\_ENTITY\_MOVE\_DATETIME

Moved entity moved date and time.

#### MOVED\_ENTITY\_CLASSIFICATION\_CODE

public static final com.imis.storageconnector.entitymodel.SystemProperty
MOVED\_ENTITY\_CLASSIFICATION\_CODE

Moved entity classification code.

#### DELETED\_ENTITY\_AGENT

public static final com.imis.storageconnector.entitymodel.SystemProperty
DELETED\_ENTITY\_AGENT

Deleted entity agent.

#### DELETED ENTITY REASON

public static final com.imis.storageconnector.entitymodel.SystemProperty
DELETED ENTITY REASON

Deleted entity reason.

#### DELETED ENTITY DELETE DATETIME

public static final com.imis.storageconnector.entitymodel.SystemProperty
DELETED\_ENTITY\_DELETE\_DATETIME

Deleted entity removed date and time.

#### DELETED ENTITY\_CLASSIFICATION\_CODE

public static final com.imis.storageconnector.entitymodel.SystemProperty
DELETED\_ENTITY\_CLASSIFICATION\_CODE

Deleted entity classification code.

#### **DELETED ENTITY REFERENCE**

public static final com.imis.storageconnector.entitymodel.SystemProperty
DELETED\_ENTITY\_REFERENCE

Deleted entity reference.

#### TRANSFERRED\_ENTITY\_SYSTEM\_ID

public static final com.imis.storageconnector.entitymodel.SystemProperty
TRANSFERRED ENTITY SYSTEM ID

Transferred entity system identifier.

#### TRANSFERRED\_ENTITY\_CLASSIFICATION\_CODE

public static final com.imis.storageconnector.entitymodel.SystemProperty
TRANSFERRED\_ENTITY\_CLASSIFICATION\_CODE

Transferred entity classification code.

#### TRANSFERRED ENTITY AUDIT LOG

public static final com.imis.storageconnector.entitymodel.SystemProperty
TRANSFERRED\_ENTITY\_AUDIT\_LOG

Transferred entity audit log.

#### TRANSFERRED ENTITY IMPORT DATETIME

public static final com.imis.storageconnector.entitymodel.SystemProperty TRANSFERRED\_ENTITY\_IMPORT\_DATETIME

Transferred entity imported date and time.

#### TRANSFERRED\_ENTITY\_EVIDENCE

public static final com.imis.storageconnector.entitymodel.SystemProperty
TRANSFERRED\_ENTITY\_EVIDENCE

Transferred entity evidence of authenticity.

#### TRANSFERRED\_ENTITY\_MOVE\_REASON

public static final com.imis.storageconnector.entitymodel.SystemProperty
TRANSFERRED\_ENTITY\_MOVE\_REASON

Transferred entity move reason.

#### TRANSFERRED\_ENTITY\_MOVE\_AGENT

public static final com.imis.storageconnector.entitymodel.SystemProperty
TRANSFERRED\_ENTITY\_MOVE\_AGENT

Transferred entity move agent.

#### TRANSFERRED ENTITY MOVE DATETIME

public static final com.imis.storageconnector.entitymodel.SystemProperty
TRANSFERRED\_ENTITY\_MOVE\_DATETIME

#### TRANSFERRED\_ENTITY\_MOVE\_CLASSIFICATION\_CODE

public static final com.imis.storageconnector.entitymodel.SystemProperty
TRANSFERRED\_ENTITY\_MOVE\_CLASSIFICATION\_CODE

Transferred entity move classification code.

#### PHYSICAL\_ENTITY\_IDENTIFIER

public static final com.imis.storageconnector.entitymodel.SystemProperty
PHYSICAL\_ENTITY\_IDENTIFIER

Physical entity identifier.

#### PHYSICAL ENTITY DESCRIPTION

public static final com.imis.storageconnector.entitymodel.SystemProperty
PHYSICAL\_ENTITY\_DESCRIPTION

Physical entity description.

#### PHYSICAL ENTITY STATUS

 $\verb"public static final com.imis.storage connector.entity model. System Property \verb"physical_entity_status"$ 

Physical entity status.

#### PHYSICAL ENTITY STATUS CHANGE DATETIME

public static final com.imis.storageconnector.entitymodel.SystemProperty
PHYSICAL\_ENTITY\_STATUS\_CHANGE\_DATETIME

Physical entity status changed date and time.

#### PHYSICAL\_ENTITY\_HOME\_LOCATION

public static final com.imis.storageconnector.entitymodel.SystemProperty
PHYSICAL\_ENTITY\_HOME\_LOCATION

Physical entity home location.

### PHYSICAL\_ENTITY\_CURRENT\_LOCATION

public static final com.imis.storageconnector.entitymodel.SystemProperty
PHYSICAL\_ENTITY\_CURRENT\_LOCATION

Physical entity current location.

#### PHYSICAL\_ENTITY\_CUSTODIAN

public static final com.imis.storageconnector.entitymodel.SystemProperty
PHYSICAL\_ENTITY\_CUSTODIAN

Physical entity custodian.

#### PHYSICAL ENTITY RETURN DUE DATETIME

public static final com.imis.storageconnector.entitymodel.SystemProperty
PHYSICAL\_ENTITY\_RETURN\_DUE\_DATETIME

Physical entity return due date and time.

#### EMAIL\_ENTITY\_MESSAGE\_ID

public static final com.imis.storageconnector.entitymodel.SystemProperty
EMAIL\_ENTITY\_MESSAGE\_ID

Email entity message identifier.

#### EMAIL ENTITY DATETIME

public static final com.imis.storageconnector.entitymodel.SystemProperty
EMAIL\_ENTITY\_DATETIME

Email entity date and time.

#### **EMAIL ENTITY FROM**

public static final com.imis.storageconnector.entitymodel.SystemProperty
EMAIL\_ENTITY\_FROM

Email entity sender.

#### EMAIL\_ENTITY\_TO

public static final com.imis.storageconnector.entitymodel.SystemProperty
EMAIL\_ENTITY\_TO

Email entity recipient.

#### EMAIL\_ENTITY\_TOCC

 $\verb|public static final com.imis.storage connector.entity model. System Property \\ \textbf{EMAIL\_ENTITY\_TOCC}|$ 

Email entity recipients of copy.

#### EMAIL ENTITY TOBCC

public static final com.imis.storageconnector.entitymodel.SystemProperty
EMAIL\_ENTITY\_TOBCC

Email entity concealed recipients of copy.

#### EMAIL\_ENTITY\_SUBJECT

public static final com.imis.storageconnector.entitymodel.SystemProperty
EMAIL\_ENTITY\_SUBJECT

Email entity subject.

## EMAIL\_ENTITY\_PRIORITY

public static final com.imis.storageconnector.entitymodel.SystemProperty
EMAIL\_ENTITY\_PRIORITY

Email entity delivery priority.

#### EMAIL\_ENTITY\_IS\_SIGNED

public static final com.imis.storageconnector.entitymodel.SystemProperty
EMAIL\_ENTITY\_IS\_SIGNED

Email entity is signed value.

#### RETENTION POLICY TRIGGER

 $\verb|public static final com.imis.storage connector.entity model. System Property \\ \textbf{RETENTION\_POLICY\_TRIGGER}|$ 

Retention policy trigger.

#### RETENTION\_POLICY\_ACTION

public static final com.imis.storageconnector.entitymodel.SystemProperty
RETENTION\_POLICY\_ACTION

Retention policy action.

#### RETENTION\_POLICY\_REASON

public static final com.imis.storageconnector.entitymodel.SystemProperty
RETENTION\_POLICY\_REASON

Retention policy reason.

#### RETENTION\_POLICY\_DETAILED\_DESCRIPTION

public static final com.imis.storageconnector.entitymodel.SystemProperty RETENTION\_POLICY\_DETAILED\_DESCRIPTION

Retention policy detailed description.

#### RETENTION\_POLICY\_REFERENCE

public static final com.imis.storageconnector.entitymodel.SystemProperty
RETENTION\_POLICY\_REFERENCE

Retention policy reference.

## DISPOSITION\_HOLD\_REASON

public static final com.imis.storageconnector.entitymodel.SystemProperty
DISPOSITION\_HOLD\_REASON

Retention policy reason.

#### REVIEW\_MEMBERS

public static final com.imis.storageconnector.entitymodel.SystemProperty
REVIEW\_MEMBERS

Review members.

#### REVIEW\_SCOPE

public static final com.imis.storageconnector.entitymodel.SystemProperty REVIEW\_SCOPE

Review scope entity identifier.

#### **REVIEW COMMENTS**

 $\verb"public static final com.imis.storage connector.entity model. System Property \verb"REVIEW_COMMENTS"$ 

Review comments.

#### REVIEW\_SCHEDULES

public static final com.imis.storageconnector.entitymodel.SystemProperty
REVIEW SCHEDULES

Review schedules.

#### REVIEW\_QUERY\_EXPRESSION

public static final com.imis.storage<br/>connector.entitymodel.SystemProperty<br/>  ${\tt REVIEW\_QUERY\_EXPRESSION}$ 

Review query expression.

#### REVIEW ACTION

public static final com.imis.storageconnector.entitymodel.SystemProperty REVIEW\_ACTION

Review action.

#### **REVIEW\_STATE**

public static final com.imis.storageconnector.entitymodel.SystemProperty REVIEW\_STATE

Review state.

#### **REVIEW MESSAGE**

public static final com.imis.storageconnector.entitymodel.SystemProperty
REVIEW\_MESSAGE

Review message.

#### REVIEW\_SCHEDULED\_ITEMS

public static final com.imis.storageconnector.entitymodel.SystemProperty
REVIEW\_SCHEDULED\_ITEMS

Review entity lists.

#### VERSION\_SERIES\_ID

public static final com.imis.storage<br/>connector.entitymodel.SystemProperty  ${\bf VERSION\_SERIES\_ID}$ 

Version series identifier.

#### VERSIONING\_LABEL

 $\verb|public static final com.imis.storage connector.entity model.System Property \\ \textbf{VERSIONING\_LABEL}$ 

Versioning series label.

#### VERSIONING\_COMMENT

 $\verb|public static final com.imis.storage connector.entity model. System Property \\ \textbf{VERSIONING\_COMMENT}|$ 

Versioning check in comment.

## Methods

#### values

public final static SystemProperty[] values()

#### valueOf

public static SystemProperty valueOf(String name)

# Package com.imis.storageconnector.services

# com.imis.storageconnector.services Class DirectoryEntityType

#### **All Implemented Interfaces:**

Serializable, Comparable

# public final class **DirectoryEntityType** extends Enum

Specifies the type of a IDirectoryEntity.

UNKNOWN directory entity type represents an invalid directory entity which is never returned on a coherent directory entity. **See Also:** 

IDirectoryEntity

Field Summary	
public static final	GROUP Represents a group entity.
public static final	UNKNOWN  Represents an unknown entity.
public static final	USER Represents a user entity.

Method Summary	
static DirectoryEntityType	valueOf(String name)
static DirectoryEntityType[]	values()

#### Methods inherited from class java.lang.Enum

clone, compareTo, equals, getDeclaringClass, hashCode, name, ordinal, toString,
valueOf

#### Methods inherited from class java.lang.Object

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

#### Methods inherited from interface java.lang.Comparable

compareTo

# Fields

### **UNKNOWN**

public static final com.imis.storageconnector.services.DirectoryEntityType UNKNOWN Represents an unknown entity.

### **USER**

public static final com.imis.storageconnector.services.DirectoryEntityType **USER**Represents a user entity.

### **GROUP**

public static final com.imis.storageconnector.services.DirectoryEntityType **GROUP**Represents a group entity.

# Methods

### values

public final static DirectoryEntityType[] values()

### valueOf

public static DirectoryEntityType valueOf(String name)

# com.imis.storageconnector.services Class Discovery

public class **Discovery** extends Object

Provides discovery services such as archive discovery, etc.

See Also:

**IArchive** 

# **Constructor Summary**

public | Discovery()

Method Summary		
static void	addConnectingListener (IConnectingListener listener)	
	Adds an IConnectingListener object.	
static Collection	static Collection   findArchives (Map options)  Gets all available archives.	
static void	removeConnectingListener(IConnectingListener listener)	
	Removes an IConnectingListener object.	

### Methods inherited from class java.lang.Object

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

# Constructors

### **Discovery**

public Discovery()

# Methods

# addConnectingListener

public static void addConnectingListener(IConnectingListener listener)

Adds an IConnectingListener object.

### **Parameters:**

listener - an IConnectingListener.

# remove Connecting Listener

public static void removeConnectingListener(IConnectingListener listener)

Removes an IConnectingListener object.

#### **Parameters:**

listener - an IConnectingListener.

### **findArchives**

```
\begin{array}{c} \text{public static Collection } \textbf{findArchives}(\texttt{Map options}) \\ \text{throws} \quad & \underbrace{\texttt{StorageConnectorException}}_{\texttt{IOException}}, \end{array}
```

Gets all available archives.

### **Parameters:**

options - an archive options.

#### **Returns:**

A collection of IArchiveDescriptor objects.

#### **Throws:**

StorageConnectorException - if

- None of the specified discovery archive type is supported.
- Discovery hint is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while getting available archives on server.

IOException - if an I/O error occurs.

# com.imis.storageconnector.services Interface IArchiveDescriptor

public interface **IArchiveDescriptor** extends

Provides discovery services such as archive discovery, etc.

See Also:

**IArchive** 

Method Summary		
String	getDescription()  Gets the archive description.	
String	getHost()  Gets the archive information as host name or IP address and port separated by colon (:).	
String	getId()  Gets the archive identifier.	
String	getName ( )  Gets the archive name.	
ArchiveType	getType()  Gets the archive type.	
<u>IArchive</u>	open (Map options)  Opens an archive using an archive login and session options.	

# Methods

# getId

public String getId()

Gets the archive identifier.

**Returns:** 

The archive identifier.

# getType

```
public ArchiveType getType()
```

Gets the archive type.

**Returns:** 

The archive type.

### getName

```
public String getName()
```

Gets the archive name.

### **Returns:**

The archive name.

# getDescription

```
public String getDescription()
```

Gets the archive description.

### **Returns:**

The archive description.

# getHost

```
public String getHost()
```

Gets the archive information as host name or IP address and port separated by colon (:).

### **Returns:**

A archive host name or IP address and port.

### open

```
public IArchive open(Map options)
  throws StorageConnectorException
```

Opens an archive using an archive login and session options.

### **Parameters:**

options - an archive login and session options.

### **Returns:**

An IArchive instance.

# com.imis.storageconnector.services Interface IDirectory

public interface **IDirectory** extends

Provides access to different directory services such as directory membership lookups, security related methods, etc. **See Also:** 

IArchive

Method Summary		
com.imis.util.IReadOn lyMap	<u>getGroupMembers</u> (String groupName)  Queries the IDirectory service for a collection of <u>IDirectoryEntity</u> objects that are members of a specified group.	
IDirectoryEntity	getInvalidDirectoryEntity()  Gets the invalid IDirectoryEntity.	
com.imis.util.IReadOn lyMap	getMembers()  Queries the IDirectory service for a collection of all IDirectoryEntity objects.	
<u>IUserProfile</u>	getUserProfile()  Gets the user profile.	
com.imis.util.IReadOn lyList	Search (String query) Searches for directory entities in the IDirectory service using specified search query.	

# Methods

# getInvalidDirectoryEntity

public <u>IDirectoryEntity</u> getInvalidDirectoryEntity()

Gets the invalid  ${\tt IDirectoryEntity}$ .

#### Returns

The invalid IDirectoryEntity.

### getMembers

```
public com.imis.util.IReadOnlyMap getMembers()
    throws StorageConnectorException
```

Queries the IDirectory service for a collection of all IDirectoryEntity objects.

#### **Returns:**

A read-only map of IDirectoryEntity objects sorted by directory entity subjects.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while getting directory members on archive.

### search

```
public com.imis.util.IReadOnlyList search(String query)
    throws StorageConnectorException
```

Searches for directory entities in the IDirectory service using specified search query.

#### **Parameters:**

query - the search query.

#### **Returns:**

A read-only list of IDirectoryEntity objects.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while getting directory members on archive.

# getGroupMembers

```
public com.imis.util.IReadOnlyMap getGroupMembers(String groupName)
    throws StorageConnectorException
```

Queries the IDirectory service for a collection of IDirectoryEntity objects that are members of a specified group.

#### **Parameters:**

groupName - the name of the group of directory entities.

#### **Returns:**

A read-only map of IDirectoryEntity objects that are members of a specified group sorted by directory entity subjects.

### Throws:

NullPointerException - if groupName is a null reference. StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Group name is required and cannot be empty.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while getting directory group members on archive.

# getUserProfile

Gets the user profile.

### **Returns:**

The IUserProfile object or a null reference.

#### **Throws:**

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while getting user profile on archive.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

# com.imis.storageconnector.services Interface IDirectoryEntity

public interface **IDirectoryEntity** extends

Represents a directory entity, a group or a person registered in the IDirectory. **See Also:** 

**IDirectory** 

Method Summary	
String	getDescription()  Gets the directory entity description.
String	<pre>getEmail() Gets the directory entity email address.</pre>
String	getFirstName()  Gets the directory entity first (given) name.
<u> IIcon</u>	getIcon()  Gets the directory entity icon.
String	getLastName()  Gets the directory entity last (surname) name.
String	getSecurityClass()  Gets the directory entity security class.
String	getSubject()  Gets the directory entity subject.
DirectoryEntityType	getType()  Gets the directory entity type.
boolean	isDeleted()  Gets the value indicating whether or not the directory entity is deleted.
boolean	isEnabled()  Gets the value indicating whether or not the directory entity is enabled.

# Methods

# getType

public DirectoryEntityType getType()

Gets the directory entity type.

### **Returns:**

The directory entity type.

### getSubject

```
public String getSubject()
```

Gets the directory entity subject.

The subject represents a IDirectoryEntity unique identifier.

### **Returns:**

The directory entity subject.

### getFirstName

```
public String getFirstName()
```

Gets the directory entity first (given) name.

The directory entity first (given) name is empty in case the entity is a group.

### **Returns:**

A string that represents the directory entity first name.

### getLastName

```
public String getLastName()
```

Gets the directory entity last (surname) name.

The directory entity last (surname) name is empty in case the entity is a group.

#### **Returns:**

A string that represents the directory entity last name.

### getEmail

```
public String getEmail()
```

Gets the directory entity email address.

### **Returns:**

The directory entity email address.

## getDescription

```
public String getDescription()
```

Gets the directory entity description.

### **Returns:**

A string that represents the directory entity description.

# getSecurityClass

```
public String getSecurityClass()
  throws StorageConnectorException
```

Gets the directory entity security class.

The directory entity security class is undefined in case the entity is a group.

### **Returns:**

The directory entity security class.

#### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting templates on archive.

### getIcon

Gets the directory entity icon.

#### **Returns:**

The directory entity icon or a null reference if no icon is set.

#### Throws:

CancellationException - if an operation was canceled by the user.

LoginException - if a login error occurs.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from session pool.
- Error occurred while getting directory members on archive.

IOException - if an I/O error occurs.

### isEnabled

```
public boolean isEnabled()
```

Gets the value indicating whether or not the directory entity is enabled.

#### Returns

true if the directory entity is enabled; otherwise false.

### isDeleted

```
public boolean isDeleted()
```

Gets the value indicating whether or not the directory entity is deleted.

### **Returns:**

true if the directory entity is deleted; otherwise false.

# com.imis.storageconnector.services Interface IIcon

public interface **IIcon** extends

Represents an icon.

Method Summary	
String	getContentType()  Gets the icon content type.
byte[]	getData()  Gets the icon data.

# Methods

# getContentType

public String getContentType()

Gets the icon content type.

### **Returns:**

The icon content type or a null reference if the icon was changed.

### getData

public byte[] getData()

Gets the icon data.

### **Returns:**

The array of bytes containing icon data.

# com.imis.storageconnector.services Interface IUserProfile

public interface **IUserProfile** extends

Represents a profile owned by the authenticated user on the IArchive.

Method Summary		
void	<pre>changePassword(String oldPassword, String newPassword) Changes the user profile password.</pre>	
String	getDescription()  Gets the user profile description.	
String	getEmail ()  Gets the user profile email address.	
String	getFirstName()  Gets the user profile first (given) name.	
Ilcon	getIcon()  Gets the user profile icon.	
String	getLastName()  Gets the user profile last (surname) name.	
String	getSecurityClass()  Gets the user profile security class.	
String	getSubject()  Gets the user profile subject.	
boolean	isDescriptionEditable()  Gets the value indicating whether or not the user profile description is editable.	
boolean	isEmailEditable()  Gets the value indicating whether or not the user profile email address is editable.	
boolean	isFirstNameEditable()  Gets the value indicating whether or not the user profile first name is editable.	
boolean	isIconEditable()  Gets the value indicating whether or not the user profile icon is editable.	
boolean	isLastNameEditable()  Gets the value indicating whether or not the user profile last name is editable.	
void	Saves the user profile changes.	
void	Sets the user profile description.	

void	Sets the user profile email address.
void	Sets the user profile first (given) name.
void	Sets the user profile icon data.
void	Sets the user profile last (surname) name.

# Methods

# getSubject

public String getSubject()

Gets the user profile subject.

### **Returns:**

The user profile subject.

### getFirstName

public String getFirstName()

Gets the user profile first (given) name.

### **Returns:**

The user profile first name.

### setFirstName

```
public void setFirstName(String value)
  throws StorageConnectorException
```

Sets the user profile first (given) name.

### **Parameters:**

value - the user profile first name.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on non editable field is not allowed.

# getLastName

```
public String getLastName()
```

Gets the user profile last (surname) name.

#### **Returns:**

The user profile last name.

### setLastName

```
public void setLastName(String value)
  throws StorageConnectorException
```

Sets the user profile last (surname) name.

#### **Parameters:**

value - the user profile last name.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on non editable field is not allowed.

### getEmail

```
public String getEmail()
```

Gets the user profile email address.

### **Returns:**

The user profile email address.

### setEmail

```
public void setEmail(String value)
  throws StorageConnectorException
```

Sets the user profile email address.

### **Parameters:**

value - the user profile email address.

### Throws:

 $\underline{{\tt StorageConnectorException}} \text{ - if an IMiS/Storage Connector error occurs:}$ 

• Operation on non editable field is not allowed.

## getDescription

```
public String getDescription()
```

Gets the user profile description.

#### **Returns:**

The user profile description.

## setDescription

```
public void setDescription(String value)
  throws StorageConnectorException
```

Sets the user profile description.

#### **Parameters:**

value - the user profile description.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on non editable field is not allowed.

### getSecurityClass

```
public String getSecurityClass()
  throws StorageConnectorException
```

Gets the user profile security class.

### **Returns:**

The user profile security class.

#### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while opening a session on server.
- Error occurred while authenticating a session on server.
- Error getting session from the session pool.
- Error occurred while getting templates on archive.

### getIcon

```
public IIcon getIcon()
```

Gets the user profile icon.

#### **Returns:**

The user profile icon or a null reference if no icon is set or icon was removed.

### setIconData

```
public void setIconData(byte[] data)
  throws StorageConnectorException
```

Sets the user profile icon data.

### **Parameters:**

data - the array of bytes containing user profile icon data or a null reference to remove the icon.

### Throws:

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Operation on non editable field is not allowed.

### isFirstNameEditable

```
public boolean isFirstNameEditable()
```

Gets the value indicating whether or not the user profile first name is editable.

#### Returns

true if the user profile first name is editable; otherwise false.

### **isLastNameEditable**

```
public boolean isLastNameEditable()
```

Gets the value indicating whether or not the user profile last name is editable.

#### **Returns:**

true if the user profile last name is editable; otherwise false.

### **isEmailEditable**

```
public boolean isEmailEditable()
```

Gets the value indicating whether or not the user profile email address is editable.

#### **Returns:**

true if the user profile email address is editable; otherwise false.

## isDescriptionEditable

```
public boolean isDescriptionEditable()
```

Gets the value indicating whether or not the user profile description is editable.

#### Returns:

true if the user profile description is editable; otherwise false.

### isIconEditable

```
public boolean isIconEditable()
```

Gets the value indicating whether or not the user profile icon is editable.

### **Returns:**

true if the user profile icon is editable; otherwise false.

# changePassword

Changes the user profile password.

### **Parameters:**

```
oldPassword - the old password.
newPassword - the new password.
```

### Throws:

NullPointerException - if oldPassword or newPassword is a null reference.

StorageConnectorException - if an IMiS/Storage Connector error occurs:

• Password is required and cannot be empty.

### save

Saves the user profile changes.

### **Throws:**

StorageConnectorException - if an IMiS/Storage Connector error occurs:

- Operation on closed archive is not allowed.
- Error occurred while committing user profile changes on archive.

 ${\tt IOException-if} \ an \ I/O \ error \ occurs.$ 

#### **Index** CBC 34 CFB 34 Α CHANGE\_RETENTION 236 CHANGE\_RIGHTS 235 accessed 261, 273, 284, 298, 322, 371, 451, 471, 487 CHANGE\_SECURITY\_CLASS 236 ACLFilterItem 214 CHANGE\_STATUS 236 acquire 69, 111 changeEntityTemplate 86 acquireSession 112 changePassword 557 addAuthenticatingListener 75, 128 changeRetention 426 addConnectingListener 75, 128, 542 changeRights 425 addDispositionHoldEntry 446 changeSecurityClass 426 addEntry 246 changeStatus 426 checkIn 302 addHandler 205 checkInDraft 89 addObjectRef 192 addPolicyEntry 445, 446 checkOut 384 checkOutEntity 88 addPropertyEntry 246 ADDRESSES 22 CLASS 242 addSession 111 CLASSES 29, 223, 243, 519 AES 31 CLASSIFICATION\_CODE 229, 529 ALL 222 cleanSessions 111 ALLOW 521 clear 9, 258, 406 ANY 242 clone 61, 263 areValuesInherited 291, 300, 340, 380, 433, 479, 490 cloneParts 255 ASCENDING 239 close 63, 69, 108, 113, 145, 292, 342, 357, 447, 482 ATTRIBUTE 213 CLOSED 530 AUDIT\_QUERY 4 closed 322, 371, 472, 487 closeSessions 111 AuditLog 7 auditLogQuery 104, 144, 145 committedValueCount 401 COMPUTER\_NAMES 23 AuditQuery 12 authenticate 79 connecting 116 authenticating 115 ConnectingEvent 43 CONTENT 530 AuthenticatingEvent 37 CONTENT\_MANAGEMENT 4 В CONTENT\_MANAGER 207 ContentTypeMapper 52 BASE16 120, 217, 226 CREATE\_REFERENCES 236 BASE64 120, 217, 227 CREATE\_SUB\_ENTITIES 235 BASE85 120, 217, 227 createAccess 440 BINARY 516 createBinaryValue 290, 337 BOOL 511 createClass 81, 251 createContentPart 277, 293 $\mathbf{C}$ created 261, 272, 284, 297, 321, 353, 370, 419, 450, 458, 471,

486

createEntity 80

createDocument 83, 252, 388, 480

cancel 38, 46

CATEGORY 531

createEntityReference 79 Discovery 542 createFolder 82, 252, 387 DISPOSED 221 createObject 131 DISPOSITION\_HOLD\_REASON 536 DOCUMENT 242 createReferences 426 createReview 100, 101 Document 56 DOCUMENTS 30, 223, 244, 520 createStringMaxValue 289, 336 createSubEntities 425 DOMINO\_DOC 207 CREATOR 530 DOUBLE 513 DRAFT 233 D DRAFT\_MANAGEMENT 4 E **DATE 513** DATE\_TIME 513 ECB 34 DECIMAL1 515 DECIMAL10 516 edit 421 DECIMAL2 515 EMAIL\_ENTITY\_DATETIME 535 DECIMAL3 515 EMAIL\_ENTITY\_FROM 535 DECIMAL4 515 EMAIL\_ENTITY\_IS\_SIGNED 536 DECIMAL5 515 EMAIL\_ENTITY\_MESSAGE\_ID 535 DECIMAL6 515 EMAIL\_ENTITY\_PRIORITY 536 DECIMAL7 516 EMAIL\_ENTITY\_SUBJECT 535 DECIMAL8 516 EMAIL\_ENTITY\_TO 535 DECIMAL9 516 EMAIL\_ENTITY\_TOBCC 535 DEFAULT\_PAGE\_COUNT 174 EMAIL\_ENTITY\_TOCC 535 DEFAULT\_PAGE\_SIZE 173 ENTITY\_MOVE 518 delete 62, 274, 347, 364, 383, 384, 410, 414, 421, 456 ENTITY\_REFERENCE 515 DELETE\_ACCESS 235 ENTITY\_SAVE 518 deleteAccess 425, 440 ENTITY\_SECURITY\_CLASS 518 DELETED 220 ENTITY\_STATUS 518 deleted 268 entityCount 500 DELETED\_ENTITY\_AGENT 532 EntityFilter 223 DELETED\_ENTITY\_CLASSIFICATION\_CODE 532 EntityFilterItem 225 DELETED\_ENTITY\_DELETE\_DATETIME 532 EntitySortKey 237 DELETED\_ENTITY\_REASON 532 EVENT\_IDS 25 EXPORT 508 DELETED\_ENTITY\_REFERENCE 532 deleteEntity 87, 90 **EXTERNAL 122, 229** deleteObject 134 EXTERNAL\_IDS 530 DENY 522 F **DESCENDING 240 DESCRIPTION 529** detach 264 FILE\_SYSTEM 207 detachParts 256 finalize 189, 204 DIRECTORY\_ENTITY 213, 511 findArchives 543 discard 302 FOLDER 242 discardDraft 89 FOLDERS 30, 223, 244, 520

freeInstance 189	getData 552
fromBackEndAuthenticationOptions 191	getDate 305
fromBackEndAuthenticationType 191	getDateFrom 17
fromLegacyContentType 52	getDateTo 18
	getDefaultExtension 56
G	getDefaultMime 56
	getDefinition 274, 455
getAcceptableIssuers 45	getDeletedEntities 97
getAccessibleCount 349	getDeletedEntity 96
getAccessMode 57	getDescription 260, 268, 272, 283, 297, 318, 353, 369, 392
getACL 285, 326, 355, 473	419, 430, 450, 458, 466, 485, 500, 545, 550, 555
getAction 451, 459, 468	getDetailedDescription 452, 459
getAddresses 13	getDirection 238
getAddressFrom 13	getDirectory 76
getAddressTo 14	getDispositionHoldEntries 445
getAgent 268, 389, 494	getDispositionHolds 78
getArchivalInformationalPackage 331, 475	getDocuments 478
getArchive 327, 374, 473, 488	getDraftCreator 324, 372
getArguments 8	getDraftId 323, 372
getAuditLog 77, 130, 331, 475, 503	getDraftInfo 107, 372
getAuthenticationType 45	getDrafts 97
getAutoSave 58	getEffectiveRights 103, 255, 285, 298, 326, 346, 354, 374,
getBCC 308	409, 416, 420, 433, 473, 488
getCapacity 129	getEmail 550, 555
getCategories 288, 299, 333, 349, 376	getEmailEntity 286, 330
getCategory 349	getEntityCollectionPageCount 77
getCC 307	getEntityCollectionPageSize 77
getClassificationCode 267, 316, 368, 389, 464, 485, 504	getEntityInfo 91, 92, 93
getComments 470	getEntityReference 79
getComputerNameFrom 15	getEntityType 500
getComputerNames 15	getEntries 245
getComputerNameTo 16	getEventIdFrom 17
getContent 276, 293, 300, 377, 501	getEventIdQueryType 16
getContentDescriptions 493	getEventIds 17
getContentType 118, 247, 261, 552	getEventIdTo 17
getContentTypeResolver 192	getEvidence 505
getContentTypes 118	getEvidenceRecords 332, 476
getContext 68, 110	getExplicitAllowRights 346, 409
getCreated 59	getExplicitContext 456
getCreator 272, 285, 298, 328, 354, 375, 419, 450, 458, 473,	getExplicitDenyRights 346, 409
488	getExtension 117, 261
getCurrentLocation 395	getExtensions 56, 117
getCustodian 395	getExternalIds 333, 376
getCustomContents 277, 293, 300, 377, 501	getFilter 18, 442
getCustomContentTypeResolver 192	getFirstName_550_554

getFrom 306 getOwner 68, 286, 298, 328, 344, 375, 407, 424, 440, 453, getGroupMembers 547 474, 488 getHomeLocation 394 getParent 262, 327, 375 getHost 76, 545 getParts 416 getIcon 551, 556 getPasswordCallback 44 getId 59, 68, 260, 266, 271, 282, 296, 316, 352, 368, 392, 418, getPersistent 110 449, 464, 484, 500, 544 getPhysicalEntity 287, 330 getInheritedAllowRights 345, 408 getPickListValues 291, 301, 340, 381, 433, 479, 490, 502 getInheritedContext 455 getPolicyEntries 445 getInheritedDenyRights 345, 408 getPriority 309 getInputDataStream 60 getProfileCapacity 143 getInstance 113, 189, 204 getProfileObjectCount 144 getInternalId 106 getProfileSpaceAvailable 143 getInternalLogging 204 getProfileSpaceUsed 144 getInvalidDirectoryEntity 546 getProperties 76, 289, 299, 334, 377, 501 getItem 223 getPropertyEntries 245 getKey 398, 399 getPropertyList 501 getKeyTypes 45 getPropertyName 238, 408 getKeywords 287, 299, 332, 376, 476, 489 getProtocol 43 getPublicClassificationCode 105, 267, 317, 368, 389, 465, 485 getLabel 430, 500 getLastAccessed 60 getQueryExpression 469 getLastName 550, 554 getReason 269, 273, 390, 451, 459, 494 getLocalCertificate 46 getReference 269 getLocalCertificateKey 46 getReferenceIds 355, 420 getLocalSocketAddress 43 getReferences 335, 378 getLogEntities 98 getRemoteCertificateChain 45 getMandate 452, 460 getRemoteHost 43 getMembers 469, 546 getRemoteSocketAddress 43 getMessage 7, 468, 486 getReport 105, 341, 382, 480, 491 getRetention 336, 378 getMessageId 305 getMimes 57 getRetentionPolicies 78, 478 getMode 320, 444, 467 getReviewedItems 477 getModified 59 getReviewInfo 102 getModifiedBy 284, 297, 321, 354, 370, 420, 472, 487 getReviews 102 getMoveAgents 505 getRootClasses 95 getMoveClassificationCodes 506 getSaveLog 329, 474 getMoveDateTimes 506 getScheduledItems 477 getMoveDetails 329 getScope 442, 469 getMoveReasons 505 getSecurityClass 326, 374, 550, 556 getName 271, 415, 429, 450, 457, 544 getSecurityClassChangeDetails 329 getSecurityClassFrom 495 getObjectIds 16 getObjectScope 16 getSecurityClassTo 495 getSession 111 getOptions 38 getOriginal 460 getSessionPool 113 getOutputDataStream 60 getSessionQueryType 13

getSessionScope 13 getVersionSequence 324, 373 getSignificance 319, 369 getXmlValue 435 getSize 59, 261 getXmlValues 437 GROUP 541 getSortOrder 18 getSourceId 283, 297 Η getSpaceAvailable 129 getSpaceUsed 130 getSslProtocols 44 hasAIP 323, 371, 482, 492 hasDraft 323, 372 getStage 43 getState 467, 486 hasReferences 335, 377 getStatus 319, 370, 393, 466, 485 has Versions 324, 373 getStore 57 Ι getStoreInfo 129 getStoreType 129 getStub 316, 464 IACSession 67 getSubEntities 95, 269, 339, 379 IASessionPool 110 getSubEntityTemplates 335, 377, 477, 489 ID192 123, 218, 230 getSubject 309, 345, 408, 550, 554 ID256 124, 219, 231 IMIS\_ARC 207 getSubjectType 345, 408 IMIS\_ARCHIVE 6 getSubParts 262 IMPORT 507 getSystemId 504 getSystemProperties 289, 299, 334, 376, 478, 490, 502 IMPORT\_EXPORT 4 imported 504 getSystemProperty 290, 300, 339, 380, 479, 490, 502 INHERITED\_VALUES 524 getSystemPropertyName 105 getSystemPropertySortKey 106 INT128 513 getTemplate 287, 299, 331, 375, 475, 488 INT16 512 getTemplates 78, 348 INT32 512 getTimeStamp 68 INT64 512 INT8 512 getTitle 267, 282, 296, 317, 352, 369, 419, 465, 485 INTERNAL 122, 229 getTo 307 getTransferDetails 330 isAppendOnly 432 getTrigger 451, 458 isChildClassificationCodeGenerated 251, 369, 386 isClosed 57, 76, 128, 325, 472 getTrustAnchors 44 getType 38, 223, 320, 370, 430, 544, 549 isContainer 267 getUser 76 isDefault 398 isDeleted 551 getUserNameFrom 14 getUserNames 14 isDescriptionEditable 557 getUserNameTo 15 isEffective 442 getUserProfile 548 isEmailArchivalCapable 500 isEmailEditable 557 getValue 247, 398, 433, 434, 435, 496 getValues 436, 437 isEnabled 551 isFirstNameEditable 556 getVersionComment 325, 373 isIconEditable 557 getVersionInfo 194 isIncludedInAIP 432 getVersionLabel 324, 373 getVersions 374 isIndexed 262

isInherited 274, 432 M isLastNameEditable 557 isModified 58 isMultiValue 430 MAX\_OPTION\_NAME\_LENGTH 155 isNew 58 modified 261, 272, 284, 297, 321, 354, 370, 420, 451, 471, 487, 494 isNonEmpty 431 isPermanent 322, 371 MODIFIED\_BY 530 isPickList 433 move 61, 264, 383 **MOVE ACCESS 235** isPropagated 426, 441 isPublic 417, 430 moveAccess 425 isReadOnly 416, 431 moved 390 MOVED\_ENTITY\_AGENT 532 isReadOnlyAfterCheckIn 416, 431 isReadOnlyAfterCreate 416, 431 MOVED\_ENTITY\_CLASSIFICATION\_CODE 532 isRecursive 19 MOVED\_ENTITY\_MOVE\_DATETIME 532 isRemoteCertificateAccepted 45 MOVED\_ENTITY\_REASON 532 isRequired 430 moveEntity 87 isSearchable 432 moveObject 133 isSigned 262, 310 moveParts 256, 257 isTruncated 350  $\mathbf{O}$ isUnique 432 isValid 19 isVersionable 417, 431, 501 OBJECT\_IDS 24 OBJECT\_SESSION\_TIMESTAMP 27 K OBJECT\_TIMESTAMP\_SESSION 27 objectCount 130 KERBEROS5\_SERVICE\_TICKET 40 objectTransfer 198 KEYWORDS 530 **ODMA 207** KS128 36 OFB 34 KS192 36 open 301, 382, 491, 545 KS256 36 openArchive 198 openClass 84 L openContentManagerStorage 197 openDataInputStream 248, 262, 497 LDAP\_CREDENTIALS 40 openDataOutputStream 248, 263, 497 LIST 20 openDocument 85 LNDI\_MSS 207 openDocumentManagerStorage 197 LOCAL\_CERTIFICATE\_SELECTION 49 openDraft 107 LOCAL\_CREDENTIALS 40 OPENED 530 lock 69 opened 322, 371, 472, 487 logAddHandler 192 openEntity 83 logGetLevel 193 openFileSystemStorage 197 logInternal 193 openFolder 85 logIsInternal 193 openIMiSARCStorage 194, 195, 196 logRemoveHandler 192 openObject 132 logSetLevel 193 openReview 104

OPTION\_APPLICATION\_NAME 157 PHYSICAL ENTITY CUSTODIAN 534 OPTION\_ARCHIVE\_ID 174 PHYSICAL\_ENTITY\_DESCRIPTION 534 OPTION\_AUTH\_CRYPTO\_ALGORITHM 163 PHYSICAL\_ENTITY\_HOME\_LOCATION 534 OPTION\_AUTH\_CRYPTO\_CIPHERMODE 164 PHYSICAL\_ENTITY\_IDENTIFIER 534 OPTION\_AUTH\_CRYPTO\_KEYSIZE 162 PHYSICAL\_ENTITY\_RETURN\_DUE\_DATETIME 535 OPTION\_AUTH\_KEY 160 PHYSICAL\_ENTITY\_STATUS 534 OPTION\_AUTH\_TYPE 159 PHYSICAL\_ENTITY\_STATUS\_CHANGE\_DATETIME 534 OPTION\_AUTH\_TYPE\_DISPOSITION 176 PRE\_AUTHENTICATE 40 OPTION COMPUTER NAME 156 PRE SHARED KEY 40 OPTION\_CONTENT\_PART\_IDENCODING 171 PROPERTIES 233 OPTION\_CONTENT\_PART\_IDTYPE 170 PROPERTY\_AUDIT\_LOG\_REQUIRED 187 OPTION\_DEFERRED\_COLLECTION\_FILTERING 186 PROPERTY\_AUDIT\_LOG\_SUPPORTED 187 OPTION\_DISCOVERY\_ARCHIVETYPES 176 PROPERTY\_AUTHENTICATED\_USER\_ACCOUNT 189 OPTION\_DISCOVERY\_HINT 175 PROPERTY\_CAPABILITIES 187 OPTION\_ENTITY\_IDENCODING 169 PROPERTY\_CLASS\_HIERARCHY\_DELIMITER 188 OPTION\_ENTITY\_IDTYPE 168 PROPERTY\_DOCUMENT\_HIERARCHY\_DELIMITER 188 OPTION\_ENTITYCOLLECTION\_PAGECOUNT 173 PROPERTY\_FOLDER\_HIERARCHY\_DELIMITER 188 OPTION ENTITYCOLLECTION PAGESIZE 172 PROPERTY ROOT EFFECTIVE RIGHTS 188 OPTION\_IMPERSONALIZATION\_USER\_NAME 184 PROPERTY\_SERVICE\_NAME 188 OPTION\_KERBEROS\_KDC 177 PROPERTY\_SERVICE\_VERSION 188 OPTION\_KERBEROS\_REALM 179 PROPERTY\_TRAFFIC\_ENCRYPTED 189 OPTION\_KERBEROS\_SPN 178 OPTION\_KERBEROS\_TICKET 179 Q OPTION\_LOCAL\_ADDRESS 158 OPTION\_LOCAL\_CERTIFICATE 180 queueForConvert 265 OPTION\_LOCAL\_CERTIFICATE\_KEY 181 queueForIndex 265 OPTION\_MAX\_IO\_PAYLOAD\_SIZE 185 queuePartsForConvert 257 OPTION\_MAX\_SESSIONS\_PER\_USER 153 queuePartsForIndex 258 OPTION\_NODES 154 OPTION\_OBJECT\_IDENCODING 166 R OPTION\_OBJECT\_IDKIND 167 OPTION\_OBJECT\_IDTYPE 165 RANGE 21 OPTION\_OUTBOUND\_ADDRESS 182 READ 64, 210 OPTION\_OUTBOUND\_ADDRESS\_V6 183 READ\_ACCESS 235 OPTION\_PERSISTENT\_SESSIONS 152 READ\_WRITE 65, 211 OPTION\_USER\_NAME 155 readAccess 424, 440 OPTION\_USER\_PASSWORD 161 readOptionDiscoveryArchiveTypes 190 readOptionDiscoveryHint 190 optionsToString 190 OWNER 530 readOptionEntityCollectionPageCount 190 readOptionEntityCollectionPageSize 190 P **RECURSIVE 523** REFERENCE 531 PARENT\_INFO 233 **REFERENCES 233** partsCount 416 release 69, 111

releaseSession 112

PHYSICAL\_ENTITY\_CURRENT\_LOCATION 534

setArguments 8 releaseSessionPool 114 REMOTE\_CERTIFICATE\_VALIDATION 49 setAutoSave 58 setBCC 308 removeAuthenticatingListener 75, 128 removeConnectingListener 75, 128, 543 setCancel 38, 47 removeHandler 205 setCategories 288, 334 REPORTS 4 setCategory 349 resolveExternalObjectId 142 setCC 308 RETENTION\_POLICY\_ACTION 536 setChangeRetention 362 RETENTION\_POLICY\_DETAILED\_DESCRIPTION 536 setChangeRights 361 RETENTION\_POLICY\_REASON 536 setChangeSecurityClass 361 RETENTION\_POLICY\_REFERENCE 536 setChangeStatus 362 RETENTION\_POLICY\_TRIGGER 536 setChildClassificationCodeGenerated 251, 387 retrieveObject 140, 141 setClassificationCode 317 setComments 470 returnDue 396 REVIEW\_ACTION 537 setComputerNameFrom 15 REVIEW\_COMMENTS 537 setComputerNameTo 16 REVIEW\_MEMBERS 537 setCreateAccess 412 REVIEW\_MESSAGE 537 setCreateReferences 363 REVIEW\_QUERY\_EXPRESSION 537 setCreateSubEntities 361 REVIEW\_SAVE 518 setCurrentLocation 395 REVIEW\_SCHEDULED\_ITEMS 538 setCustodian 396 REVIEW\_SCHEDULES 537 setCustomContentTypeResolver 192 REVIEW\_SCOPE 537 setDate 306 REVIEW\_STATE 537 setDateFrom 18 REVIEW\_STATUS 518 setDateTo 18 setDeleteAccess 360, 413 S setDescription 260, 283, 318, 353, 393, 466, 555 setDirection 238 save 62, 292, 342, 356, 447, 481, 558 setEmail 555 SAVE\_LOG 530 setEntityCollectionPageCount 77 search 99, 100, 340, 381, 547 setEntityCollectionPageSize 77 SECURED 51 setEntitySecurityClass 94 SECURITY\_CLASS 531 setEntityStatus 94 SECURITY\_CLASS\_CHANGE\_AGENT 531 setEventIdFrom 17 SECURITY\_CLASS\_CHANGE\_FROM 531 setEventIdQueryType 16 setEventIdTo 17 SECURITY\_CLASS\_CHANGE\_MODIFIED\_DATETIME 531 setExtensions 56 SECURITY\_CLASS\_CHANGE\_REASON 531 setExternalIds 333 SECURITY\_CLASS\_CHANGE\_TO 531 setExternalObjectId 141 SESSION\_INITIALIZATION 48 setFilter 18, 454 SESSION\_OBJECT\_TIMESTAMP 27 setFirstName 554 SESSION\_TIMESTAMP\_OBJECT 27 setFrom 306 setAction 468 setHomeLocation 394 setAddressFrom 14 setIconData 556 setAddressTo 14 setId 392

setInternalLogging 204 setValues 403, 404, 405 setIsClosed 57, 129 setWriteAccess 360, 412 setIsModified 58 setXmlValue 402 setXmlValues 404 setIsNew 58 SIGNIFICANCE 530 setKeywords 288, 332, 476 STATUS 529 setLastName 555 setLevel 205 statusChange 394 setLocalCertificate 46 Storage 128 setLocalCertificateKey 46 StorageConnectorException 201, 202 setMembers 470 storeObject 135, 136, 137, 138, 139 setMessage 8 STRING10 514 STRING100 514 setMessageId 305 setMimes 57 STRING20 514 STRING200 514 setMoveAccess 360 setObjectScope 16 STRING30 514 STRING40 514 setOwner 68, 286, 328, 474 setParts 255 STRING50 514 setPersistent 110 STRINGMAX 513 setPriority 310 subEntityCount 269, 325, 374 setPropagated 364, 413 T setPropertyName 238 setReadAccess 359, 412 TEMPLATES 233 setRecursive 19 setReferenceIds 355 **TIME 513** setRemoteCertificateAccepted 45 TIMESTAMP\_OBJECT\_SESSION 27 setReturnDue 396 TIMESTAMP\_SESSION\_OBJECT 27 TITLE 529 setScope 453 setSecurityClass 327, 379 toBackEndAuthenticationOptions 191 setSessionQueryType 13 toBackEndAuthenticationType 191 setSessionScope 13 toLegacyContentType 52 setSigned 310 toString 214, 223, 225 setSignificance 319 TRANSFERRED\_ENTITY\_AUDIT\_LOG 533 setSortOrder 18 TRANSFERRED\_ENTITY\_CLASSIFICATION\_CODE 533 setSslProtocols 44 TRANSFERRED\_ENTITY\_EVIDENCE 533 setStatus 320, 379, 393, 467, 489 TRANSFERRED\_ENTITY\_IMPORT\_DATETIME 533 setSubject 309 TRANSFERRED\_ENTITY\_MOVE\_AGENT 533 setTimeStamp 69 TRANSFERRED\_ENTITY\_MOVE\_CLASSIFICATION\_CO setTitle 282, 318, 352, 465 DE 534 setTo 307 TRANSFERRED\_ENTITY\_MOVE\_DATETIME 533 setTrustAnchors 44 TRANSFERRED\_ENTITY\_MOVE\_REASON 533 setUserNameFrom 15 TRANSFERRED\_ENTITY\_SYSTEM\_ID 533 setUserNameTo 15 IJ setValidFrom 363, 413 setValidTo 363, 414 setValue 248, 401, 403, 496 UINT128 513

UINT16 512

UINT32 512

UINT64 513

UINT8 512

UNKNOWN 5, 50, 122, 212, 229, 242, 511, 540

unlock 69

UNSECURED 51

USER 541

USER\_NAMES 23

### V

validFrom 427, 441

validTo 427, 441

valueCount 433

valueOf 4, 6, 21, 23, 25, 28, 30, 32, 34, 36, 40, 49, 51, 65, 120,

122, 124, 208, 211, 213, 217, 219, 221, 227, 229, 231, 233,

236, 240, 242, 244, 508, 516, 518, 520, 522, 524, 538, 541

values 4, 6, 21, 23, 25, 27, 30, 32, 34, 36, 40, 49, 51, 65, 120,

122, 124, 207, 211, 213, 217, 219, 221, 227, 229, 231, 233,

236, 240, 242, 244, 508, 516, 518, 520, 522, 524, 538, 541

VERSION\_SERIES\_ID 538

VERSIONING\_COMMENT 538

VERSIONING\_LABEL 538

**VERSIONS 233** 

### W

WRITE 65, 211

WRITE\_ACCESS 235

writeAccess 424, 440