

Method Summary	
void	<a href="#">addErrorMessage</a> (java.lang.String sErrorMessage) add a message to the list of failed checks
void	<a href="#">addNotificationMessage</a> (java.lang.String sMessage, <a href="#">Priority</a> priority) add a notification message which will be shown after the transaction was successful
void	<a href="#">addTask</a> (java.lang.String sTask, java.lang.String sOwner, java.lang.String sDelegator, java.util.Date dScheduled, java.util.Date dCompleted, java.lang.Integer iPriority, java.util.Collection<java.lang.Integer> collTaskObjects) add a new entry in the task list
void	<a href="#">addTimelimitTask</a> (java.lang.Integer iGenericObjectId, java.util.Date dateExpired, java.lang.String sDescription, java.util.Date dateCompleted) add a new entry in the timelimit task list
<a href="#">CommonDate</a>	<a href="#">calculateTimelimit</a> ( <a href="#">MasterDataVO</a> mdvoTimelimit)
<a href="#">CommonDate</a>	<a href="#">calculateTimelimit</a> ( <a href="#">MasterDataVO</a> mdvoTimelimit, <a href="#">CommonDate</a> ndStartDate) calculate a timelimit from a masterdata record of entity timelimit
void	<a href="#">changeState</a> (int iNumeral) changes the state for the current generic object
void	<a href="#">changeState</a> (java.lang.Integer iGenericObjectId, int iNumeral) changes the state for generic object with intid iGenericObjectId
boolean	<a href="#">check</a> ( <a href="#">DynamicAttributeVO</a> attrvo, int iComparator) simple version of check only for NULL and NOT_NULL checks
boolean	<a href="#">check</a> ( <a href="#">DynamicAttributeVO</a> attrvo, int iComparator, <a href="#">DynamicAttributeVO</a> attrvoCompare) validate if the condition defined in iComparator is true between attrVO and attrvoCompare if the condition is false the attribute is added to liAttributeCheckFailed
java.lang.Integer	<a href="#">createObject</a> ( <a href="#">RuleObjectContainerCVO</a> roccvo, java.lang.String sGeneratorName) create a new object based on the given RuleObjectContainerCVO If the object-generation fails, this method will not throw an error, but return null instead of the new object id
java.lang.Integer	<a href="#">createObject</a> (java.lang.String sGeneratorName) Create a new object based on the current generic object.
void	<a href="#">debug</a> (java.lang.Object message) allows login in rules, debug level
void	<a href="#">evaluateCheckResult</a> () evaluates the result of all prior calls to the check(..) function if liAttributeCheckFailed is not empty an error String is created
<a href="#">RuleVO</a>	<a href="#">getCurrentRule</a> ()
<a href="#">MasterDataVO</a>	<a href="#">getCurrentUser</a> ()
java.util.Collection< <a href="#">MasterDataVO</a> >	<a href="#">getDependants</a> (java.lang.String sEntityName) gets the dependant masterdata records belonging to the given entity, for the current generic object.
java.util.Collection< <a href="#">MasterDataVO</a> >	<a href="#">getDependants</a> (java.lang.String sEntityName,

<a href="#">aVO</a> >	java.lang.String sForeignKeyFieldName) gets the dependant masterdata records belonging to the given entity, for the current generic object, using the given foreign key field to the current generic object.
<a href="#">GenericObjectVO</a>	<a href="#">getGenericObject</a> ()
<a href="#">GenericObjectVO</a>	<a href="#">getGenericObject</a> (java.lang.Integer iGenericObjectId) get the GenericObjectVO with the given id
java.util.Collection<java.lang.Integer>	<a href="#">getGenericObjectContaining</a> (java.lang.Integer iModuleId) Find all generic objects containing the specified generic object
java.util.Collection<java.lang.Integer>	<a href="#">getGenericObjectContaining</a> (java.lang.Integer iGenericObjectId, java.lang.Integer iModuleId) Find all generic objects containing the specified generic object
java.util.Collection<java.lang.Integer>	<a href="#">getGenericObjectParts</a> (java.lang.Integer iModuleId) get a collection of all contained generic object ids in specified module for the current generic object
java.util.Collection<java.lang.Integer>	<a href="#">getGenericObjectParts</a> (java.lang.Integer iGenericObjectId, java.lang.Integer iModuleId) get a collection of all contained generic object ids in specified module for generic object with intid iGenericObjectId
java.util.Collection<java.lang.Integer>	<a href="#">getGenericObjectsOriginating</a> (java.lang.Integer iModuleId) gets collection of all originating generic object ids in specified module for the current generic object
java.util.Collection<java.lang.Integer>	<a href="#">getGenericObjectsOriginating</a> (java.lang.Integer iGenericObjectId, java.lang.Integer iModuleId) gets collection of all originating generic objects ids in specified module for generic object with intid iGenericObjectId
java.util.Collection<java.lang.Integer>	<a href="#">getGenericObjectsResulting</a> (java.lang.Integer iModuleId) gets collection of all resulting generic object ids in specified module for the current generic object
java.util.Collection<java.lang.Integer>	<a href="#">getGenericObjectsResulting</a> (java.lang.Integer iGenericObjectId, java.lang.Integer iModuleId) gets collection of all resulting generic object ids in specified module for generic object with intid iGenericObjectId
java.lang.Integer	<a href="#">getInitialStateNumeral</a> ()
java.lang.Integer	<a href="#">getInitialStateNumeral</a> (java.lang.Integer iGenericObjectId)
java.util.List< <a href="#">NuclosMail</a> >	<a href="#">getMails</a> (boolean remove) Get mails from POP3 by system parameters
java.util.List< <a href="#">NuclosMail</a> >	<a href="#">getMails</a> (java.lang.String pop3Host, java.lang.String pop3Port, java.lang.String pop3User, java.lang.String pop3Password, boolean remove)
<a href="#">MasterDataVO</a>	<a href="#">getMasterData</a> ()
<a href="#">MasterDataVO</a>	<a href="#">getMasterData</a> (java.lang.String sEntityName, java.lang.Integer iId)
java.util.Collection<java.lang.Object>	<a href="#">getMasterDataIds</a> (java.lang.String sEntityName)
<a href="#">MasterDataWithDependantsVO</a>	<a href="#">getMasterDataWithDependants</a> (java.lang.String sEntit

	yName, java.lang.Integer iId)
java.lang.Integer	<a href="#">getModuleId()</a>
java.lang.Integer	<a href="#">getModuleId</a> (java.lang.Integer iGenericObjectId)
<a href="#">MasterDataVO</a>	<a href="#">getNewMasterDataCVO</a> (java.lang.String sEntity) Create and return a new MasterDataVO for a certain entity.
java.lang.Integer	<a href="#">getNextIntid</a> ()
java.io.Serializable	<a href="#">getProperty</a> (java.lang.String sKey)
java.util.Collection<java.lang.Integer>	<a href="#">getRelatedGenericObjectIds</a> (java.lang.Integer iModuleId, java.lang.Integer iGenericObjectId, boolean bForward, java.lang.String relationType)
java.util.List< <a href="#">RuleNotification</a> >	<a href="#">getRuleNotification</a> () get the notifications added by a single rule
<a href="#">RuleObjectContainerCVO</a>	<a href="#">getRuleObjectContainerCVO</a> () may be called by rules to get the current object.
<a href="#">RuleObjectContainerCVO</a>	<a href="#">getRuleObjectContainerCVOIfAny</a> () may be called by the BeanShellRunner only.
java.lang.Object	<a href="#">getSourceAttributeValue</a> (java.lang.String sAttributeName) Gets an attribute value from a source object in an object generation.
<a href="#">RuleObjectContainerCVO</a>	<a href="#">getSourceObjectContainerCVO</a> () may be called by rules to get the source object for object generation rules
java.lang.String	<a href="#">getUserMailAddress</a> (java.lang.String sUserName)
java.lang.Integer	<a href="#">getValueIdFromValue</a> (java.lang.String sAttributeName, java.lang.Object oValue) Iterates the value list of the attribute with the given name, trying to find an entry with the given value.
static java.lang.Integer	<a href="#">getValueIdOrNull</a> ( <a href="#">DynamicAttributeVO</a> attrvo)
static java.lang.Object	<a href="#">getValueOrNull</a> ( <a href="#">DynamicAttributeVO</a> attrvo)
boolean	<a href="#">hasAttributeChanged</a> (java.lang.Integer iGenericObjectToCompareWith, java.lang.String... asAttributeNames) <b>Deprecated.</b>
boolean	<a href="#">hasAttributeChanged</a> (java.lang.String... sAttributeName) <b>Deprecated.</b>
boolean	<a href="#">hasFieldChanged</a> (java.lang.String sEntityName, java.lang.Integer iObjectToCompareWith, java.lang.String... asFieldNames)
boolean	<a href="#">hasFieldChanged</a> (java.lang.String sEntityName, java.lang.String... sFieldName)
boolean	<a href="#">hasMasterDataFieldChanged</a> (java.lang.String sEntityName, java.lang.Integer iId, java.lang.String sFieldName) checks whether the value of the given masterdatafield has changed

void	<a href="#"><u>invalidateRelation</u></a> (java.lang.Integer iGenericObjectIdFrom, java.lang.Integer iGenericObjectIdTo, java.lang.String relationType) invalidates the relation between the given generic objects, of the given type, by setting the "validUntil" field to the current date, if necessary.
boolean	<a href="#"><u>isAttributeNull</u></a> ( <a href="#"><u>DynamicAttributeVO</u></a> attrvo)
boolean	<a href="#"><u>isAttributeValueEqual</u></a> (java.lang.Integer iGenericObjectId, java.lang.String sAttributeName, java.lang.Object oValue) <b>Deprecated.</b>
boolean	<a href="#"><u>isAttributeValueEqual</u></a> (java.lang.String sAttributeName, java.lang.Object oValue) <b>Deprecated.</b>
boolean	<a href="#"><u>isAttributeValueNull</u></a> (java.lang.Integer iGenericObjectId, java.lang.String sAttributeName) <b>Deprecated.</b>
boolean	<a href="#"><u>isAttributeValueNull</u></a> (java.lang.String sAttributeName) <b>Deprecated.</b>
boolean	<a href="#"><u>isFieldNull</u></a> (java.lang.String sEntityName, <a href="#"><u>MasterDataVO</u></a> mdvo, java.lang.String sFieldName)
boolean	<a href="#"><u>isFieldValueEqual</u></a> (java.lang.String sEntityName, java.lang.Integer iObjectId, java.lang.String sFieldName, java.lang.Object oValue) Compare the value of an attribute from a generic object stored in the database with the given value.
boolean	<a href="#"><u>isFieldValueEqual</u></a> (java.lang.String sFieldName, java.lang.Object oValue) Compare the value of a field from the current object with the given value.
boolean	<a href="#"><u>isFieldValueNull</u></a> (java.lang.String sFieldName)
boolean	<a href="#"><u>isFieldValueNull</u></a> (java.lang.String sEntityName, java.lang.Integer iObjectId, java.lang.String sFieldName) check if a field value of object with intid iObjectId is null.
boolean	<a href="#"><u>isGenericObjectNew</u></a> () <b>Deprecated.</b>
boolean	<a href="#"><u>isObjectNew</u></a> ()
boolean	<a href="#"><u>isPeriodOverlapping</u></a> (java.util.Date datePeriod1From, java.util.Date datePeriod1Until, java.util.Date datePeriod2From, java.util.Date datePeriod2Until)
boolean	<a href="#"><u>isPeriodValid</u></a> (java.util.Date dateFrom, java.util.Date dateUntil) checks if dateFrom is before dateUntil or if one of them is null
boolean	<a href="#"><u>isStateChangePossible</u></a> (java.lang.Integer iGenericObjectId, int state) check if a state change to state is possible for generic object with id iGenericObjectId
void	<a href="#"><u>logError</u></a> (java.lang.String sMessage) write error message into protocol table (scheduled timelimit rules)
void	<a href="#"><u>logInfo</u></a> (java.lang.String sMessage)

	write info message into protocol table (scheduled timelimit rules)
void	<a href="#">logWarning</a> (java.lang.String sMessage) write warning message into protocol table (scheduled timelimit rules)
java.util.Date	<a href="#">now</a> () get todays date with hour, minute, second and milisecond set to the current time.
void	<a href="#">relate</a> (java.lang.Integer iGenericObjectIdFrom, java.lang.Integer iGenericObjectIdTo, java.lang.String relationType) creates a relation between the given generic objects, of the given type.
void	<a href="#">relate</a> (java.lang.Integer iGenericObjectIdFrom, java.lang.Integer iGenericObjectIdTo, java.lang.String relationType, boolean bDeferred) creates a relation between the given generic objects, of the given type.
void	<a href="#">relate</a> (java.lang.Integer iGenericObjectIdFrom, java.lang.Integer iGenericObjectIdTo, java.lang.String relationType, java.util.Date dateValidFrom, java.util.Date dateValidUntil, java.lang.String sDescription) creates a relation between the given generic objects, of the given type.
<a href="#">NuclosFileImportResult</a>	<a href="#">runImport</a> ( <a href="#">NuclosFileImport</a> fileimport) define and execute a file import (csv)
java.util.Collection< <a href="#">NuclosFile</a> <a href="#">e</a> >	<a href="#">runPDFReport</a> (java.lang.String reportName) run report on server object
java.util.Collection< <a href="#">NuclosFile</a> <a href="#">e</a> >	<a href="#">runPDFReport</a> (java.lang.String reportName, java.lang.String objectFieldForReportName, boolean nameWithTimestamp) run report on server object
java.util.Collection< <a href="#">NuclosFile</a> <a href="#">e</a> >	<a href="#">runPDFReport</a> (java.lang.String reportName, java.lang.String entity, java.lang.Integer iObjectId, java.lang.String objectFieldForReportName, boolean nameWithTimestamp)
void	<a href="#">scheduleStateChange</a> (int iNewState, java.util.Date dateToSchedule) performs a state change for the current generic object at the given point in time.
void	<a href="#">scheduleStateChange</a> (java.lang.Integer iGenericObjectId, int iNewState, java.util.Date dateToSchedule) performs a state change for the generic object with the given id at the given point in time.
void	<a href="#">scheduleTestJob</a> () schedules a test job once for ten seconds later
void	<a href="#">sendMail</a> ( <a href="#">NuclosMail</a> mail)
void	<a href="#">sendMail</a> (java.lang.String smtpHost, java.lang.Integer smtpPort, <a href="#">NuclosMail</a> mail)
void	<a href="#">sendMail</a> (java.lang.String smtpHost, java.lang.Integer smtpPort, java.lang.String login, java.lang.String password, <a href="#">NuclosMail</a> mail)
void	<a href="#">sendMail</a> (java.lang.String smtpHost, <a href="#">NuclosMail</a> mail)
void	<a href="#">sendMessage</a> (java.lang.String[] asRecipients, java.lang.String sSubject,

	<p>java.lang.String sContent)  Sends a message with specified content and subject to specified recipients</p>
void	<p><a href="#">setAttribute</a>(java.lang.Integer iGenericObjectId, java.lang.String sAttributeName, <a href="#">DynamicAttributeVO</a> attrvo)  sets an attribute of generic object with intid iGenericObjectId</p>
void	<p><a href="#">setAttribute</a>(java.lang.Integer iGenericObjectId, java.lang.String sAttributeName, java.lang.Integer iValueId, java.lang.Object oValue)  <b>Deprecated.</b></p>
void	<p><a href="#">setAttribute</a>(java.lang.String sAttributeName, <a href="#">DynamicAttributeVO</a> attrvo)  set an attribute of the current generic object.</p>
void	<p><a href="#">setAttribute</a>(java.lang.String sAttributeName, java.lang.Integer iValueId, java.lang.Object oValue)  <b>Deprecated.</b></p>
void	<p><a href="#">setAttributeValue</a>(java.lang.Integer iGenericObjectId, java.lang.String sAttributeName, java.lang.Object oValue)  <b>Deprecated.</b></p>
void	<p><a href="#">setAttributeValue</a>(java.lang.String sAttributeName, java.lang.Object oValue)  <b>Deprecated.</b></p>
void	<p><a href="#">setDependants</a>(java.lang.String sEntityName, java.util.Collection&lt;<a href="#">MasterDataVO</a>&gt; coll)  set the generic objects dependants of the given entity.</p>
void	<p><a href="#">setDependants</a>(java.lang.String sEntityName, java.lang.Integer iObjectId, java.lang.String sDependantEntityName, java.util.Collection&lt;<a href="#">MasterDataVO</a>&gt; collmdvoDependants)  may be called by rules to overwrite the set of specified subentity entries.</p>
void	<p><a href="#">setEnumeratedAttributeByValue</a>(java.lang.String sAttributeName, java.lang.Object oValue)  sets the value of an enumerated attribute (that is an attribute containing a value list).</p>
void	<p><a href="#">setField</a>(java.lang.String sEntityName, java.lang.Integer iObjectId, java.lang.String sFieldName, java.lang.Integer iValueId, java.lang.Object oValue)  sets an field of (generic or masterdata) object with intid iObjectId</p>
void	<p><a href="#">setField</a>(java.lang.String sEntityName, java.lang.String sFieldName, java.lang.Integer iValueId, java.lang.Object oValue)  sets a field of the current object.</p>
void	<p><a href="#">setFieldValue</a>(java.lang.String sEntityName, java.lang.Integer iObjectId, java.lang.String sFieldName, java.lang.Object oValue)  sets the field sFieldName to the value oValue for the object with intid iObjectId.</p>
void	<p><a href="#">setFieldValue</a>(java.lang.String sEntityName, java.lang.String sFieldName, java.lang.Object oValue)  sets the field sFieldName to the value oValue for the current</p>

	object.
void	<a href="#">setProperty</a> (java.util.Map<java.lang.String, ? extends java.io.Serializable> mpProperties)
void	<a href="#">setProperty</a> (java.lang.String sKey, java.io.Serializable oValue)
void	<a href="#">setSessionId</a> (java.lang.Integer iId) set job run id
void	<a href="#">sleep</a> (java.lang.Integer ims) Causes the currently executing rule to sleep for the specified number of milliseconds.
void	<a href="#">storeAttachment</a> ( <a href="#">NuclosFile</a> attachment) Store attachment to server object in GeneralSearchDocument entity
void	<a href="#">storeAttachment</a> ( <a href="#">NuclosFile</a> attachment, java.lang.String comment) Store attachment to server object in GeneralSearchDocument entity
void	<a href="#">storeAttachment</a> (java.lang.String entity, java.lang.Integer iObjectId, <a href="#">NuclosFile</a> attachment) Store attachment to object of given entity in GeneralSearchDocument entity
void	<a href="#">storeAttachment</a> (java.lang.String entity, java.lang.Integer iObjectId, <a href="#">NuclosFile</a> attachment, java.lang.String comment) Store attachment to object of given entity in GeneralSearchDocument entity
void	<a href="#">storeAttachment</a> (java.lang.String entity, java.lang.Integer iObjectId, java.lang.String attachmentEntity, java.lang.String foreignField, java.lang.String attachmentField, <a href="#">NuclosFile</a> attachment, <a href="#">Pair</a> <java.lang.String, java.lang.Object>... additionalFields) Store attachment to object of given entity in specified attachment entity
void	<a href="#">storeAttachment</a> (java.lang.String attachmentEntity, java.lang.String foreignField, java.lang.String attachmentField, <a href="#">NuclosFile</a> attachment, <a href="#">Pair</a> <java.lang.String, java.lang.Object>... additionalFields) Store attachment to server object in specified attachment entity
void	<a href="#">storeAttachments</a> (java.util.Collection< <a href="#">NuclosFile</a> > attachments)
void	<a href="#">storeAttachments</a> (java.util.Collection< <a href="#">NuclosFile</a> > attachments, java.lang.String comment)
void	<a href="#">storeAttachments</a> (java.lang.String entity, java.lang.Integer iObjectId, java.util.Collection< <a href="#">NuclosFile</a> > attachments)
void	<a href="#">storeAttachments</a> (java.lang.String entity, java.lang.Integer iObjectId, java.util.Collection< <a href="#">NuclosFile</a> > attachments, java.lang.String comment)
void	<a href="#">storeAttachments</a> (java.lang.String entity, java.lang.Integer iObjectId,

	java.lang.String attachmentEntity, java.lang.String foreignField, java.lang.String attachmentField, java.util.Collection< <a href="#">NuclosFile</a> > attachments, <a href="#">Pair</a> <java.lang.String, java.lang.Object>... additionalFields)
void	<a href="#">storeAttachments</a> (java.lang.String attachmentEntity, java.lang.String foreignField, java.lang.String attachmentField, java.util.Collection< <a href="#">NuclosFile</a> > attachments, <a href="#">Pair</a> <java.lang.String, java.lang.Object>... additionalFields)
java.util.Date	<a href="#">today</a> () get todays date with hour, minute, second and milisecond set to 0.
void	<a href="#">transferGenericObjectData</a> ( <a href="#">GenericObjectVO</a> govoSource, java.lang.Integer iGenericObjectTarget, java.lang.String[][] asAttributes) transfers data from iGenericObjectSource to iGenericObjectTarget
void	<a href="#">unrelate</a> (java.lang.Integer iGenericObjectIdFrom, java.lang.Integer iGenericObjectIdTo, java.lang.String relationType) removes the relations between the given generic objects of the given type.

#### Methods inherited from class org.nuclos.server.customcode.[CustomCodeInterface](#)

[callDbFunction](#), [callDbProcedure](#), [createTempFile](#), [error](#),  
[executeSelectOnJCADatasource](#), [fatal](#), [getAttribute](#), [getAttribute](#), [getAttribute](#),  
[getAttributeValue](#), [getAttributeValue](#), [getCalculatedAttributeValue](#), [getCellValues](#),  
[getCellValues](#), [getDependants](#), [getDependants](#), [getDocumentTags](#), [getDocumentTags](#),  
[getField](#), [getFieldId](#), [getFieldValue](#), [getFieldValue](#), [getFieldValue](#),  
[getGenericObjectId](#), [getGenericObjectIds](#), [getGenericObjectIds](#), [getMasterDataIds](#),  
[getMasterDataIds](#), [getObjectId](#), [getRuleInterface](#), [info](#), [isStateEqual](#), [isStateEqual](#),  
[isStateEqual](#), [newAndCondition](#), [newGOComparison](#), [newGOIsNullCondition](#),  
[newGOLikeCondition](#), [newNotCondition](#), [newOrCondition](#),  
[setConnectionSettingsForWebservice](#), [warn](#)

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

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#),  
[wait](#), [wait](#)

#### Field Detail

##### ERROR\_MESSAGES

public static final int **ERROR\_MESSAGES**

See Also:

[Constant Field Values](#)

---

##### WARNING\_MESSAGES

public static final int **WARNING\_MESSAGES**

See Also:

[Constant Field Values](#)

---

##### INFO\_MESSAGES

public static final int **INFO\_MESSAGES**



See Also:

[Constant Field Values](#)

## Constructor Detail

### RuleInterface

```
public RuleInterface(RuleVO ruleVO,  
                    RuleObjectContainerCVO roccvoCurrent,  
                    RuleObjectContainerCVO roccvoTargetObject)
```

Create a RuleInterface with the RuleObjectContainerCVO for which the rule is fired

**Parameters:**

ruleVO -

roccvoCurrent - RuleObjectContainerCVO (RuleObjectContainerCVO)roccvo in the Rule

roccvoTargetObject - if not null this one is the current object

---

### RuleInterface

```
public RuleInterface(RuleVO ruleVO,  
                    RuleObjectContainerCVO roccvoCurrent,  
                    RuleObjectContainerCVO roccvoTargetObject,  
                    java.util.List<java.lang.String> lstActions)
```

Create a RuleInterface with the GenericObjectContainerCVO for which the rule is fired

**Parameters:**

ruleVO -

roccvoCurrent - GenericObjectContainerCVO (GenericObjectContainerCVO)roccvo in the Rule

roccvoTargetObject - if not null this one is the current object

---

## Method Detail

### setProperty

```
public void setProperty(java.lang.String sKey,  
                        java.io.Serializable oValue)
```

---

### setProperties

```
public void setProperties(java.util.Map<java.lang.String,? extends  
java.io.Serializable> mpProperties)
```

---

### getProperty

```
public java.io.Serializable getProperty(java.lang.String sKey)
```

---

### getRuleObjectContainerCVO

```
public RuleObjectContainerCVO getRuleObjectContainerCVO()
```

may be called by rules to get the current object.

**Returns:**

the current object.

**Throws:**

[NuclosFatalRuleException](#) - if there is no current object.

---

### getSourceObjectContainerCVO

```
public RuleObjectContainerCVO getSourceObjectContainerCVO()
```

may be called by rules to get the source object for object generation rules

**Returns:**

the target object of rule generation

**Throws:**

[NuclosFatalRuleException](#) - if there is no target object.

---

**getRuleObjectContainerCVOIfAny**

public [RuleObjectContainerCVO](#) **getRuleObjectContainerCVOIfAny** ()  
may be called by the BeanShellRunner only. Must be public but is not part of the "official" rule interface.  
**Returns:**  
the current object, if any.

---

**setDependants**

```
public void setDependants (java.lang.String sEntityName,  
                          java.lang.Integer iObjectId,  
                          java.lang.String sDependantEntityName,  
                          java.util.Collection<MasterDataVO> collmdvoDependants)
```

may be called by rules to overwrite the set of specified subentity entries.  
**Parameters:**  
sEntityName -  
iObjectId -  
sDependantEntityName -  
collmdvoDependants -  
**Throws:**  
[NuclosFatalRuleException](#)

---

**getGenericObject**

public [GenericObjectVO](#) **getGenericObject** ()  
**Specified by:**  
[getGenericObject](#) in class [CustomCodeInterface](#)  
**Returns:**  
the GenericObjectVO contained in roccvo.

---

**getMasterData**

public [MasterDataVO](#) **getMasterData** ()  
**Specified by:**  
[getMasterData](#) in class [CustomCodeInterface](#)  
**Returns:**  
the MasterDataVO contained in roccvo.

---

**getGenericObject**

```
public GenericObjectVO getGenericObject (java.lang.Integer iGenericObjectId)  
                                     throws CommonFinderException,  
                                             CommonPermissionException
```

get the GenericObjectVO with the given id  
**Returns:**  
GenericObjectVO  
**Throws:**  
[CommonFinderException](#)  
[CommonPermissionException](#)

---

**getDependants**

```
public java.util.Collection<MasterDataVO>  
getDependants (java.lang.String sEntityName)
```

gets the dependant masterdata records belonging to the given entity, for the current generic object. Changes to these masterdata records are not stored. The masterdata is merged, so that the result contains the data as if it was saved yet. This is the same as `this.getDependants(sEntityName, "genericObject")`.

**Parameters:**

sEntityName - name of the dependant entity

**Returns:**

Collection

---

### getDependants

```
public java.util.Collection<MasterDataVO>
getDependants(java.lang.String sEntityName,
```

```
java.lang.String sForeignKeyFieldName)
```

gets the dependant masterdata records belonging to the given entity, for the current generic object, using the given foreign key field to the current generic object. Changes to these masterdata records are not stored. The masterdata is merged, so that the result contains the data as if it was saved yet.

**Parameters:**

sEntityName - name of the dependant entity

sForeignKeyFieldName - name of the foreign key field to the entity of the current generic object.

**Returns:**

Collection

---

### setDependants

```
public void setDependants(java.lang.String sEntityName,
                        java.util.Collection<MasterDataVO> coll)
```

set the generic objects dependants of the given entity.

**Parameters:**

sEntityName - name of the dependant entity

coll - Collection

---

### getNewMasterDataCVO

```
public MasterDataVO getNewMasterDataCVO(java.lang.String sEntity)
```

Create and return a new MasterDataVO for a certain entity.

**Parameters:**

sEntity - the entity name.

**Returns:**

a fresh and shiny new MasterDataVO.

---

### isAttributeValueEqual

@Deprecated

```
public boolean isAttributeValueEqual(java.lang.Integer iGenericObjectId,
                                    java.lang.String sAttributeName,
                                    java.lang.Object oValue)
```

**Deprecated.**

Compare the value of an attribute from a generic object stored in the database with the given value. Use `isAttributeEqual(String sAttributeName, String oValue)` if you want to compare an attribute of the current generic object.

**Parameters:**

iGenericObjectId - generic object id

sAttributeName - name of attribute to compare

oValue - attribute value to compare to

**Returns:**

**Preconditions:**

iGenericObjectId != null, sAttributeName != null

---

### isFieldValueEqual

```
public boolean isFieldValueEqual(java.lang.String sEntityName,  
                                java.lang.Integer iObjectId,  
                                java.lang.String sFieldName,  
                                java.lang.Object oValue)
```

Compare the value of an attribute from a generic object stored in the database with the given value. Use `isAttributeEqual(String sAttributeName, String oValue)` if you want to compare an attribute of the current generic object.

**Parameters:**

`iGenericObjectId` - generic object id  
`sAttributeName` - name of attribute to compare  
`oValue` - attribute value to compare to

**Returns:**

**Preconditions:**

`iGenericObjectId != null, sAttributeName != null`

---

### **isAttributeValueEqual**

@Deprecated

```
public boolean isAttributeValueEqual(java.lang.String sAttributeName,  
                                       java.lang.Object oValue)
```

**Deprecated.**

Compare the value of an attribute from the current generic object with the given value. Use `isAttributeEqual(Integer iGenericObjectId, String sAttributeName, String oValue)` if you want to compare an attribute from any other generic object.

**Parameters:**

`sAttributeName` - name of attribute to compare  
`oValue` - attribute value to compare to

**Returns:**

**Preconditions:**

`sAttributeName != null`

---

### **isFieldValueEqual**

```
public boolean isFieldValueEqual(java.lang.String sFieldName,  
                                   java.lang.Object oValue)
```

Compare the value of a field from the current object with the given value. Use `isFieldEqual(Integer iObjectId, String sFieldName, String oValue)` if you want to compare a field from any other object.

**Parameters:**

`sFieldName` - name of field to compare  
`oValue` - field value to compare to

**Returns:**

**Preconditions:**

`sFieldName != null`

---

### **isAttributeValueNull**

@Deprecated

```
public boolean isAttributeValueNull(java.lang.Integer iGenericObjectId,  
                                       java.lang.String sAttributeName)
```

**Deprecated.**

check if an attribute value of generic object with intid `iGenericObjectId` is null. Do not use this function if you want to compare an attribute of the current generic object!

**Parameters:**

`iGenericObjectId` - generic object id  
`sAttributeName` - name of attribute to compare

**Returns:**

**Preconditions:**

`iGenericObjectId != null, sAttributeName != null`

---

### **isFieldValueNull**

```
public boolean isFieldValueNull(java.lang.String sEntityName,  
                                java.lang.Integer iObjectId,  
                                java.lang.String sFieldName)
```

check if a field value of object with intid iObjectId is null.

**Parameters:**

iObjectId - object (generic or masterdata) id  
sFieldName - name of field to compare

**Returns:**

**Preconditions:**

iObjectId != null, sFieldName != null

---

### **isAttributeValueNull**

@Deprecated

```
public boolean isAttributeValueNull(java.lang.String sAttributeName)
```

**Deprecated.**

**Parameters:**

sAttributeName -

**Returns:**

Is the attribute value with the given name of the current generic object null?

**Preconditions:**

sAttributeName != null

---

### **isFieldValueNull**

```
public boolean isFieldValueNull(java.lang.String sFieldName)
```

**Parameters:**

sFieldName -

**Returns:**

Is the field value with the given name of the current object null?

**Preconditions:**

sFieldName != null

---

### **isAttributeNull**

```
public boolean isAttributeNull(DynamicAttributeVO attrvo)
```

**Parameters:**

attrvo -

**Returns:**

Is attrvo or it's value null or removed

---

### **isFieldNull**

```
public boolean isFieldNull(java.lang.String sEntityName,  
                            MasterDataVO mdvo,  
                            java.lang.String sFieldName)
```

**Parameters:**

sEntityName -

mdvo -

sFieldName -

**Returns:**

is the MasterDataMetaFieldVO or it's value null or removed

---

### **setAttribute**

```
public void setAttribute(java.lang.Integer iGenericObjectId,  
                          java.lang.String sAttributeName,  
                          DynamicAttributeVO attrvo)  
    throws NuclosBusinessRuleException
```

sets an attribute of generic object with intid iGenericObjectId

**Parameters:**

iGenericObjectId -

sAttributeName -

attrvo -

**Throws:**

[NuclosBusinessRuleException](#)

**Preconditions:**

iGenericObjectId != null, sAttributeName != null

---

### getValueOrNull

```
public static java.lang.Object getValueOrNull(DynamicAttributeVO attrvo)
```

**Parameters:**

attrvo -

**Returns:**

the value of attrvo or null, if attrvo itself is null.

**To do:**

generally consider isRemoved() here?, move to DynamicAttributeVO?

---

### getValueIdOrNull

```
public static java.lang.Integer getValueIdOrNull(DynamicAttributeVO attrvo)
```

**Parameters:**

attrvo -

**Returns:**

the value id of attrvo or null, if attrvo itself is null.

**To do:**

generally consider isRemoved() here?, move to DynamicAttributeVO?

---

### setAttribute

```
public void setAttribute(java.lang.String sAttributeName,  
                          DynamicAttributeVO attrvo)
```

set an attribute of the current generic object.

**Parameters:**

sAttributeName -

attrvo -

**Preconditions:**

sAttributeName != null

---

### setAttribute

@Deprecated

```
public void setAttribute(java.lang.Integer iGenericObjectId,  
                          java.lang.String sAttributeName,  
                          java.lang.Integer iValueId,  
                          java.lang.Object oValue)
```

throws [NuclosBusinessRuleException](#)

**Deprecated.**

sets an attribute of generic object with intid iGenericObjectId

**Parameters:**

iGenericObjectId - generic object id

sAttributeName - attribute to change value for

iValueId - new value id

oValue - new value

**Throws:**

[NuclosBusinessRuleException](#)

**Preconditions:**

iGenericObjectId != null, sAttributeName != null

---

## setField

```
public void setField(java.lang.String sEntityName,  
                    java.lang.Integer iObjectId,  
                    java.lang.String sFieldName,  
                    java.lang.Integer iValueId,  
                    java.lang.Object oValue)
```

throws [NuclosBusinessRuleException](#)

sets an field of (generic or masterdata) object with intid iObjectId

### Parameters:

iObjectId - object id  
sFieldName - field to change value for  
iValueId - new value id  
oValue - new value

### Throws:

[NuclosBusinessRuleException](#)

### Preconditions:

iObjectId != null, sFieldName != null

---

## setAttribute

@Deprecated

```
public void setAttribute(java.lang.String sAttributeName,  
                        java.lang.Integer iValueId,  
                        java.lang.Object oValue)
```

### Deprecated.

sets an attribute of the current generic object.

### Parameters:

sAttributeName - attribute to change value for  
iValueId - new value id  
oValue - new value

### Preconditions:

sAttributeName != null

---

## setField

```
public void setField(java.lang.String sEntityName,  
                    java.lang.String sFieldName,  
                    java.lang.Integer iValueId,  
                    java.lang.Object oValue)
```

sets a field of the current object.

### Parameters:

sFieldName - field to change value for  
iValueId - new value id  
oValue - new value

### Preconditions:

sFieldName != null

---

## setAttributeValue

@Deprecated

```
public void setAttributeValue(java.lang.String sAttributeName,  
                              java.lang.Object oValue)
```

### Deprecated.

sets the attribute sAttributeName to the value oValue for the current generic object. the data type of the attribute and oValue has to be the same

### Parameters:

sAttributeName - attribute to change value for  
oValue - new value

### Preconditions:

sAttributeName != null

---

## setFieldValue

```
public void setFieldValue(java.lang.String sEntityName,  
                           java.lang.String sFieldName,  
                           java.lang.Object oValue)
```

sets the field `sFieldName` to the value `oValue` for the current object. the data type of the field and `oValue` has to be the same

**Parameters:**

`sFieldName` - field to change value for

`oValue` - new value

**Preconditions:**

`sFieldName` != null

---

## setAttributeValue

@Deprecated

```
public void setAttributeValue(java.lang.Integer iGenericObjectId,  
                               java.lang.String sAttributeName,  
                               java.lang.Object oValue)
```

```
    throws NuclosBusinessRuleException
```

**Deprecated.**

sets the attribute `sAttributeName` to the value `oValue` for the generic object with intid `iGenericObjectId`. the data type of the attribute and `oValue` has to be the same

**Parameters:**

`sAttributeName` - attribute to change value for

`oValue` - new value

**Throws:**

[NuclosBusinessRuleException](#)

**Preconditions:**

`sAttributeName` != null

---

## setFieldValue

```
public void setFieldValue(java.lang.String sEntityName,  
                           java.lang.Integer iObjectId,  
                           java.lang.String sFieldName,  
                           java.lang.Object oValue)
```

```
    throws NuclosBusinessRuleException
```

sets the field `sFieldName` to the value `oValue` for the object with intid `iObjectId`. the data type of the field and `oValue` has to be the same

**Parameters:**

`sEntityName` -

`sFieldName` - field to change value for

`oValue` - new value

**Throws:**

[NuclosBusinessRuleException](#)

**Preconditions:**

`sFieldName` != null

---

## getSourceAttributeValue

```
public java.lang.Object getSourceAttributeValue(java.lang.String sAttributeName)
```

Gets an attribute value from a source object in an object generation.

**Parameters:**

`sAttributeName` - name of the attribute to read.

**Returns:**

the value of the attribute.

---

## getValueIdFromValue

```
public java.lang.Integer getValueIdFromValue(java.lang.String sAttributeName,
```



java.lang.Object oValue)

Iterates the value list of the attribute with the given name, trying to find an entry with the given value.

**Parameters:**

sAttributeName -

oValue -

**Returns:**

the value id corresponding to the given value, if any.

**Preconditions:**

sAttributeName != null

---

### setEnumeratedAttributeByValue

```
public void setEnumeratedAttributeByValue(java.lang.String sAttributeName,  
                                           java.lang.Object oValue)  
                                           throws NuclosBusinessRuleException
```

sets the value of an enumerated attribute (that is an attribute containing a value list). Tries to find an entry in the value list containing the given value. If none is found, null is written as value id.

**Parameters:**

sAttributeName -

oValue -

**Throws:**

[NuclosBusinessRuleException](#)

**Preconditions:**

sAttributeName != null

---

### sendMessage

```
public void sendMessage(java.lang.String[] asRecipients,  
                        java.lang.String sSubject,  
                        java.lang.String sContent)  
                        throws NuclosBusinessRuleException
```

Sends a message with specified content and subject to specified recipients

**Parameters:**

asRecipients - addressees of recipients of message

sSubject - subject of content of message

sContent - content of e-mail to message

**Throws:**

[NuclosBusinessRuleException](#)

---

### createObject

```
public java.lang.Integer createObject(java.lang.String sGeneratorName)  
                                     throws NuclosBusinessRuleException
```

Create a new object based on the current generic object. If the object-generation fails, this method will not throw an error, but return null instead of the new object id

**Parameters:**

sGeneratorName - name of object generator

**Returns:**

the new object's id or null

**Throws:**

[NuclosBusinessRuleException](#)

---

### createObject

```
public java.lang.Integer createObject(RuleObjectContainerCVO roccvo,  
                                       java.lang.String sGeneratorName)  
                                       throws NuclosBusinessRuleException
```

create a new object based on the given RuleObjectContainerCVO If the object-generation fails, this method will not throw an error, but return null instead of the new object id

**Parameters:**

sGeneratorName - name of object generator

**Returns:**  
the new object's id or null  
**Throws:**  
[NuclosBusinessRuleException](#)

---

### **getGenericObjectsOriginating**

```
public java.util.Collection<java.lang.Integer>  
getGenericObjectsOriginating(java.lang.Integer iGenericObjectId,  
java.lang.Integer iModuleId) throws
```

[NuclosBusinessRuleException](#)  
gets collection of all originating generic objects ids in specified module for generic object with intid  
iGenericObjectId  
**Parameters:**  
iGenericObjectId - generic object id  
iModuleId - id of module to get related objects for  
**Returns:**  
Collection collection of related generic object ids  
**Throws:**  
[NuclosBusinessRuleException](#)  
**Postconditions:**  
result != null, (iModuleId == null) --> result.isEmpty(), (iGenericObjectId == null) --> result.isEmpty()

---

### **getGenericObjectsOriginating**

```
public java.util.Collection<java.lang.Integer>  
getGenericObjectsOriginating(java.lang.Integer iModuleId) throws
```

[NuclosBusinessRuleException](#)  
gets collection of all originating generic object ids in specified module for the current generic object  
**Parameters:**  
iModuleId - id of module to get related objects for  
**Returns:**  
collection of related generic object ids  
**Throws:**  
[NuclosBusinessRuleException](#)  
**Postconditions:**  
result != null, (iModuleId == null) --> result.isEmpty()

---

### **getGenericObjectsResulting**

```
public java.util.Collection<java.lang.Integer>  
getGenericObjectsResulting(java.lang.Integer iGenericObjectId,  
java.lang.Integer iModuleId)  
gets collection of all resulting generic object ids in specified module for generic object with intid  
iGenericObjectId  
Parameters:  
iGenericObjectId - generic object id  
iModuleId - id of module to get related objects for  
Returns:  
collection of related generic object ids  
Postconditions:  
result != null, (iModuleId == null) --> result.isEmpty(), (iGenericObjectId == null) --> result.isEmpty()

---


```

### **getGenericObjectsResulting**

```
public java.util.Collection<java.lang.Integer>  
getGenericObjectsResulting(java.lang.Integer iModuleId)  
gets collection of all resulting generic object ids in specified module for the current generic object
```

**Parameters:**

iModuleId - id of module to get related objects for

**Returns:**

collection of related generic object ids

**Postconditions:**

result != null, (iModuleId == null) --> result.isEmpty()

---

**getGenericObjectParts**

```
public java.util.Collection<java.lang.Integer>  
getGenericObjectParts(java.lang.Integer iGenericObjectId,
```

```
java.lang.Integer iModuleId)
```

get a collection of all contained generic object ids in specified module for generic object with intid  
iGenericObjectId

**Parameters:**

iGenericObjectId - generic object id

iModuleId - id of module to get related objects for

**Returns:**

collection of related generic object ids

**Postconditions:**

result != null, (iModuleId == null) --> result.isEmpty(), (iGenericObjectId == null) --> result.isEmpty()

---

**getGenericObjectParts**

```
public java.util.Collection<java.lang.Integer>  
getGenericObjectParts(java.lang.Integer iModuleId)
```

get a collection of all contained generic object ids in specified module for the current generic object

**Parameters:**

iModuleId - id of module to get related objects for

**Returns:**

collection of related generic object ids

**Postconditions:**

result != null, (iModuleId == null) --> result.isEmpty()

---

**getGenericObjectContaining**

```
public java.util.Collection<java.lang.Integer>  
getGenericObjectContaining(java.lang.Integer iGenericObjectId,
```

```
java.lang.Integer iModuleId)
```

Find all generic objects containing the specified generic object

**Returns:**

Collection collection of generic object ids

**Postconditions:**

result != null, (iModuleId == null) --> result.isEmpty(), (iGenericObjectId == null) --> result.isEmpty()

---

**getGenericObjectContaining**

```
public java.util.Collection<java.lang.Integer>  
getGenericObjectContaining(java.lang.Integer iModuleId)
```

Find all generic objects containing the specified generic object

**Returns:**

Collection collection of generic object ids

**Postconditions:**

result != null, (iModuleId == null) --> result.isEmpty(), (iGenericObjectId == null) --> result.isEmpty()

---

**getRelatedGenericObjectIds**

```
public java.util.Collection<java.lang.Integer>
getRelatedGenericObjectIds (java.lang.Integer iModuleId,
java.lang.Integer iGenericObjectId,
boolean bForward,
java.lang.String relationType)
Parameters:
iModuleId -
iGenericObjectId -
bForward - true: forward - false: reverse
relationType -
Returns:
ids of the generic objects of the given module related to the given generic object in the specified way.
Postconditions:
result != null, (iModuleId == null) --> result.isEmpty(), (iGenericObjectId == null) --> result.isEmpty()
```

---

### **scheduleTestJob**

```
public void scheduleTestJob ()
schedules a test job once for ten seconds later
```

---

### **getInitialStateNumeral**

```
public java.lang.Integer getInitialStateNumeral ()
Returns:
the initial state for the current generic object
```

---

### **getInitialStateNumeral**

```
public java.lang.Integer getInitialStateNumeral (java.lang.Integer iGenericObjectId)
Parameters:
iGenericObjectId -
Returns:
the initial state for the generic object with the given intid.
```

---

### **getMasterData**

```
public MasterDataVO getMasterData (java.lang.String sEntityName,
java.lang.Integer iId)
Parameters:
sEntityName - the entity of the desired masterdata object
iId - the id of the desired masterdata object
Returns:
the master data value object of the given entity, with the given id (as primary key)
```

---

### **getMasterDataWithDependants**

```
public MasterDataWithDependantsVO
getMasterDataWithDependants (java.lang.String sEntityName,
java.lang.Integer iId)
Parameters:
sEntityName - the entity of the desired masterdata object
iId - the id of the desired masterdata object
Returns:
the MasterDataWithDependantsVO of the given entity, with the given id (as primary key) NUCLEUSINT-1160
```

---

### **getMasterDataIds**

```
public java.util.Collection<java.lang.Object>
getMasterDataIds(java.lang.String sEntityName)
  Parameters:
    sEntityName - the entity of the desired masterdata object
  Returns:
    all intids of the masterdata objects for the given entity
```

---

### **today**

```
public java.util.Date today()
  get todays date with hour, minute, second and milisecond set to 0.
  Returns:
    today's date with day precision
```

---

### **now**

```
public java.util.Date now()
  get todays date with hour, minute, second and milisecond set to the current time.
  Returns:
    today's date and time with milisecond precision
```

---

### **getModuleId**

```
public java.lang.Integer getModuleId()
  Returns:
    the module id of the current generic object
```

---

### **getModuleId**

```
public java.lang.Integer getModuleId(java.lang.Integer iGenericObjectId)
  Returns:
    the module id of the generic object with the given id.
  Preconditions:
    iGenericObjectId != null
  To do:
    add postcondition result != null
```

---

### **changeState**

```
public void changeState(int iNumeral)
    throws NuclosBusinessRuleException,
    CommonFinderException
  changes the state for the current generic object
  Parameters:
    iNumeral - requested subsequent state
  Throws:
    NuclosBusinessRuleException
    CommonFinderException
```

---

### **changeState**

```
public void changeState(java.lang.Integer iGenericObjectId,
    int iNumeral)
    throws NuclosBusinessRuleException,
    CommonFinderException
  changes the state for generic object with intid iGenericObjectId
```

**Parameters:**

iGenericObjectId - generic object value object

iNumeral - requested subsequent state

**Throws:**

[NuclosBusinessRuleException](#)

[CommonFinderException](#)

---

**sleep**

```
public void sleep(java.lang.Integer ims)
```

Causes the currently executing rule to sleep for the specified number of milliseconds.

**Parameters:**

ims - milliseconds

---

**scheduleStateChange**

```
public void scheduleStateChange(int iNewState,  
                                java.util.Date dateToSchedule)  
    throws NuclosBusinessRuleException
```

performs a state change for the current generic object at the given point in time. If an old job exists already, it is always removed.

**Parameters:**

iNewState - the new state for the object.

dateToSchedule - the date for the state change to happen. If null, only a possibly existing job is removed. If

dateToSchedule is in the future, a new job is scheduled for the given date. If dateToSchedule is in the

past, the state change is executed immediately (synchronously).

**Throws:**

[NuclosBusinessRuleException](#) - if the transition from the current state to the new state is not possible for the given object.

**Preconditions:**

this.getGenericObjectId() != null

---

**scheduleStateChange**

```
public void scheduleStateChange(java.lang.Integer iGenericObjectId,  
                                int iNewState,  
                                java.util.Date dateToSchedule)  
    throws NuclosBusinessRuleException
```

performs a state change for the generic object with the given id at the given point in time. If an old job exists already, it is always removed.

**Parameters:**

iGenericObjectId -

iNewState - the new state for the object.

dateToSchedule - the date for the state change to happen. If null only a possibly existing job is removed. If

dateToSchedule is in the future, a new job is scheduled for the given date. If dateToSchedule is in the

past, the state change is executed immediately (synchronously).

**Throws:**

[NuclosBusinessRuleException](#) - if the transition from the current state to the new state is not possible for the given object.

**Preconditions:**

iGenericObjectId != null

---

**isStateChangePossible**

```
public boolean isStateChangePossible(java.lang.Integer iGenericObjectId,  
                                      int state)  
    throws CommonFinderException
```

check if a state change to state is possible for generic object with id iGenericObjectId

**Parameters:**

iGenericObjectId -

state -

**Returns:**  
**Throws:**  
[CommonFinderException](#)  
**Preconditions:**  
iGenericObjectId != null

---

### transferGenericObjectData

```
public void transferGenericObjectData(GenericObjectVO govoSource,  
                                       java.lang.Integer iGenericObjectTarget,  
                                       java.lang.String[][] asAttributes)
```

transfers data from iGenericObjectSource to iGenericObjectTarget

**Parameters:**

iGenericObjectSource -  
iGenericObjectTarget -  
asAttributes - Array of attribute names to specify transferred data

**Preconditions:**

asAttributes != null

---

### debug

```
public void debug(java.lang.Object message)  
    allows loggin in rules, debug level
```

**Parameters:**

message -

---

### addTimelimitTask

```
public void addTimelimitTask(java.lang.Integer iGenericObjectId,  
                              java.util.Date dateExpired,  
                              java.lang.String sDescription,  
                              java.util.Date dateCompleted)
```

add a new entry in the timelimit task list

**Parameters:**

iGenericObjectId -  
dateExpired -  
sDescription -  
dateCompleted -

---

### addTask

```
public void addTask(java.lang.String sTask,  
                    java.lang.String sOwner,  
                    java.lang.String sDelegator,  
                    java.util.Date dScheduled,  
                    java.util.Date dCompleted,  
                    java.lang.Integer iPriority,  
                    java.util.Collection<java.lang.Integer> collTaskObjects)
```

add a new entry in the task list

**Parameters:**

sTask -  
sOwner -  
sDelegator -  
dScheduled -  
dCompleted -  
collTaskObjects -

---

### getUserMailAddress

```
public java.lang.String getUserMailAddress(java.lang.String sUserName)
```

**Parameters:**

sUserName -

**Returns:**

email address of the given user or null if user is not found.

---

### isPeriodOverlapping

```
public boolean isPeriodOverlapping(java.util.Date datePeriod1From,  
                                     java.util.Date datePeriod1Until,  
                                     java.util.Date datePeriod2From,  
                                     java.util.Date datePeriod2Until)  
                                     throws NuclosBusinessRuleException
```

**Throws:**

[NuclosBusinessRuleException](#)

---

### isPeriodValid

```
public boolean isPeriodValid(java.util.Date dateFrom,  
                               java.util.Date dateUntil)
```

checks if dateFrom is before dateUntil or if one of them is null

**Parameters:**

dateFrom -

dateUntil -

**Returns:**

true if dateFrom is before dateUntil or one of them is null

---

### calculateTimelimit

```
public CommonDate calculateTimelimit(MasterDataVO mdvoTimelimit)  
                                     throws NuclosBusinessRuleException
```

**Throws:**

[NuclosBusinessRuleException](#)

---

### calculateTimelimit

```
public CommonDate calculateTimelimit(MasterDataVO mdvoTimelimit,  
                                     CommonDate ndStartDate)  
                                     throws NuclosBusinessRuleException
```

calculate a timelimit from a masterdata record of entity timelimit

**Parameters:**

mdvoTimelimit - MasterDataVO from entity timelimit

**Returns:**

**Throws:**

[NuclosBusinessRuleException](#)

**To do:**

refactor: timelimit calculation does not belong here

---

### check

```
public boolean check(DynamicAttributeVO attrvo,  
                    int iComparator)  
                    throws NuclosBusinessRuleException
```

simple version of check only for NULL and NOT\_NULL checks

**Parameters:**

attrvo -

iComparator -

**Returns:**

**Throws:**

[NuclosBusinessRuleException](#)



---

## check

```
public boolean check(DynamicAttributeVO attrvo,  
                    int iComparator,  
                    DynamicAttributeVO attrvoCompare)  
    throws NuclosBusinessRuleException
```

validate if the condition defined in iComparator is true between attrVO and attrvoCompare if the condition is false the attribute is added to liAttributeCheckFailed

**Parameters:**

attrvo -  
iComparator -  
attrvoCompare -

**Returns:**

**Throws:**  
[NuclosBusinessRuleException](#)

---

## evaluateCheckResult

```
public void evaluateCheckResult()  
    throws NuclosBusinessRuleException
```

evaluates the result of all prior calls to the check(..) function if liAttributeCheckFailed is not empty an error String is created

**Throws:**

[NuclosBusinessRuleException](#)

---

## addErrorMessage

```
public void addErrorMessage(java.lang.String sErrorMessage)  
    add a message to the list of failed checks
```

**Parameters:**

sErrorMessage -

---

## relate

```
public void relate(java.lang.Integer iGenericObjectIdFrom,  
                  java.lang.Integer iGenericObjectIdTo,  
                  java.lang.String relationType)  
    throws NuclosBusinessRuleException
```

creates a relation between the given generic objects, of the given type.

**Parameters:**

iGenericObjectIdFrom -  
iGenericObjectIdTo -  
relationType -

**Throws:**

[NuclosBusinessRuleException](#)

---

## relate

```
public void relate(java.lang.Integer iGenericObjectIdFrom,  
                  java.lang.Integer iGenericObjectIdTo,  
                  java.lang.String relationType,  
                  boolean bDeferred)  
    throws NuclosBusinessRuleException
```

creates a relation between the given generic objects, of the given type.

**Parameters:**

iGenericObjectIdFrom -  
iGenericObjectIdTo -  
relationType -

bDeferred - if true relating is executed later on, because the object to relate is not yet created

**Throws:**

[NuclosBusinessRuleException](#)

---

**relate**

```
public void relate(java.lang.Integer iGenericObjectIdFrom,
                  java.lang.Integer iGenericObjectIdTo,
                  java.lang.String relationType,
                  java.util.Date dateValidFrom,
                  java.util.Date dateValidUntil,
                  java.lang.String sDescription)
```

throws [NuclosBusinessRuleException](#)

creates a relation between the given generic objects, of the given type.

**Parameters:**

iGenericObjectIdFrom -

iGenericObjectIdTo -

relationType -

dateValidFrom -

dateValidUntil -

sDescription -

**Throws:**

[NuclosBusinessRuleException](#)

---

**unrelate**

```
public void unrelate(java.lang.Integer iGenericObjectIdFrom,
                    java.lang.Integer iGenericObjectIdTo,
                    java.lang.String relationType)
```

throws [NuclosBusinessRuleException](#)

removes the relations between the given generic objects of the given type.

**Parameters:**

iGenericObjectIdFrom -

iGenericObjectIdTo -

relationType -

**Throws:**

[NuclosBusinessRuleException](#)

---

**invalidateRelation**

```
public void invalidateRelation(java.lang.Integer iGenericObjectIdFrom,
                              java.lang.Integer iGenericObjectIdTo,
                              java.lang.String relationType)
```

throws [NuclosBusinessRuleException](#)

invalidates the relation between the given generic objects, of the given type, by setting the "validUntil" field to the current date, if necessary.

**Parameters:**

iGenericObjectIdFrom -

iGenericObjectIdTo -

relationType -

**Throws:**

[NuclosBusinessRuleException](#)

**To do:**

rename to invalidateRelations

---

**addNotificationMessage**

```
public void addNotificationMessage(java.lang.String sMessage,
                                   Priority priority)
```

add a notification message which will be shown after the transaction was successful

**Parameters:**

sMessage -

---

### getRuleNotification

```
public java.util.List<RuleNotification> getRuleNotification()
```

get the notifications added by a single rule

---

### isGenericObjectNew

```
@Deprecated  
public boolean isGenericObjectNew()
```

**Deprecated.**

---

### isObjectNew

```
public boolean isObjectNew()
```

---

### hasAttributeChanged

```
@Deprecated  
public boolean hasAttributeChanged(java.lang.String... sAttributeName)
```

**Deprecated.**  
**Parameters:**  
sAttributeName -  
**Returns:**  
Has one of the given attributes changed in the current object?

---

### hasFieldChanged

```
public boolean hasFieldChanged(java.lang.String sEntityName,  
                                java.lang.String... sFieldName)
```

**Parameters:**  
sFieldName -  
**Returns:**  
Has one of the given fields changed in the current object?

---

### hasAttributeChanged

```
@Deprecated  
public boolean hasAttributeChanged(java.lang.Integer iGenericObjectToCompareWith,  
                                    java.lang.String... asAttributeNames)
```

**Deprecated.**  
**Parameters:**  
iGenericObjectToCompareWith - the id if the object to compare attributes with  
asAttributeNames - names of the attributes to compare  
**Returns:**  
Does one of the given attributes have a different value in the current object than in the object with the given id?

---

### hasFieldChanged

```
public boolean hasFieldChanged(java.lang.String sEntityName,  
                                java.lang.Integer iObjectToCompareWith,  
                                java.lang.String... asFieldNames)
```

**Parameters:**  
iObjectToCompareWith - the id if the object to compare fields with  
asFieldNames - names of the fields to compare

**Returns:**

Does one of the given fields have a different value in the current object than in the object with the given id?

---

**getNextIntid**

```
public java.lang.Integer getNextIntid()
```

**Returns:**

next unique system id using default sequence "IDFACTORY"

---

**hasMasterDataFieldChanged**

```
public boolean hasMasterDataFieldChanged(java.lang.String sEntityName,  
                                         java.lang.Integer iId,  
                                         java.lang.String sFieldName)  
                                         throws NuclosFatalRuleException
```

checks whether the value of the given masterdatafield has changed

**Parameters:**

sEntityName -

iId -

sFieldName -

**Returns:**

true, if value of masterdatafield has changed or is new, otherwise false

**Throws:**

[NuclosFatalRuleException](#)

---

**sendMail**

```
public void sendMail(NuclosMail mail)  
                  throws NuclosFatalRuleException
```

**Parameters:**

mail -

**Throws:**

[NuclosFatalRuleException](#)

---

**sendMail**

```
public void sendMail(java.lang.String smtpHost,  
                    NuclosMail mail)  
                  throws NuclosFatalRuleException
```

**Parameters:**

smtpHost -

mail -

**Throws:**

[NuclosFatalRuleException](#)

---

**sendMail**

```
public void sendMail(java.lang.String smtpHost,  
                    java.lang.Integer smtpPort,  
                    NuclosMail mail)  
                  throws NuclosFatalRuleException
```

**Parameters:**

smtpHost -

smtpPort -

mail -

**Throws:**

[NuclosFatalRuleException](#)

---

## sendMail

```
public void sendMail(java.lang.String smtpHost,  
                    java.lang.Integer smtpPort,  
                    java.lang.String login,  
                    java.lang.String password,  
                    NuclosMail mail)  
    throws NuclosFatalRuleException
```

### Parameters:

smtpHost -  
smtpPort -  
login -  
password -  
mail -

### Throws:

[NuclosFatalRuleException](#)

---

## getMails

```
public java.util.List<NuclosMail> getMails(boolean remove)  
    throws NuclosFatalException
```

Get mails from POP3 by system parameters

### Parameters:

remove -

### Returns:

### Throws:

[NuclosFatalException](#)

---

## getMails

```
public java.util.List<NuclosMail> getMails(java.lang.String pop3Host,  
                    java.lang.String pop3Port,  
                    java.lang.String pop3User,  
                    java.lang.String pop3Password,  
                    boolean remove)  
    throws NuclosFatalRuleException
```

### Parameters:

pop3Host -  
pop3Port -  
pop3User -  
pop3Password -  
remove -

### Returns:

### Throws:

[NuclosFatalRuleException](#)

---

## getCurrentRule

```
public RuleVO getCurrentRule()
```

---

## setSessionId

```
public void setSessionId(java.lang.Integer iId)
```

### Parameters:

iId -

---

## getCurrentUser

```
public MasterDataVO getCurrentUser()
    throws NuclosBusinessRuleException

Throws:
NuclosBusinessRuleException
```

---

#### **storeAttachment**

```
public void storeAttachment(NuclosFile attachment)
    Store attachment to server object in GeneralSearchDocument entity
Parameters:
    attachment -
```

---

#### **storeAttachments**

```
public void storeAttachments(java.util.Collection<NuclosFile> attachments)
```

---

#### **storeAttachment**

```
public void storeAttachment(NuclosFile attachment,
    java.lang.String comment)
    Store attachment to server object in GeneralSearchDocument entity
Parameters:
    attachment -
    comment -
```

---

#### **storeAttachments**

```
public void storeAttachments(java.util.Collection<NuclosFile> attachments,
    java.lang.String comment)
```

---

#### **storeAttachment**

```
public void storeAttachment(java.lang.String entity,
    java.lang.Integer iObjectId,
    NuclosFile attachment)
    Store attachment to object of given entity in GeneralSearchDocument entity
Parameters:
    entity -
    iObjectId -
    attachment -
```

---

#### **storeAttachments**

```
public void storeAttachments(java.lang.String entity,
    java.lang.Integer iObjectId,
    java.util.Collection<NuclosFile> attachments)
```

---

#### **storeAttachment**

```
public void storeAttachment(java.lang.String entity,
    java.lang.Integer iObjectId,
    NuclosFile attachment,
    java.lang.String comment)
    Store attachment to object of given entity in GeneralSearchDocument entity
Parameters:
    entity -
```

iObjectId -  
attachment -  
comment -

---

### storeAttachments

```
public void storeAttachments(java.lang.String entity,  
                             java.lang.Integer iObjectId,  
                             java.util.Collection<NuclosFile> attachments,  
                             java.lang.String comment)
```

---

### storeAttachment

```
public void storeAttachment(java.lang.String attachmentEntity,  
                             java.lang.String foreignField,  
                             java.lang.String attachmentField,  
                             NuclosFile attachment,
```

[Pair](#)<java.lang.String, java.lang.Object>... additionalFields)

Store attachment to server object in specified attachment entity

**Parameters:**

entity - (entity of object id)

iObjectId -

attachmentEntity - (dependant entity for storing attachment)

foreignField - (referencing field between entity and attachmentEntity)

attachmentField -

attachment - ([NuclosFile](#) Object)

additionalFields - (may be like comments or something like this)

---

### storeAttachments

```
public void storeAttachments(java.lang.String attachmentEntity,  
                             java.lang.String foreignField,  
                             java.lang.String attachmentField,  
                             java.util.Collection<NuclosFile> attachments,
```

[Pair](#)<java.lang.String, java.lang.Object>... additionalFields)

---

### storeAttachment

```
public void storeAttachment(java.lang.String entity,  
                             java.lang.Integer iObjectId,  
                             java.lang.String attachmentEntity,  
                             java.lang.String foreignField,  
                             java.lang.String attachmentField,  
                             NuclosFile attachment,
```

[Pair](#)<java.lang.String, java.lang.Object>... additionalFields)

Store attachment to object of given entity in specified attachment entity

**Parameters:**

entity - (entity of object id)

iObjectId -

attachmentEntity - (dependant entity for storing attachment)

foreignField - (referencing field between entity and attachmentEntity)

attachmentField -

attachment - ([NuclosFile](#) Object)

additionalFields - (may be like comments or something like this)

---

### storeAttachments

```
public void storeAttachments(java.lang.String entity,
                             java.lang.Integer objectId,
                             java.lang.String attachmentEntity,
                             java.lang.String foreignField,
                             java.lang.String attachmentField,
                             java.util.Collection<NuclosFile> attachments,
```

```
Pair<java.lang.String, java.lang.Object>... additionalFields)
```

---

### **runPDFReport**

```
public java.util.Collection<NuclosFile> runPDFReport(java.lang.String reportName)
run report on server object
```

**Parameters:**

reportName - report name would be like "reportName\_2010-06-01 12-05-00.pdf"

---

### **runPDFReport**

```
public java.util.Collection<NuclosFile> runPDFReport(java.lang.String reportName,
java.lang.String objectFieldForReportName,
                                                    boolean nameWithTimestamp)
```

run report on server object

**Parameters:**

reportName -

objectFieldForReportName - (if set report name would be like "reportName\_VALUE-OF-THIS-FIELD.pdf" otherwise "reportName.pdf")

nameWithTimestamp - (is set report name would be like "reportName\_2010-06-01 12-05-00.pdf" otherwise "reportName.pdf" both, objectFieldForReportName and nameWithTimestamp could be combined!

---

### **runPDFReport**

```
public java.util.Collection<NuclosFile> runPDFReport(java.lang.String reportName,
                                                    java.lang.String entity,
                                                    java.lang.Integer objectId,
java.lang.String objectFieldForReportName,
                                                    boolean nameWithTimestamp)
```

**Parameters:**

reportName -

entity -

objectId -

objectFieldForReportName - (if set report name would be like "reportName\_VALUE-OF-THIS-FIELD.pdf" otherwise "reportName.pdf")

nameWithTimestamp - (is set report name would be like "reportName\_2010-06-01 12-05-00.pdf" otherwise "reportName.pdf" both, objectFieldForReportName and nameWithTimestamp could be combined!

---

### **runImport**

```
public NuclosFileImportResult runImport(NuclosFileImport fileimport)
throws NuclosBusinessRuleException
```

define and execute a file import (csv)

**Parameters:**

fileimport -

**Returns:**

**Throws:**

[NuclosBusinessRuleException](#)

---

### **logInfo**



```
public void logInfo(java.lang.String sMessage)
    throws NuclosBusinessRuleException
    write info message into protocol table (scheduled timelimit rules)
Parameters:
    sMessage -
Throws:
NuclosBusinessRuleException - logging should work in business rules also
```

---

### **logWarning**

```
public void logWarning(java.lang.String sMessage)
    throws NuclosBusinessRuleException
    write warning message into protocol table (scheduled timelimit rules)
Parameters:
    sMessage -
Throws:
NuclosBusinessRuleException - logging should work in business rules also
```

---

### **logError**

```
public void logError(java.lang.String sMessage)
    throws NuclosBusinessRuleException
    write error message into protocol table (scheduled timelimit rules)
Parameters:
    sMessage -
Throws:
NuclosBusinessRuleException - logging should work in business rules also
```