| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ModelMBeanOperationInfo.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/javax/management/modelmbean/ModelMBeanNotificationInfo.html)   [**NEXT CLASS**](http://docs.google.com/javax/management/modelmbean/RequiredModelMBean.html) | [**FRAMES**](http://docs.google.com/index.html?javax/management/modelmbean/ModelMBeanOperationInfo.html)    [**NO FRAMES**](http://docs.google.com/ModelMBeanOperationInfo.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#3rdcrjn) | [METHOD](#2jxsxqh) |

## **javax.management.modelmbean**

Class ModelMBeanOperationInfo

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [javax.management.MBeanFeatureInfo](http://docs.google.com/javax/management/MBeanFeatureInfo.html)  
 [javax.management.MBeanOperationInfo](http://docs.google.com/javax/management/MBeanOperationInfo.html)  
 **javax.management.modelmbean.ModelMBeanOperationInfo**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [DescriptorAccess](http://docs.google.com/javax/management/DescriptorAccess.html), [DescriptorRead](http://docs.google.com/javax/management/DescriptorRead.html)

public class **ModelMBeanOperationInfo**extends [MBeanOperationInfo](http://docs.google.com/javax/management/MBeanOperationInfo.html)implements [DescriptorAccess](http://docs.google.com/javax/management/DescriptorAccess.html)

The ModelMBeanOperationInfo object describes a management operation of the ModelMBean. It is a subclass of MBeanOperationInfo with the addition of an associated Descriptor and an implementation of the DescriptorAccess interface.

The fields in the descriptor are defined, but not limited to, the following:   
 name : operation name   
 descriptorType : must be "operation"   
 class : class where method is defined (fully qualified)   
 role : must be "operation", "getter", or "setter  
 targetObject : object on which to execute this method   
 targetType : type of object reference for targetObject. Can be: ObjectReference | Handle | EJBHandle | IOR | RMIReference.  
 value : cached value for operation   
 currencyTimeLimit : how long cached value is valid   
 lastUpdatedTimeStamp : when cached value was set   
 visibility : 1-4 where 1: always visible 4: rarely visible   
 presentationString : xml formatted string to describe how to present operation

The default descriptor will have name, descriptorType, displayName and role fields set.

**Note:** because of inconsistencies in previous versions of this specification, it is recommended not to use negative or zero values for currencyTimeLimit. To indicate that a cached value is never valid, omit the currencyTimeLimit field. To indicate that it is always valid, use a very large number for this field.

The **serialVersionUID** of this class is 6532732096650090465L.

**Since:** 1.5 **See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#javax.management.modelmbean.ModelMBeanOperationInfo)

| **Field Summary** | |
| --- | --- |

| **Fields inherited from class javax.management.**[**MBeanOperationInfo**](http://docs.google.com/javax/management/MBeanOperationInfo.html) |
| --- |
| [ACTION](http://docs.google.com/javax/management/MBeanOperationInfo.html#ACTION), [ACTION\_INFO](http://docs.google.com/javax/management/MBeanOperationInfo.html#ACTION_INFO), [INFO](http://docs.google.com/javax/management/MBeanOperationInfo.html#INFO), [UNKNOWN](http://docs.google.com/javax/management/MBeanOperationInfo.html#UNKNOWN) |

| **Fields inherited from class javax.management.**[**MBeanFeatureInfo**](http://docs.google.com/javax/management/MBeanFeatureInfo.html) |
| --- |
| [description](http://docs.google.com/javax/management/MBeanFeatureInfo.html#description), [name](http://docs.google.com/javax/management/MBeanFeatureInfo.html#name) |

| **Constructor Summary** | |
| --- | --- |
| [**ModelMBeanOperationInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#ModelMBeanOperationInfo(javax.management.modelmbean.ModelMBeanOperationInfo))([ModelMBeanOperationInfo](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html) inInfo)            Constructs a new ModelMBeanOperationInfo object from this ModelMBeanOperation Object. |
| [**ModelMBeanOperationInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#ModelMBeanOperationInfo(java.lang.String,%20java.lang.reflect.Method))([String](http://docs.google.com/java/lang/String.html) description, [Method](http://docs.google.com/java/lang/reflect/Method.html) operationMethod)            Constructs a ModelMBeanOperationInfo object with a default descriptor. |
| [**ModelMBeanOperationInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#ModelMBeanOperationInfo(java.lang.String,%20java.lang.reflect.Method,%20javax.management.Descriptor))([String](http://docs.google.com/java/lang/String.html) description, [Method](http://docs.google.com/java/lang/reflect/Method.html) operationMethod, [Descriptor](http://docs.google.com/javax/management/Descriptor.html) descriptor)            Constructs a ModelMBeanOperationInfo object. |
| [**ModelMBeanOperationInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#ModelMBeanOperationInfo(java.lang.String,%20java.lang.String,%20javax.management.MBeanParameterInfo%5B%5D,%20java.lang.String,%20int))([String](http://docs.google.com/java/lang/String.html) name, [String](http://docs.google.com/java/lang/String.html) description, [MBeanParameterInfo](http://docs.google.com/javax/management/MBeanParameterInfo.html)[] signature, [String](http://docs.google.com/java/lang/String.html) type, int impact)            Constructs a ModelMBeanOperationInfo object with a default descriptor. |
| [**ModelMBeanOperationInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#ModelMBeanOperationInfo(java.lang.String,%20java.lang.String,%20javax.management.MBeanParameterInfo%5B%5D,%20java.lang.String,%20int,%20javax.management.Descriptor))([String](http://docs.google.com/java/lang/String.html) name, [String](http://docs.google.com/java/lang/String.html) description, [MBeanParameterInfo](http://docs.google.com/javax/management/MBeanParameterInfo.html)[] signature, [String](http://docs.google.com/java/lang/String.html) type, int impact, [Descriptor](http://docs.google.com/javax/management/Descriptor.html) descriptor)            Constructs a ModelMBeanOperationInfo object. |

| **Method Summary** | |
| --- | --- |
| [Object](http://docs.google.com/java/lang/Object.html) | [**clone**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#clone())()            Creates and returns a new ModelMBeanOperationInfo which is a duplicate of this ModelMBeanOperationInfo. |
| [Descriptor](http://docs.google.com/javax/management/Descriptor.html) | [**getDescriptor**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#getDescriptor())()            Returns a copy of the associated Descriptor of the ModelMBeanOperationInfo. |
| void | [**setDescriptor**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#setDescriptor(javax.management.Descriptor))([Descriptor](http://docs.google.com/javax/management/Descriptor.html) inDescriptor)            Sets associated Descriptor (full replace) for the ModelMBeanOperationInfo If the new Descriptor is null, then the associated Descriptor reverts to a default descriptor. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#toString())()            Returns a string containing the entire contents of the ModelMBeanOperationInfo in human readable form. |

| **Methods inherited from class javax.management.**[**MBeanOperationInfo**](http://docs.google.com/javax/management/MBeanOperationInfo.html) |
| --- |
| [equals](http://docs.google.com/javax/management/MBeanOperationInfo.html#equals(java.lang.Object)), [getImpact](http://docs.google.com/javax/management/MBeanOperationInfo.html#getImpact()), [getReturnType](http://docs.google.com/javax/management/MBeanOperationInfo.html#getReturnType()), [getSignature](http://docs.google.com/javax/management/MBeanOperationInfo.html#getSignature()), [hashCode](http://docs.google.com/javax/management/MBeanOperationInfo.html#hashCode()) |

| **Methods inherited from class javax.management.**[**MBeanFeatureInfo**](http://docs.google.com/javax/management/MBeanFeatureInfo.html) |
| --- |
| [getDescription](http://docs.google.com/javax/management/MBeanFeatureInfo.html#getDescription()), [getName](http://docs.google.com/javax/management/MBeanFeatureInfo.html#getName()) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### ModelMBeanOperationInfo

public **ModelMBeanOperationInfo**([String](http://docs.google.com/java/lang/String.html) description,  
 [Method](http://docs.google.com/java/lang/reflect/Method.html) operationMethod)

Constructs a ModelMBeanOperationInfo object with a default descriptor. The [Descriptor](http://docs.google.com/javax/management/Descriptor.html) of the constructed object will include fields contributed by any annotations on the Method object that contain the [DescriptorKey](http://docs.google.com/javax/management/DescriptorKey.html) meta-annotation.

**Parameters:**operationMethod - The java.lang.reflect.Method object describing the MBean operation.description - A human readable description of the operation.

### ModelMBeanOperationInfo

public **ModelMBeanOperationInfo**([String](http://docs.google.com/java/lang/String.html) description,  
 [Method](http://docs.google.com/java/lang/reflect/Method.html) operationMethod,  
 [Descriptor](http://docs.google.com/javax/management/Descriptor.html) descriptor)

Constructs a ModelMBeanOperationInfo object. The [Descriptor](http://docs.google.com/javax/management/Descriptor.html) of the constructed object will include fields contributed by any annotations on the Method object that contain the [DescriptorKey](http://docs.google.com/javax/management/DescriptorKey.html) meta-annotation.

**Parameters:**operationMethod - The java.lang.reflect.Method object describing the MBean operation.description - A human readable description of the operation.descriptor - An instance of Descriptor containing the appropriate metadata for this instance of the ModelMBeanOperationInfo. If it is null a default descriptor will be created. If the descriptor does not contain the fields "displayName" or "role" these fields are added in the descriptor with their default values. **Throws:** [RuntimeOperationsException](http://docs.google.com/javax/management/RuntimeOperationsException.html) - Wraps an IllegalArgumentException. The descriptor is invalid; or descriptor field "name" is not equal to operation name; or descriptor field "DescriptorType" is not equal to "operation"; or descriptor optional field "role" is not equal to "operation", "getter", or "setter".

### ModelMBeanOperationInfo

public **ModelMBeanOperationInfo**([String](http://docs.google.com/java/lang/String.html) name,  
 [String](http://docs.google.com/java/lang/String.html) description,  
 [MBeanParameterInfo](http://docs.google.com/javax/management/MBeanParameterInfo.html)[] signature,  
 [String](http://docs.google.com/java/lang/String.html) type,  
 int impact)

Constructs a ModelMBeanOperationInfo object with a default descriptor.

**Parameters:**name - The name of the method.description - A human readable description of the operation.signature - MBeanParameterInfo objects describing the parameters(arguments) of the method.type - The type of the method's return value.impact - The impact of the method, one of INFO, ACTION, ACTION\_INFO, UNKNOWN.

### ModelMBeanOperationInfo

public **ModelMBeanOperationInfo**([String](http://docs.google.com/java/lang/String.html) name,  
 [String](http://docs.google.com/java/lang/String.html) description,  
 [MBeanParameterInfo](http://docs.google.com/javax/management/MBeanParameterInfo.html)[] signature,  
 [String](http://docs.google.com/java/lang/String.html) type,  
 int impact,  
 [Descriptor](http://docs.google.com/javax/management/Descriptor.html) descriptor)

Constructs a ModelMBeanOperationInfo object.

**Parameters:**name - The name of the method.description - A human readable description of the operation.signature - MBeanParameterInfo objects describing the parameters(arguments) of the method.type - The type of the method's return value.impact - The impact of the method, one of INFO, ACTION, ACTION\_INFO, UNKNOWN.descriptor - An instance of Descriptor containing the appropriate metadata. for this instance of the MBeanOperationInfo.If it is null then a default descriptor will be created. If the descriptor does not contain the fields "displayName" or "role" these fields are added in the descriptor with their default values. **Throws:** [RuntimeOperationsException](http://docs.google.com/javax/management/RuntimeOperationsException.html) - Wraps an IllegalArgumentException. The descriptor is invalid; or descriptor field "name" is not equal to operation name; or descriptor field "DescriptorType" is not equal to "operation"; or descriptor optional field "role" is not equal to "operation", "getter", or "setter".

### ModelMBeanOperationInfo

public **ModelMBeanOperationInfo**([ModelMBeanOperationInfo](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html) inInfo)

Constructs a new ModelMBeanOperationInfo object from this ModelMBeanOperation Object.

**Parameters:**inInfo - the ModelMBeanOperationInfo to be duplicated

| **Method Detail** |
| --- |

### clone

public [Object](http://docs.google.com/java/lang/Object.html) **clone**()

Creates and returns a new ModelMBeanOperationInfo which is a duplicate of this ModelMBeanOperationInfo.

**Overrides:**[clone](http://docs.google.com/javax/management/MBeanOperationInfo.html#clone()) in class [MBeanOperationInfo](http://docs.google.com/javax/management/MBeanOperationInfo.html) **Returns:**a clone of this instance.**See Also:**[Cloneable](http://docs.google.com/java/lang/Cloneable.html)

### getDescriptor

public [Descriptor](http://docs.google.com/javax/management/Descriptor.html) **getDescriptor**()

Returns a copy of the associated Descriptor of the ModelMBeanOperationInfo.

**Specified by:**[getDescriptor](http://docs.google.com/javax/management/DescriptorRead.html#getDescriptor()) in interface [DescriptorRead](http://docs.google.com/javax/management/DescriptorRead.html)**Overrides:**[getDescriptor](http://docs.google.com/javax/management/MBeanFeatureInfo.html#getDescriptor()) in class [MBeanFeatureInfo](http://docs.google.com/javax/management/MBeanFeatureInfo.html) **Returns:**Descriptor associated with the ModelMBeanOperationInfo object.**See Also:**[setDescriptor(javax.management.Descriptor)](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#setDescriptor(javax.management.Descriptor))

### setDescriptor

public void **setDescriptor**([Descriptor](http://docs.google.com/javax/management/Descriptor.html) inDescriptor)

Sets associated Descriptor (full replace) for the ModelMBeanOperationInfo If the new Descriptor is null, then the associated Descriptor reverts to a default descriptor. The Descriptor is validated before it is assigned. If the new Descriptor is invalid, then a RuntimeOperationsException wrapping an IllegalArgumentException is thrown.

**Specified by:**[setDescriptor](http://docs.google.com/javax/management/DescriptorAccess.html#setDescriptor(javax.management.Descriptor)) in interface [DescriptorAccess](http://docs.google.com/javax/management/DescriptorAccess.html) **Parameters:**inDescriptor - replaces the Descriptor associated with the ModelMBeanOperation. **Throws:** [RuntimeOperationsException](http://docs.google.com/javax/management/RuntimeOperationsException.html) - Wraps an IllegalArgumentException for invalid Descriptor.**See Also:**[getDescriptor()](http://docs.google.com/javax/management/modelmbean/ModelMBeanOperationInfo.html#getDescriptor())

### toString

public [String](http://docs.google.com/java/lang/String.html) **toString**()

Returns a string containing the entire contents of the ModelMBeanOperationInfo in human readable form.

**Overrides:**[toString](http://docs.google.com/javax/management/MBeanOperationInfo.html#toString()) in class [MBeanOperationInfo](http://docs.google.com/javax/management/MBeanOperationInfo.html) **Returns:**a string representation of the object.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ModelMBeanOperationInfo.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#3rdcrjn) | [METHOD](#2jxsxqh) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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