| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ModelMBeanAttributeInfo.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/ModelMBean.html)   [**NEXT CLASS**](http://docs.google.com/javax/management/modelmbean/ModelMBeanConstructorInfo.html) | [**FRAMES**](http://docs.google.com/index.html?javax/management/modelmbean/ModelMBeanAttributeInfo.html)    [**NO FRAMES**](http://docs.google.com/ModelMBeanAttributeInfo.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#17dp8vu) | [METHOD](#44sinio) |

## **javax.management.modelmbean**

Class ModelMBeanAttributeInfo

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

**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 **ModelMBeanAttributeInfo**extends [MBeanAttributeInfo](http://docs.google.com/javax/management/MBeanAttributeInfo.html)implements [DescriptorAccess](http://docs.google.com/javax/management/DescriptorAccess.html)

The ModelMBeanAttributeInfo object describes an attribute of the ModelMBean. It is a subclass of MBeanAttributeInfo 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 : attribute name   
 descriptorType : must be "attribute"   
 value : current value for attribute   
 default : default value for attribute   
 displayName : name of attribute to be used in displays   
 getMethod : name of operation descriptor for get method   
 setMethod : name of operation descriptor for set method   
 protocolMap : object which implements the Descriptor interface: mappings must be appropriate for the attribute  
 and entries can be updated or augmented at runtime.  
 persistPolicy : OnUpdate|OnTimer|NoMoreOftenThan|OnUnregister|Always|Never   
 persistPeriod : seconds - frequency of persist cycle. Used when persistPolicy is"OnTimer" or "NoMoreOftenThan".   
 currencyTimeLimit : how long value is valid, <0 never, =0 always, >0 seconds  
 lastUpdatedTimeStamp : when value was set   
 visibility : 1-4 where 1: always visible 4: rarely visible   
 presentationString : xml formatted string to allow presentation of data

The default descriptor contains the name, descriptorType and displayName fields.

**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 6181543027787327345L.

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

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

| **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** | |
| --- | --- |
| [**ModelMBeanAttributeInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#ModelMBeanAttributeInfo(javax.management.modelmbean.ModelMBeanAttributeInfo))([ModelMBeanAttributeInfo](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html) inInfo)            Constructs a new ModelMBeanAttributeInfo object from this ModelMBeanAttributeInfo Object. |
| [**ModelMBeanAttributeInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#ModelMBeanAttributeInfo(java.lang.String,%20java.lang.String,%20java.lang.reflect.Method,%20java.lang.reflect.Method))([String](http://docs.google.com/java/lang/String.html) name, [String](http://docs.google.com/java/lang/String.html) description, [Method](http://docs.google.com/java/lang/reflect/Method.html) getter, [Method](http://docs.google.com/java/lang/reflect/Method.html) setter)            Constructs a ModelMBeanAttributeInfo object with a default descriptor. |
| [**ModelMBeanAttributeInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#ModelMBeanAttributeInfo(java.lang.String,%20java.lang.String,%20java.lang.reflect.Method,%20java.lang.reflect.Method,%20javax.management.Descriptor))([String](http://docs.google.com/java/lang/String.html) name, [String](http://docs.google.com/java/lang/String.html) description, [Method](http://docs.google.com/java/lang/reflect/Method.html) getter, [Method](http://docs.google.com/java/lang/reflect/Method.html) setter, [Descriptor](http://docs.google.com/javax/management/Descriptor.html) descriptor)            Constructs a ModelMBeanAttributeInfo object. |
| [**ModelMBeanAttributeInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#ModelMBeanAttributeInfo(java.lang.String,%20java.lang.String,%20java.lang.String,%20boolean,%20boolean,%20boolean))([String](http://docs.google.com/java/lang/String.html) name, [String](http://docs.google.com/java/lang/String.html) type, [String](http://docs.google.com/java/lang/String.html) description, boolean isReadable, boolean isWritable, boolean isIs)            Constructs a ModelMBeanAttributeInfo object with a default descriptor. |
| [**ModelMBeanAttributeInfo**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#ModelMBeanAttributeInfo(java.lang.String,%20java.lang.String,%20java.lang.String,%20boolean,%20boolean,%20boolean,%20javax.management.Descriptor))([String](http://docs.google.com/java/lang/String.html) name, [String](http://docs.google.com/java/lang/String.html) type, [String](http://docs.google.com/java/lang/String.html) description, boolean isReadable, boolean isWritable, boolean isIs, [Descriptor](http://docs.google.com/javax/management/Descriptor.html) descriptor)            Constructs a ModelMBeanAttributeInfo object with a default descriptor. |

| **Method Summary** | |
| --- | --- |
| [Object](http://docs.google.com/java/lang/Object.html) | [**clone**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#clone())()            Creates and returns a new ModelMBeanAttributeInfo which is a duplicate of this ModelMBeanAttributeInfo. |
| [Descriptor](http://docs.google.com/javax/management/Descriptor.html) | [**getDescriptor**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#getDescriptor())()            Gets a copy of the associated Descriptor for the ModelMBeanAttributeInfo. |
| void | [**setDescriptor**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#setDescriptor(javax.management.Descriptor))([Descriptor](http://docs.google.com/javax/management/Descriptor.html) inDescriptor)            Sets associated Descriptor (full replace) for the ModelMBeanAttributeDescriptor. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#toString())()            Returns a human-readable version of the ModelMBeanAttributeInfo instance. |

| **Methods inherited from class javax.management.**[**MBeanAttributeInfo**](http://docs.google.com/javax/management/MBeanAttributeInfo.html) |
| --- |
| [equals](http://docs.google.com/javax/management/MBeanAttributeInfo.html#equals(java.lang.Object)), [getType](http://docs.google.com/javax/management/MBeanAttributeInfo.html#getType()), [hashCode](http://docs.google.com/javax/management/MBeanAttributeInfo.html#hashCode()), [isIs](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isIs()), [isReadable](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isReadable()), [isWritable](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isWritable()) |

| **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** |
| --- |

### ModelMBeanAttributeInfo

public **ModelMBeanAttributeInfo**([String](http://docs.google.com/java/lang/String.html) name,  
 [String](http://docs.google.com/java/lang/String.html) description,  
 [Method](http://docs.google.com/java/lang/reflect/Method.html) getter,  
 [Method](http://docs.google.com/java/lang/reflect/Method.html) setter)  
 throws [IntrospectionException](http://docs.google.com/javax/management/IntrospectionException.html)

Constructs a ModelMBeanAttributeInfo 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 objects that contain the [DescriptorKey](http://docs.google.com/javax/management/DescriptorKey.html) meta-annotation.

**Parameters:**name - The name of the attribute.description - A human readable description of the attribute. Optional.getter - The method used for reading the attribute value. May be null if the property is write-only.setter - The method used for writing the attribute value. May be null if the attribute is read-only. **Throws:** [IntrospectionException](http://docs.google.com/javax/management/IntrospectionException.html) - There is a consistency problem in the definition of this attribute.

### ModelMBeanAttributeInfo

public **ModelMBeanAttributeInfo**([String](http://docs.google.com/java/lang/String.html) name,  
 [String](http://docs.google.com/java/lang/String.html) description,  
 [Method](http://docs.google.com/java/lang/reflect/Method.html) getter,  
 [Method](http://docs.google.com/java/lang/reflect/Method.html) setter,  
 [Descriptor](http://docs.google.com/javax/management/Descriptor.html) descriptor)  
 throws [IntrospectionException](http://docs.google.com/javax/management/IntrospectionException.html)

Constructs a ModelMBeanAttributeInfo 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 objects that contain the [DescriptorKey](http://docs.google.com/javax/management/DescriptorKey.html) meta-annotation.

**Parameters:**name - The name of the attribute.description - A human readable description of the attribute. Optional.getter - The method used for reading the attribute value. May be null if the property is write-only.setter - The method used for writing the attribute value. May be null if the attribute is read-only.descriptor - An instance of Descriptor containing the appropriate metadata for this instance of the Attribute. If it is null, then a default descriptor will be created. If the descriptor does not contain the field "displayName" this field is added in the descriptor with its default value. **Throws:** [IntrospectionException](http://docs.google.com/javax/management/IntrospectionException.html) - There is a consistency problem in the definition of this attribute. [RuntimeOperationsException](http://docs.google.com/javax/management/RuntimeOperationsException.html) - Wraps an IllegalArgumentException. The descriptor is invalid, or descriptor field "name" is not equal to name parameter, or descriptor field "DescriptorType" is not equal to "attribute".

### ModelMBeanAttributeInfo

public **ModelMBeanAttributeInfo**([String](http://docs.google.com/java/lang/String.html) name,  
 [String](http://docs.google.com/java/lang/String.html) type,  
 [String](http://docs.google.com/java/lang/String.html) description,  
 boolean isReadable,  
 boolean isWritable,  
 boolean isIs)

Constructs a ModelMBeanAttributeInfo object with a default descriptor.

**Parameters:**name - The name of the attributetype - The type or class name of the attributedescription - A human readable description of the attribute.isReadable - True if the attribute has a getter method, false otherwise.isWritable - True if the attribute has a setter method, false otherwise.isIs - True if the attribute has an "is" getter, false otherwise.

### ModelMBeanAttributeInfo

public **ModelMBeanAttributeInfo**([String](http://docs.google.com/java/lang/String.html) name,  
 [String](http://docs.google.com/java/lang/String.html) type,  
 [String](http://docs.google.com/java/lang/String.html) description,  
 boolean isReadable,  
 boolean isWritable,  
 boolean isIs,  
 [Descriptor](http://docs.google.com/javax/management/Descriptor.html) descriptor)

Constructs a ModelMBeanAttributeInfo object with a default descriptor.

**Parameters:**name - The name of the attributetype - The type or class name of the attributedescription - A human readable description of the attribute.isReadable - True if the attribute has a getter method, false otherwise.isWritable - True if the attribute has a setter method, false otherwise.isIs - True if the attribute has an "is" getter, false otherwise.descriptor - An instance of Descriptor containing the appropriate metadata for this instance of the Attribute. If it is null then a default descriptor will be created. If the descriptor does not contain the field "displayName" this field is added in the descriptor with its default value. **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 name parameter, or descriptor field "DescriptorType" is not equal to "attribute".

### ModelMBeanAttributeInfo

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

Constructs a new ModelMBeanAttributeInfo object from this ModelMBeanAttributeInfo Object. A default descriptor will be created.

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

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

### getDescriptor

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

Gets a copy of the associated Descriptor for the ModelMBeanAttributeInfo.

**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 ModelMBeanAttributeInfo object.**See Also:**[setDescriptor(javax.management.Descriptor)](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.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 ModelMBeanAttributeDescriptor. 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 ModelMBeanAttributeInfo **Throws:** [RuntimeOperationsException](http://docs.google.com/javax/management/RuntimeOperationsException.html) - Wraps an IllegalArgumentException for an invalid Descriptor**See Also:**[getDescriptor()](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html#getDescriptor())

### clone

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

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

**Overrides:**[clone](http://docs.google.com/javax/management/MBeanAttributeInfo.html#clone()) in class [MBeanAttributeInfo](http://docs.google.com/javax/management/MBeanAttributeInfo.html) **Returns:**a clone of this instance. **Throws:** [RuntimeOperationsException](http://docs.google.com/javax/management/RuntimeOperationsException.html) - for illegal value for field Names or field Values. If the descriptor construction fails for any reason, this exception will be thrown.**See Also:**[Cloneable](http://docs.google.com/java/lang/Cloneable.html)

### toString

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

Returns a human-readable version of the ModelMBeanAttributeInfo instance.

**Overrides:**[toString](http://docs.google.com/javax/management/MBeanAttributeInfo.html#toString()) in class [MBeanAttributeInfo](http://docs.google.com/javax/management/MBeanAttributeInfo.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/ModelMBeanAttributeInfo.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/ModelMBean.html)   [**NEXT CLASS**](http://docs.google.com/javax/management/modelmbean/ModelMBeanConstructorInfo.html) | [**FRAMES**](http://docs.google.com/index.html?javax/management/modelmbean/ModelMBeanAttributeInfo.html)    [**NO FRAMES**](http://docs.google.com/ModelMBeanAttributeInfo.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#17dp8vu) | [METHOD](#44sinio) |

[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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