| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MBeanAttributeInfo.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/MalformedObjectNameException.html)   [**NEXT CLASS**](http://docs.google.com/javax/management/MBeanConstructorInfo.html) | [**FRAMES**](http://docs.google.com/index.html?javax/management/MBeanAttributeInfo.html)    [**NO FRAMES**](http://docs.google.com/MBeanAttributeInfo.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#2s8eyo1) | [METHOD](#lnxbz9) |

## **javax.management**

Class MBeanAttributeInfo

[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**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [DescriptorRead](http://docs.google.com/javax/management/DescriptorRead.html) **Direct Known Subclasses:** [ModelMBeanAttributeInfo](http://docs.google.com/javax/management/modelmbean/ModelMBeanAttributeInfo.html), [OpenMBeanAttributeInfoSupport](http://docs.google.com/javax/management/openmbean/OpenMBeanAttributeInfoSupport.html)

public class **MBeanAttributeInfo**extends [MBeanFeatureInfo](http://docs.google.com/javax/management/MBeanFeatureInfo.html)implements [Cloneable](http://docs.google.com/java/lang/Cloneable.html)

Describes an MBean attribute exposed for management. Instances of this class are immutable. Subclasses may be mutable but this is not recommended.

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

| **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** | |
| --- | --- |
| [**MBeanAttributeInfo**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#MBeanAttributeInfo(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)            This constructor takes the name of a simple attribute, and Method objects for reading and writing the attribute. |
| [**MBeanAttributeInfo**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#MBeanAttributeInfo(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 an MBeanAttributeInfo object. |
| [**MBeanAttributeInfo**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#MBeanAttributeInfo(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 an MBeanAttributeInfo object. |

| **Method Summary** | |
| --- | --- |
| [Object](http://docs.google.com/java/lang/Object.html) | [**clone**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#clone())()            Returns a shallow clone of this instance. |
| boolean | [**equals**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#equals(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) o)            Compare this MBeanAttributeInfo to another. |
| [String](http://docs.google.com/java/lang/String.html) | [**getType**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#getType())()            Returns the class name of the attribute. |
| int | [**hashCode**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#hashCode())()            Returns a hash code value for the object. |
| boolean | [**isIs**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isIs())()            Indicates if this attribute has an "is" getter. |
| boolean | [**isReadable**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isReadable())()            Whether the value of the attribute can be read. |
| boolean | [**isWritable**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isWritable())()            Whether new values can be written to the attribute. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/javax/management/MBeanAttributeInfo.html#toString())()            Returns a string representation of the object. |

| **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()), [getDescriptor](http://docs.google.com/javax/management/MBeanFeatureInfo.html#getDescriptor()), [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** |
| --- |

### MBeanAttributeInfo

public **MBeanAttributeInfo**([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 an MBeanAttributeInfo object.

**Parameters:**name - The name of the attribute.type - The type or class name of the attribute.description - 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 this attribute has an "is" getter, false otherwise. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if isIs is true but isReadable is not, or if isIs is true and type is not boolean or java.lang.Boolean. (New code should always use boolean rather than java.lang.Boolean.)

### MBeanAttributeInfo

public **MBeanAttributeInfo**([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 an MBeanAttributeInfo object.

**Parameters:**name - The name of the attribute.type - The type or class name of the attribute.description - 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 this attribute has an "is" getter, false otherwise.descriptor - The descriptor for the attribute. This may be null which is equivalent to an empty descriptor. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if isIs is true but isReadable is not, or if isIs is true and type is not boolean or java.lang.Boolean. (New code should always use boolean rather than java.lang.Boolean.)**Since:** 1.6

### MBeanAttributeInfo

public **MBeanAttributeInfo**([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)

This constructor takes the name of a simple attribute, and Method objects for reading and writing the attribute. 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 programmatic name of the attribute.description - A human readable description of the attribute.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.

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

### clone

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

Returns a shallow clone of this instance. The clone is obtained by simply calling super.clone(), thus calling the default native shallow cloning mechanism implemented by Object.clone(). No deeper cloning of any internal field is made.

Since this class is immutable, cloning is chiefly of interest to subclasses.

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

### getType

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

Returns the class name of the attribute.

**Returns:**the class name.

### isReadable

public boolean **isReadable**()

Whether the value of the attribute can be read.

**Returns:**True if the attribute can be read, false otherwise.

### isWritable

public boolean **isWritable**()

Whether new values can be written to the attribute.

**Returns:**True if the attribute can be written to, false otherwise.

### isIs

public boolean **isIs**()

Indicates if this attribute has an "is" getter.

**Returns:**true if this attribute has an "is" getter.

### toString

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

**Description copied from class:** [**Object**](http://docs.google.com/java/lang/Object.html#toString()) Returns a string representation of the object. In general, the toString method returns a string that "textually represents" this object. The result should be a concise but informative representation that is easy for a person to read. It is recommended that all subclasses override this method.

The toString method for class Object returns a string consisting of the name of the class of which the object is an instance, the at-sign character `@', and the unsigned hexadecimal representation of the hash code of the object. In other words, this method returns a string equal to the value of:

getClass().getName() + '@' + Integer.toHexString(hashCode())

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

### equals

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

Compare this MBeanAttributeInfo to another.

**Overrides:**[equals](http://docs.google.com/javax/management/MBeanFeatureInfo.html#equals(java.lang.Object)) in class [MBeanFeatureInfo](http://docs.google.com/javax/management/MBeanFeatureInfo.html) **Parameters:**o - the object to compare to. **Returns:**true if and only if o is an MBeanAttributeInfo such that its [MBeanFeatureInfo.getName()](http://docs.google.com/javax/management/MBeanFeatureInfo.html#getName()), [getType()](http://docs.google.com/javax/management/MBeanAttributeInfo.html#getType()), [MBeanFeatureInfo.getDescription()](http://docs.google.com/javax/management/MBeanFeatureInfo.html#getDescription()), [isReadable()](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isReadable()), [isWritable()](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isWritable()), and [isIs()](http://docs.google.com/javax/management/MBeanAttributeInfo.html#isIs()) values are equal (not necessarily identical) to those of this MBeanAttributeInfo.**See Also:**[Object.hashCode()](http://docs.google.com/java/lang/Object.html#hashCode()), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

### hashCode

public int **hashCode**()

**Description copied from class:** [**Object**](http://docs.google.com/java/lang/Object.html#hashCode()) Returns a hash code value for the object. This method is supported for the benefit of hashtables such as those provided by java.util.Hashtable.

The general contract of hashCode is:

* Whenever it is invoked on the same object more than once during an execution of a Java application, the hashCode method must consistently return the same integer, provided no information used in equals comparisons on the object is modified. This integer need not remain consistent from one execution of an application to another execution of the same application.
* If two objects are equal according to the equals(Object) method, then calling the hashCode method on each of the two objects must produce the same integer result.
* It is *not* required that if two objects are unequal according to the [Object.equals(java.lang.Object)](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)) method, then calling the hashCode method on each of the two objects must produce distinct integer results. However, the programmer should be aware that producing distinct integer results for unequal objects may improve the performance of hashtables.

As much as is reasonably practical, the hashCode method defined by class Object does return distinct integers for distinct objects. (This is typically implemented by converting the internal address of the object into an integer, but this implementation technique is not required by the JavaTM programming language.)

**Overrides:**[hashCode](http://docs.google.com/javax/management/MBeanFeatureInfo.html#hashCode()) in class [MBeanFeatureInfo](http://docs.google.com/javax/management/MBeanFeatureInfo.html) **Returns:**a hash code value for this object.**See Also:**[Object.equals(java.lang.Object)](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MBeanAttributeInfo.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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[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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