| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MBeanPermission.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/MBeanParameterInfo.html)   [**NEXT CLASS**](http://docs.google.com/javax/management/MBeanRegistration.html) | [**FRAMES**](http://docs.google.com/index.html?javax/management/MBeanPermission.html)    [**NO FRAMES**](http://docs.google.com/MBeanPermission.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: FIELD | [CONSTR](#4d34og8) | [METHOD](#3rdcrjn) |

## **javax.management**

Class MBeanPermission

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.security.Permission](http://docs.google.com/java/security/Permission.html)  
 **javax.management.MBeanPermission**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Guard](http://docs.google.com/java/security/Guard.html)

public class **MBeanPermission**extends [Permission](http://docs.google.com/java/security/Permission.html)

Permission controlling access to MBeanServer operations. If a security manager has been set using [System.setSecurityManager(java.lang.SecurityManager)](http://docs.google.com/java/lang/System.html#setSecurityManager(java.lang.SecurityManager)), most operations on the MBean Server require that the caller's permissions imply an MBeanPermission appropriate for the operation. This is described in detail in the documentation for the [MBeanServer](http://docs.google.com/javax/management/MBeanServer.html) interface.

As with other [Permission](http://docs.google.com/java/security/Permission.html) objects, an MBeanPermission can represent either a permission that you *have* or a permission that you *need*. When a sensitive operation is being checked for permission, an MBeanPermission is constructed representing the permission you need. The operation is only allowed if the permissions you have [imply](http://docs.google.com/javax/management/MBeanPermission.html#implies(java.security.Permission)) the permission you need.

An MBeanPermission contains four items of information:

* The *action*. For a permission you need, this is one of the actions in the list [below](#3znysh7). For a permission you have, this is a comma-separated list of those actions, or \*, representing all actions.  
  The action is returned by [getActions()](http://docs.google.com/javax/management/MBeanPermission.html#getActions()).
* The *class name*.  
  For a permission you need, this is the class name of an MBean you are accessing, as returned by [MBeanServer.getMBeanInfo(name)](http://docs.google.com/javax/management/MBeanServer.html#getMBeanInfo(javax.management.ObjectName)).[getClassName()](http://docs.google.com/javax/management/MBeanInfo.html#getClassName()). Certain operations do not reference a class name, in which case the class name is null.  
  For a permission you have, this is either empty or a *class name pattern*. A class name pattern is a string following the Java conventions for dot-separated class names. It may end with ".\*" meaning that the permission grants access to any class that begins with the string preceding ".\*". For instance, "javax.management.\*" grants access to javax.management.MBeanServerDelegate and javax.management.timer.Timer, among other classes.  
  A class name pattern can also be empty or the single character "\*", both of which grant access to any class.
* The *member*.  
  For a permission you need, this is the name of the attribute or operation you are accessing. For operations that do not reference an attribute or operation, the member is null.  
  For a permission you have, this is either the name of an attribute or operation you can access, or it is empty or the single character "\*", both of which grant access to any member.
* The *object name*.  
  For a permission you need, this is the [ObjectName](http://docs.google.com/javax/management/ObjectName.html) of the MBean you are accessing. For operations that do not reference a single MBean, it is null. It is never an object name pattern.  
  For a permission you have, this is the [ObjectName](http://docs.google.com/javax/management/ObjectName.html) of the MBean or MBeans you can access. It may be an object name pattern to grant access to all MBeans whose names match the pattern. It may also be empty, which grants access to all MBeans whatever their name.

If you have an MBeanPermission, it allows operations only if all four of the items match.

The class name, member, and object name can be written together as a single string, which is the *name* of this permission. The name of the permission is the string returned by [getName()](http://docs.google.com/java/security/Permission.html#getName()). The format of the string is:

className#member[objectName]

The object name is written using the usual syntax for [ObjectName](http://docs.google.com/javax/management/ObjectName.html). It may contain any legal characters, including ]. It is terminated by a ] character that is the last character in the string.

One or more of the className, member, or objectName may be omitted. If the member is omitted, the # may be too (but does not have to be). If the objectName is omitted, the [] may be too (but does not have to be). It is not legal to omit all three items, that is to have a *name* that is the empty string.

One or more of the className, member, or objectName may be the character "-", which is equivalent to a null value. A null value is implied by any value (including another null value) but does not imply any other value.

The possible actions are these:

* addNotificationListener
* getAttribute
* getClassLoader
* getClassLoaderFor
* getClassLoaderRepository
* getDomains
* getMBeanInfo
* getObjectInstance
* instantiate
* invoke
* isInstanceOf
* queryMBeans
* queryNames
* registerMBean
* removeNotificationListener
* setAttribute
* unregisterMBean

In a comma-separated list of actions, spaces are allowed before and after each action.

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

| **Constructor Summary** | |
| --- | --- |
| [**MBeanPermission**](http://docs.google.com/javax/management/MBeanPermission.html#MBeanPermission(java.lang.String,%20java.lang.String))([String](http://docs.google.com/java/lang/String.html) name, [String](http://docs.google.com/java/lang/String.html) actions)            Create a new MBeanPermission object with the specified target name and actions. |
| [**MBeanPermission**](http://docs.google.com/javax/management/MBeanPermission.html#MBeanPermission(java.lang.String,%20java.lang.String,%20javax.management.ObjectName,%20java.lang.String))([String](http://docs.google.com/java/lang/String.html) className, [String](http://docs.google.com/java/lang/String.html) member, [ObjectName](http://docs.google.com/javax/management/ObjectName.html) objectName, [String](http://docs.google.com/java/lang/String.html) actions)            Create a new MBeanPermission object with the specified target name (class name, member, object name) and actions. |

| **Method Summary** | |
| --- | --- |
| boolean | [**equals**](http://docs.google.com/javax/management/MBeanPermission.html#equals(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) obj)            Checks two MBeanPermission objects for equality. |
| [String](http://docs.google.com/java/lang/String.html) | [**getActions**](http://docs.google.com/javax/management/MBeanPermission.html#getActions())()            Returns the "canonical string representation" of the actions. |
| int | [**hashCode**](http://docs.google.com/javax/management/MBeanPermission.html#hashCode())()            Returns the hash code value for this object. |
| boolean | [**implies**](http://docs.google.com/javax/management/MBeanPermission.html#implies(java.security.Permission))([Permission](http://docs.google.com/java/security/Permission.html) p)            Checks if this MBeanPermission object "implies" the specified permission. |

| **Methods inherited from class java.security.**[**Permission**](http://docs.google.com/java/security/Permission.html) |
| --- |
| [checkGuard](http://docs.google.com/java/security/Permission.html#checkGuard(java.lang.Object)), [getName](http://docs.google.com/java/security/Permission.html#getName()), [newPermissionCollection](http://docs.google.com/java/security/Permission.html#newPermissionCollection()), [toString](http://docs.google.com/java/security/Permission.html#toString()) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [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** |
| --- |

### MBeanPermission

public **MBeanPermission**([String](http://docs.google.com/java/lang/String.html) name,  
 [String](http://docs.google.com/java/lang/String.html) actions)

Create a new MBeanPermission object with the specified target name and actions.

The target name is of the form "className#member[objectName]" where each part is optional. It must not be empty or null.

The actions parameter contains a comma-separated list of the desired actions granted on the target name. It must not be empty or null.

**Parameters:**name - the triplet "className#member[objectName]".actions - the action string. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if the name or actions is invalid.

### MBeanPermission

public **MBeanPermission**([String](http://docs.google.com/java/lang/String.html) className,  
 [String](http://docs.google.com/java/lang/String.html) member,  
 [ObjectName](http://docs.google.com/javax/management/ObjectName.html) objectName,  
 [String](http://docs.google.com/java/lang/String.html) actions)

Create a new MBeanPermission object with the specified target name (class name, member, object name) and actions.

The class name, member and object name parameters define a target name of the form "className#member[objectName]" where each part is optional. This will be the result of [Permission.getName()](http://docs.google.com/java/security/Permission.html#getName()) on the resultant MBeanPermission.

The actions parameter contains a comma-separated list of the desired actions granted on the target name. It must not be empty or null.

**Parameters:**className - the class name to which this permission applies. May be null or "-", which represents a class name that is implied by any class name but does not imply any other class name.member - the member to which this permission applies. May be null or "-", which represents a member that is implied by any member but does not imply any other member.objectName - the object name to which this permission applies. May be null, which represents an object name that is implied by any object name but does not imply any other object name.actions - the action string.

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

### getActions

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

Returns the "canonical string representation" of the actions. That is, this method always returns present actions in alphabetical order.

**Specified by:**[getActions](http://docs.google.com/java/security/Permission.html#getActions()) in class [Permission](http://docs.google.com/java/security/Permission.html) **Returns:**the canonical string representation of the actions.

### hashCode

public int **hashCode**()

Returns the hash code value for this object.

**Specified by:**[hashCode](http://docs.google.com/java/security/Permission.html#hashCode()) in class [Permission](http://docs.google.com/java/security/Permission.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)

### implies

public boolean **implies**([Permission](http://docs.google.com/java/security/Permission.html) p)

Checks if this MBeanPermission object "implies" the specified permission.

More specifically, this method returns true if:

* *p* is an instance of MBeanPermission; and
* *p* has a null className or *p*'s className matches this object's className; and
* *p* has a null member or *p*'s member matches this object's member; and
* *p* has a null object name or *p*'s object name matches this object's object name; and
* *p*'s actions are a subset of this object's actions

If this object's className is "\*", *p*'s className always matches it. If it is "a.\*", *p*'s className matches it if it begins with "a.".

If this object's member is "\*", *p*'s member always matches it.

If this object's objectName *n1* is an object name pattern, *p*'s objectName *n2* matches it if [*n1*.equals(*n2*)](http://docs.google.com/javax/management/ObjectName.html#equals(java.lang.Object)) or if [*n1*.apply(*n2*)](http://docs.google.com/javax/management/ObjectName.html#apply(javax.management.ObjectName)).

A permission that includes the queryMBeans action is considered to include queryNames as well.

**Specified by:**[implies](http://docs.google.com/java/security/Permission.html#implies(java.security.Permission)) in class [Permission](http://docs.google.com/java/security/Permission.html) **Parameters:**p - the permission to check against. **Returns:**true if the specified permission is implied by this object, false if not.

### equals

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

Checks two MBeanPermission objects for equality. Checks that *obj* is an MBeanPermission, and has the same name and actions as this object.

**Specified by:**[equals](http://docs.google.com/java/security/Permission.html#equals(java.lang.Object)) in class [Permission](http://docs.google.com/java/security/Permission.html) **Parameters:**obj - the object we are testing for equality with this object. **Returns:**true if obj is an MBeanPermission, and has the same name and actions as this MBeanPermission object.**See Also:**[Object.hashCode()](http://docs.google.com/java/lang/Object.html#hashCode()), [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/MBeanPermission.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 | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: FIELD | [CONSTR](#4d34og8) | [METHOD](#3rdcrjn) |

[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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