| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AccessibleObject.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   [**NEXT CLASS**](http://docs.google.com/java/lang/reflect/AnnotatedElement.html) | [**FRAMES**](http://docs.google.com/index.html?java/lang/reflect/AccessibleObject.html)    [**NO FRAMES**](http://docs.google.com/AccessibleObject.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **java.lang.reflect**

Class AccessibleObject

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

**All Implemented Interfaces:** [AnnotatedElement](http://docs.google.com/java/lang/reflect/AnnotatedElement.html) **Direct Known Subclasses:** [Constructor](http://docs.google.com/java/lang/reflect/Constructor.html), [Field](http://docs.google.com/java/lang/reflect/Field.html), [Method](http://docs.google.com/java/lang/reflect/Method.html)

public class **AccessibleObject**extends [Object](http://docs.google.com/java/lang/Object.html)implements [AnnotatedElement](http://docs.google.com/java/lang/reflect/AnnotatedElement.html)

The AccessibleObject class is the base class for Field, Method and Constructor objects. It provides the ability to flag a reflected object as suppressing default Java language access control checks when it is used. The access checks--for public, default (package) access, protected, and private members--are performed when Fields, Methods or Constructors are used to set or get fields, to invoke methods, or to create and initialize new instances of classes, respectively.

Setting the accessible flag in a reflected object permits sophisticated applications with sufficient privilege, such as Java Object Serialization or other persistence mechanisms, to manipulate objects in a manner that would normally be prohibited.

**Since:** 1.2 **See Also:**[Field](http://docs.google.com/java/lang/reflect/Field.html), [Method](http://docs.google.com/java/lang/reflect/Method.html), [Constructor](http://docs.google.com/java/lang/reflect/Constructor.html), [ReflectPermission](http://docs.google.com/java/lang/reflect/ReflectPermission.html)

| **Constructor Summary** | |
| --- | --- |
| protected | [**AccessibleObject**](http://docs.google.com/java/lang/reflect/AccessibleObject.html#AccessibleObject())()            Constructor: only used by the Java Virtual Machine. |

| **Method Summary** | |
| --- | --- |
| | <T extends [Annotation](http://docs.google.com/java/lang/annotation/Annotation.html)>  T | | --- | | [**getAnnotation**](http://docs.google.com/java/lang/reflect/AccessibleObject.html#getAnnotation(java.lang.Class))([Class](http://docs.google.com/java/lang/Class.html)<T> annotationClass)            Returns this element's annotation for the specified type if such an annotation is present, else null. |
| [Annotation](http://docs.google.com/java/lang/annotation/Annotation.html)[] | [**getAnnotations**](http://docs.google.com/java/lang/reflect/AccessibleObject.html#getAnnotations())()            Returns all annotations present on this element. |
| [Annotation](http://docs.google.com/java/lang/annotation/Annotation.html)[] | [**getDeclaredAnnotations**](http://docs.google.com/java/lang/reflect/AccessibleObject.html#getDeclaredAnnotations())()            Returns all annotations that are directly present on this element. |
| boolean | [**isAccessible**](http://docs.google.com/java/lang/reflect/AccessibleObject.html#isAccessible())()            Get the value of the accessible flag for this object. |
| boolean | [**isAnnotationPresent**](http://docs.google.com/java/lang/reflect/AccessibleObject.html#isAnnotationPresent(java.lang.Class))([Class](http://docs.google.com/java/lang/Class.html)<? extends [Annotation](http://docs.google.com/java/lang/annotation/Annotation.html)> annotationClass)            Returns true if an annotation for the specified type is present on this element, else false. |
| static void | [**setAccessible**](http://docs.google.com/java/lang/reflect/AccessibleObject.html#setAccessible(java.lang.reflect.AccessibleObject%5B%5D,%20boolean))([AccessibleObject](http://docs.google.com/java/lang/reflect/AccessibleObject.html)[] array, boolean flag)            Convenience method to set the accessible flag for an array of objects with a single security check (for efficiency). |
| void | [**setAccessible**](http://docs.google.com/java/lang/reflect/AccessibleObject.html#setAccessible(boolean))(boolean flag)            Set the accessible flag for this object to the indicated boolean value. |

| **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()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [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** |
| --- |

### AccessibleObject

protected **AccessibleObject**()

Constructor: only used by the Java Virtual Machine.

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

### setAccessible

public static void **setAccessible**([AccessibleObject](http://docs.google.com/java/lang/reflect/AccessibleObject.html)[] array,  
 boolean flag)  
 throws [SecurityException](http://docs.google.com/java/lang/SecurityException.html)

Convenience method to set the accessible flag for an array of objects with a single security check (for efficiency).

First, if there is a security manager, its checkPermission method is called with a ReflectPermission("suppressAccessChecks") permission.

A SecurityException is raised if flag is true but accessibility of any of the elements of the input array may not be changed (for example, if the element object is a [Constructor](http://docs.google.com/java/lang/reflect/Constructor.html) object for the class [Class](http://docs.google.com/java/lang/Class.html)). In the event of such a SecurityException, the accessibility of objects is set to flag for array elements upto (and excluding) the element for which the exception occurred; the accessibility of elements beyond (and including) the element for which the exception occurred is unchanged.

**Parameters:**array - the array of AccessibleObjectsflag - the new value for the accessible flag in each object **Throws:** [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - if the request is denied.**See Also:**[SecurityManager.checkPermission(java.security.Permission)](http://docs.google.com/java/lang/SecurityManager.html#checkPermission(java.security.Permission)), [RuntimePermission](http://docs.google.com/java/lang/RuntimePermission.html)

### setAccessible

public void **setAccessible**(boolean flag)  
 throws [SecurityException](http://docs.google.com/java/lang/SecurityException.html)

Set the accessible flag for this object to the indicated boolean value. A value of true indicates that the reflected object should suppress Java language access checking when it is used. A value of false indicates that the reflected object should enforce Java language access checks.

First, if there is a security manager, its checkPermission method is called with a ReflectPermission("suppressAccessChecks") permission.

A SecurityException is raised if flag is true but accessibility of this object may not be changed (for example, if this element object is a [Constructor](http://docs.google.com/java/lang/reflect/Constructor.html) object for the class [Class](http://docs.google.com/java/lang/Class.html)).

A SecurityException is raised if this object is a [Constructor](http://docs.google.com/java/lang/reflect/Constructor.html) object for the class java.lang.Class, and flag is true.

**Parameters:**flag - the new value for the accessible flag **Throws:** [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - if the request is denied.**See Also:**[SecurityManager.checkPermission(java.security.Permission)](http://docs.google.com/java/lang/SecurityManager.html#checkPermission(java.security.Permission)), [RuntimePermission](http://docs.google.com/java/lang/RuntimePermission.html)

### isAccessible

public boolean **isAccessible**()

Get the value of the accessible flag for this object.

**Returns:**the value of the object's accessible flag

### getAnnotation

public <T extends [Annotation](http://docs.google.com/java/lang/annotation/Annotation.html)> T **getAnnotation**([Class](http://docs.google.com/java/lang/Class.html)<T> annotationClass)

**Description copied from interface:** [**AnnotatedElement**](http://docs.google.com/java/lang/reflect/AnnotatedElement.html#getAnnotation(java.lang.Class)) Returns this element's annotation for the specified type if such an annotation is present, else null.

**Specified by:**[getAnnotation](http://docs.google.com/java/lang/reflect/AnnotatedElement.html#getAnnotation(java.lang.Class)) in interface [AnnotatedElement](http://docs.google.com/java/lang/reflect/AnnotatedElement.html) **Parameters:**annotationClass - the Class object corresponding to the annotation type **Returns:**this element's annotation for the specified annotation type if present on this element, else null **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if the given annotation class is null**Since:** 1.5

### isAnnotationPresent

public boolean **isAnnotationPresent**([Class](http://docs.google.com/java/lang/Class.html)<? extends [Annotation](http://docs.google.com/java/lang/annotation/Annotation.html)> annotationClass)

**Description copied from interface:** [**AnnotatedElement**](http://docs.google.com/java/lang/reflect/AnnotatedElement.html#isAnnotationPresent(java.lang.Class)) Returns true if an annotation for the specified type is present on this element, else false. This method is designed primarily for convenient access to marker annotations.

**Specified by:**[isAnnotationPresent](http://docs.google.com/java/lang/reflect/AnnotatedElement.html#isAnnotationPresent(java.lang.Class)) in interface [AnnotatedElement](http://docs.google.com/java/lang/reflect/AnnotatedElement.html) **Parameters:**annotationClass - the Class object corresponding to the annotation type **Returns:**true if an annotation for the specified annotation type is present on this element, else false **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if the given annotation class is null**Since:** 1.5

### getAnnotations

public [Annotation](http://docs.google.com/java/lang/annotation/Annotation.html)[] **getAnnotations**()

**Description copied from interface:** [**AnnotatedElement**](http://docs.google.com/java/lang/reflect/AnnotatedElement.html#getAnnotations()) Returns all annotations present on this element. (Returns an array of length zero if this element has no annotations.) The caller of this method is free to modify the returned array; it will have no effect on the arrays returned to other callers.

**Specified by:**[getAnnotations](http://docs.google.com/java/lang/reflect/AnnotatedElement.html#getAnnotations()) in interface [AnnotatedElement](http://docs.google.com/java/lang/reflect/AnnotatedElement.html) **Returns:**all annotations present on this element**Since:** 1.5

### getDeclaredAnnotations

public [Annotation](http://docs.google.com/java/lang/annotation/Annotation.html)[] **getDeclaredAnnotations**()

**Description copied from interface:** [**AnnotatedElement**](http://docs.google.com/java/lang/reflect/AnnotatedElement.html#getDeclaredAnnotations()) Returns all annotations that are directly present on this element. Unlike the other methods in this interface, this method ignores inherited annotations. (Returns an array of length zero if no annotations are directly present on this element.) The caller of this method is free to modify the returned array; it will have no effect on the arrays returned to other callers.

**Specified by:**[getDeclaredAnnotations](http://docs.google.com/java/lang/reflect/AnnotatedElement.html#getDeclaredAnnotations()) in interface [AnnotatedElement](http://docs.google.com/java/lang/reflect/AnnotatedElement.html) **Returns:**All annotations directly present on this element**Since:** 1.5

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AccessibleObject.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   [**NEXT CLASS**](http://docs.google.com/java/lang/reflect/AnnotatedElement.html) | [**FRAMES**](http://docs.google.com/index.html?java/lang/reflect/AccessibleObject.html)    [**NO FRAMES**](http://docs.google.com/AccessibleObject.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

[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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