| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/SearchControls.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/naming/directory/SchemaViolationException.html)   [**NEXT CLASS**](http://docs.google.com/javax/naming/directory/SearchResult.html) | [**FRAMES**](http://docs.google.com/index.html?javax/naming/directory/SearchControls.html)    [**NO FRAMES**](http://docs.google.com/SearchControls.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#3rdcrjn) | [METHOD](#35nkun2) |

## **javax.naming.directory**

Class SearchControls

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.naming.directory.SearchControls**

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

public class **SearchControls**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Serializable](http://docs.google.com/java/io/Serializable.html)

This class encapsulates factors that determine scope of search and what gets returned as a result of the search.

A SearchControls instance is not synchronized against concurrent multithreaded access. Multiple threads trying to access and modify a single SearchControls instance should lock the object.

**Since:** 1.3 **See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#javax.naming.directory.SearchControls)

| **Field Summary** | |
| --- | --- |
| static int | [**OBJECT\_SCOPE**](http://docs.google.com/javax/naming/directory/SearchControls.html#OBJECT_SCOPE)            Search the named object. |
| static int | [**ONELEVEL\_SCOPE**](http://docs.google.com/javax/naming/directory/SearchControls.html#ONELEVEL_SCOPE)            Search one level of the named context. |
| static int | [**SUBTREE\_SCOPE**](http://docs.google.com/javax/naming/directory/SearchControls.html#SUBTREE_SCOPE)            Search the entire subtree rooted at the named object. |

| **Constructor Summary** | |
| --- | --- |
| [**SearchControls**](http://docs.google.com/javax/naming/directory/SearchControls.html#SearchControls())()            Constructs a search constraints using defaults. |
| [**SearchControls**](http://docs.google.com/javax/naming/directory/SearchControls.html#SearchControls(int,%20long,%20int,%20java.lang.String%5B%5D,%20boolean,%20boolean))(int scope, long countlim, int timelim, [String](http://docs.google.com/java/lang/String.html)[] attrs, boolean retobj, boolean deref)            Constructs a search constraints using arguments. |

| **Method Summary** | |
| --- | --- |
| long | [**getCountLimit**](http://docs.google.com/javax/naming/directory/SearchControls.html#getCountLimit())()            Retrieves the maximum number of entries that will be returned as a result of the search. |
| boolean | [**getDerefLinkFlag**](http://docs.google.com/javax/naming/directory/SearchControls.html#getDerefLinkFlag())()            Determines whether links will be dereferenced during the search. |
| [String](http://docs.google.com/java/lang/String.html)[] | [**getReturningAttributes**](http://docs.google.com/javax/naming/directory/SearchControls.html#getReturningAttributes())()            Retrieves the attributes that will be returned as part of the search. |
| boolean | [**getReturningObjFlag**](http://docs.google.com/javax/naming/directory/SearchControls.html#getReturningObjFlag())()            Determines whether objects will be returned as part of the result. |
| int | [**getSearchScope**](http://docs.google.com/javax/naming/directory/SearchControls.html#getSearchScope())()            Retrieves the search scope of these SearchControls. |
| int | [**getTimeLimit**](http://docs.google.com/javax/naming/directory/SearchControls.html#getTimeLimit())()            Retrieves the time limit of these SearchControls in milliseconds. |
| void | [**setCountLimit**](http://docs.google.com/javax/naming/directory/SearchControls.html#setCountLimit(long))(long limit)            Sets the maximum number of entries to be returned as a result of the search. |
| void | [**setDerefLinkFlag**](http://docs.google.com/javax/naming/directory/SearchControls.html#setDerefLinkFlag(boolean))(boolean on)            Enables/disables link dereferencing during the search. |
| void | [**setReturningAttributes**](http://docs.google.com/javax/naming/directory/SearchControls.html#setReturningAttributes(java.lang.String%5B%5D))([String](http://docs.google.com/java/lang/String.html)[] attrs)            Specifies the attributes that will be returned as part of the search. |
| void | [**setReturningObjFlag**](http://docs.google.com/javax/naming/directory/SearchControls.html#setReturningObjFlag(boolean))(boolean on)            Enables/disables returning objects returned as part of the result. |
| void | [**setSearchScope**](http://docs.google.com/javax/naming/directory/SearchControls.html#setSearchScope(int))(int scope)            Sets the search scope to one of: OBJECT\_SCOPE, ONELEVEL\_SCOPE, SUBTREE\_SCOPE. |
| void | [**setTimeLimit**](http://docs.google.com/javax/naming/directory/SearchControls.html#setTimeLimit(int))(int ms)            Sets the time limit of these SearchControls in milliseconds. |

| **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)) |

| **Field Detail** |
| --- |

### OBJECT\_SCOPE

public static final int **OBJECT\_SCOPE**

Search the named object.

The NamingEnumeration that results from search() using OBJECT\_SCOPE will contain one or zero element. The enumeration contains one element if the named object satisfies the search filter specified in search(). The element will have as its name the empty string because the names of elements in the NamingEnumeration are relative to the target context--in this case, the target context is the named object. It contains zero element if the named object does not satisfy the search filter specified in search().

The value of this constant is 0.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#javax.naming.directory.SearchControls.OBJECT_SCOPE)

### ONELEVEL\_SCOPE

public static final int **ONELEVEL\_SCOPE**

Search one level of the named context.

The NamingEnumeration that results from search() using ONELEVEL\_SCOPE contains elements with objects in the named context that satisfy the search filter specified in search(). The names of elements in the NamingEnumeration are atomic names relative to the named context.

The value of this constant is 1.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#javax.naming.directory.SearchControls.ONELEVEL_SCOPE)

### SUBTREE\_SCOPE

public static final int **SUBTREE\_SCOPE**

Search the entire subtree rooted at the named object.

If the named object is not a DirContext, search only the object. If the named object is a DirContext, search the subtree rooted at the named object, including the named object itself.

The search will not cross naming system boundaries.

The NamingEnumeration that results from search() using SUBTREE\_SCOPE contains elements of objects from the subtree (including the named context) that satisfy the search filter specified in search(). The names of elements in the NamingEnumeration are either relative to the named context or is a URL string. If the named context satisfies the search filter, it is included in the enumeration with the empty string as its name.

The value of this constant is 2.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#javax.naming.directory.SearchControls.SUBTREE_SCOPE)

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

### SearchControls

public **SearchControls**()

Constructs a search constraints using defaults.

The defaults are:

* search one level
* no maximum return limit for search results
* no time limit for search
* return all attributes associated with objects that satisfy the search filter.
* do not return named object (return only name and class)
* do not dereference links during search

### SearchControls

public **SearchControls**(int scope,  
 long countlim,  
 int timelim,  
 [String](http://docs.google.com/java/lang/String.html)[] attrs,  
 boolean retobj,  
 boolean deref)

Constructs a search constraints using arguments.

**Parameters:**scope - The search scope. One of: OBJECT\_SCOPE, ONELEVEL\_SCOPE, SUBTREE\_SCOPE.timelim - The number of milliseconds to wait before returning. If 0, wait indefinitely.deref - If true, dereference links during search.countlim - The maximum number of entries to return. If 0, return all entries that satisfy filter.retobj - If true, return the object bound to the name of the entry; if false, do not return object.attrs - The identifiers of the attributes to return along with the entry. If null, return all attributes. If empty return no attributes.

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

### getSearchScope

public int **getSearchScope**()

Retrieves the search scope of these SearchControls.

One of OBJECT\_SCOPE, ONELEVEL\_SCOPE, SUBTREE\_SCOPE.

**Returns:**The search scope of this SearchControls.**See Also:**[setSearchScope(int)](http://docs.google.com/javax/naming/directory/SearchControls.html#setSearchScope(int))

### getTimeLimit

public int **getTimeLimit**()

Retrieves the time limit of these SearchControls in milliseconds.

If the value is 0, this means to wait indefinitely.

**Returns:**The time limit of these SearchControls in milliseconds.**See Also:**[setTimeLimit(int)](http://docs.google.com/javax/naming/directory/SearchControls.html#setTimeLimit(int))

### getDerefLinkFlag

public boolean **getDerefLinkFlag**()

Determines whether links will be dereferenced during the search.

**Returns:**true if links will be dereferenced; false otherwise.**See Also:**[setDerefLinkFlag(boolean)](http://docs.google.com/javax/naming/directory/SearchControls.html#setDerefLinkFlag(boolean))

### getReturningObjFlag

public boolean **getReturningObjFlag**()

Determines whether objects will be returned as part of the result.

**Returns:**true if objects will be returned; false otherwise.**See Also:**[setReturningObjFlag(boolean)](http://docs.google.com/javax/naming/directory/SearchControls.html#setReturningObjFlag(boolean))

### getCountLimit

public long **getCountLimit**()

Retrieves the maximum number of entries that will be returned as a result of the search.

0 indicates that all entries will be returned.

**Returns:**The maximum number of entries that will be returned.**See Also:**[setCountLimit(long)](http://docs.google.com/javax/naming/directory/SearchControls.html#setCountLimit(long))

### getReturningAttributes

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

Retrieves the attributes that will be returned as part of the search.

A value of null indicates that all attributes will be returned. An empty array indicates that no attributes are to be returned.

**Returns:**An array of attribute ids identifying the attributes that will be returned. Can be null.**See Also:**[setReturningAttributes(java.lang.String[])](http://docs.google.com/javax/naming/directory/SearchControls.html#setReturningAttributes(java.lang.String%5B%5D))

### setSearchScope

public void **setSearchScope**(int scope)

Sets the search scope to one of: OBJECT\_SCOPE, ONELEVEL\_SCOPE, SUBTREE\_SCOPE.

**Parameters:**scope - The search scope of this SearchControls.**See Also:**[getSearchScope()](http://docs.google.com/javax/naming/directory/SearchControls.html#getSearchScope())

### setTimeLimit

public void **setTimeLimit**(int ms)

Sets the time limit of these SearchControls in milliseconds.

If the value is 0, this means to wait indefinitely.

**Parameters:**ms - The time limit of these SearchControls in milliseconds.**See Also:**[getTimeLimit()](http://docs.google.com/javax/naming/directory/SearchControls.html#getTimeLimit())

### setDerefLinkFlag

public void **setDerefLinkFlag**(boolean on)

Enables/disables link dereferencing during the search.

**Parameters:**on - if true links will be dereferenced; if false, not followed.**See Also:**[getDerefLinkFlag()](http://docs.google.com/javax/naming/directory/SearchControls.html#getDerefLinkFlag())

### setReturningObjFlag

public void **setReturningObjFlag**(boolean on)

Enables/disables returning objects returned as part of the result.

If disabled, only the name and class of the object is returned. If enabled, the object will be returned.

**Parameters:**on - if true, objects will be returned; if false, objects will not be returned.**See Also:**[getReturningObjFlag()](http://docs.google.com/javax/naming/directory/SearchControls.html#getReturningObjFlag())

### setCountLimit

public void **setCountLimit**(long limit)

Sets the maximum number of entries to be returned as a result of the search.

0 indicates no limit: all entries will be returned.

**Parameters:**limit - The maximum number of entries that will be returned.**See Also:**[getCountLimit()](http://docs.google.com/javax/naming/directory/SearchControls.html#getCountLimit())

### setReturningAttributes

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

Specifies the attributes that will be returned as part of the search.

null indicates that all attributes will be returned. An empty array indicates no attributes are returned.

**Parameters:**attrs - An array of attribute ids identifying the attributes that will be returned. Can be null.**See Also:**[getReturningAttributes()](http://docs.google.com/javax/naming/directory/SearchControls.html#getReturningAttributes())

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