| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/KeySelector.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/xml/crypto/Data.html)   [**NEXT CLASS**](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/crypto/KeySelector.html)    [**NO FRAMES**](http://docs.google.com/KeySelector.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | FIELD | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |

## **javax.xml.crypto**

Class KeySelector

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.xml.crypto.KeySelector**

public abstract class **KeySelector**extends [Object](http://docs.google.com/java/lang/Object.html)

A selector that finds and returns a key using the data contained in a [KeyInfo](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/KeyInfo.html) object. An example of an implementation of this class is one that searchs a [KeyStore](http://docs.google.com/java/security/KeyStore.html) for trusted keys that match information contained in a KeyInfo.

Whether or not the returned key is trusted and the mechanisms used to determine that is implementation-specific.

**Since:** 1.6

| **Nested Class Summary** | |
| --- | --- |
| static class | [**KeySelector.Purpose**](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html)            The purpose of the key that is to be selected. |

| **Constructor Summary** | |
| --- | --- |
| protected | [**KeySelector**](http://docs.google.com/javax/xml/crypto/KeySelector.html#KeySelector())()            Default no-args constructor; intended for invocation by subclasses only. |

| **Method Summary** | |
| --- | --- |
| abstract  [KeySelectorResult](http://docs.google.com/javax/xml/crypto/KeySelectorResult.html) | [**select**](http://docs.google.com/javax/xml/crypto/KeySelector.html#select(javax.xml.crypto.dsig.keyinfo.KeyInfo,%20javax.xml.crypto.KeySelector.Purpose,%20javax.xml.crypto.AlgorithmMethod,%20javax.xml.crypto.XMLCryptoContext))([KeyInfo](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/KeyInfo.html) keyInfo, [KeySelector.Purpose](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html) purpose, [AlgorithmMethod](http://docs.google.com/javax/xml/crypto/AlgorithmMethod.html) method, [XMLCryptoContext](http://docs.google.com/javax/xml/crypto/XMLCryptoContext.html) context)            Attempts to find a key that satisfies the specified constraints. |
| static [KeySelector](http://docs.google.com/javax/xml/crypto/KeySelector.html) | [**singletonKeySelector**](http://docs.google.com/javax/xml/crypto/KeySelector.html#singletonKeySelector(java.security.Key))([Key](http://docs.google.com/java/security/Key.html) key)            Returns a KeySelector that always selects the specified key, regardless of the KeyInfo passed to it. |

| **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** |
| --- |

### KeySelector

protected **KeySelector**()

Default no-args constructor; intended for invocation by subclasses only.

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

### select

public abstract [KeySelectorResult](http://docs.google.com/javax/xml/crypto/KeySelectorResult.html) **select**([KeyInfo](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/KeyInfo.html) keyInfo,  
 [KeySelector.Purpose](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html) purpose,  
 [AlgorithmMethod](http://docs.google.com/javax/xml/crypto/AlgorithmMethod.html) method,  
 [XMLCryptoContext](http://docs.google.com/javax/xml/crypto/XMLCryptoContext.html) context)  
 throws [KeySelectorException](http://docs.google.com/javax/xml/crypto/KeySelectorException.html)

Attempts to find a key that satisfies the specified constraints.

**Parameters:**keyInfo - a KeyInfo (may be null)purpose - the key's purpose ([KeySelector.Purpose.SIGN](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html#SIGN), [KeySelector.Purpose.VERIFY](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html#VERIFY), [KeySelector.Purpose.ENCRYPT](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html#ENCRYPT), or [KeySelector.Purpose.DECRYPT](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html#DECRYPT))method - the algorithm method that this key is to be used for. Only keys that are compatible with the algorithm and meet the constraints of the specified algorithm should be returned.context - an XMLCryptoContext that may contain useful information for finding an appropriate key. If this key selector supports resolving [RetrievalMethod](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/RetrievalMethod.html) types, the context's baseURI and dereferencer parameters (if specified) should be used by the selector to resolve and dereference the URI. **Returns:**the result of the key selector **Throws:** [KeySelectorException](http://docs.google.com/javax/xml/crypto/KeySelectorException.html) - if an exceptional condition occurs while attempting to find a key. Note that an inability to find a key is not considered an exception (null should be returned in that case). However, an error condition (ex: network communications failure) that prevented the KeySelector from finding a potential key should be considered an exception. [ClassCastException](http://docs.google.com/java/lang/ClassCastException.html) - if the data type of method is not supported by this key selector

### singletonKeySelector

public static [KeySelector](http://docs.google.com/javax/xml/crypto/KeySelector.html) **singletonKeySelector**([Key](http://docs.google.com/java/security/Key.html) key)

Returns a KeySelector that always selects the specified key, regardless of the KeyInfo passed to it.

**Parameters:**key - the sole key to be stored in the key selector **Returns:**a key selector that always selects the specified key **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if key is null

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/KeySelector.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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| [**PREV CLASS**](http://docs.google.com/javax/xml/crypto/Data.html)   [**NEXT CLASS**](http://docs.google.com/javax/xml/crypto/KeySelector.Purpose.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/crypto/KeySelector.html)    [**NO FRAMES**](http://docs.google.com/KeySelector.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | FIELD | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |

[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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