| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/RetrievalMethod.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/dsig/keyinfo/PGPData.html)   [**NEXT CLASS**](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/X509Data.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/crypto/dsig/keyinfo/RetrievalMethod.html)    [**NO FRAMES**](http://docs.google.com/RetrievalMethod.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#3dy6vkm) |

## **javax.xml.crypto.dsig.keyinfo**

Interface RetrievalMethod

**All Superinterfaces:** [URIReference](http://docs.google.com/javax/xml/crypto/URIReference.html), [XMLStructure](http://docs.google.com/javax/xml/crypto/XMLStructure.html)

public interface **RetrievalMethod**extends [URIReference](http://docs.google.com/javax/xml/crypto/URIReference.html), [XMLStructure](http://docs.google.com/javax/xml/crypto/XMLStructure.html)

A representation of the XML RetrievalMethod element as defined in the  [W3C Recommendation for XML-Signature Syntax and Processing](http://www.w3.org/TR/xmldsig-core/). A RetrievalMethod object is used to convey a reference to KeyInfo information that is stored at another location. The XML schema definition is defined as:

<element name="RetrievalMethod" type="ds:RetrievalMethodType"/>  
 <complexType name="RetrievalMethodType">  
 <sequence>  
 <element name="Transforms" type="ds:TransformsType" minOccurs="0"/>   
 </sequence>   
 <attribute name="URI" type="anyURI"/>  
 <attribute name="Type" type="anyURI" use="optional"/>  
 </complexType>

A RetrievalMethod instance may be created by invoking one of the [newRetrievalMethod](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/KeyInfoFactory.html#newRetrievalMethod(java.lang.String)) methods of the [KeyInfoFactory](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/KeyInfoFactory.html) class, and passing it the URI identifying the location of the KeyInfo, an optional type URI identifying the type of KeyInfo, and an optional list of [Transform](http://docs.google.com/javax/xml/crypto/dsig/Transform.html)s; for example:

KeyInfoFactory factory = KeyInfoFactory.getInstance("DOM");  
 RetrievalMethod rm = factory.newRetrievalMethod  
 ("#KeyValue-1", KeyValue.DSA\_TYPE, Collections.singletonList(Transform.BASE64));

**Since:** 1.6 **See Also:**[KeyInfoFactory.newRetrievalMethod(String)](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/KeyInfoFactory.html#newRetrievalMethod(java.lang.String)), [KeyInfoFactory.newRetrievalMethod(String, String, List)](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/KeyInfoFactory.html#newRetrievalMethod(java.lang.String,%20java.lang.String,%20java.util.List))

| **Method Summary** | |
| --- | --- |
| [Data](http://docs.google.com/javax/xml/crypto/Data.html) | [**dereference**](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/RetrievalMethod.html#dereference(javax.xml.crypto.XMLCryptoContext))([XMLCryptoContext](http://docs.google.com/javax/xml/crypto/XMLCryptoContext.html) context)            Dereferences the KeyInfo information referenced by this RetrievalMethod and applies the specified Transforms. |
| [List](http://docs.google.com/java/util/List.html) | [**getTransforms**](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/RetrievalMethod.html#getTransforms())()            Returns an [unmodifiable list](http://docs.google.com/java/util/Collections.html#unmodifiableList(java.util.List)) of [Transform](http://docs.google.com/javax/xml/crypto/dsig/Transform.html)s of this RetrievalMethod. |
| [String](http://docs.google.com/java/lang/String.html) | [**getURI**](http://docs.google.com/javax/xml/crypto/dsig/keyinfo/RetrievalMethod.html#getURI())()            Returns the URI of the referenced KeyInfo information. |

| **Methods inherited from interface javax.xml.crypto.**[**URIReference**](http://docs.google.com/javax/xml/crypto/URIReference.html) |
| --- |
| [getType](http://docs.google.com/javax/xml/crypto/URIReference.html#getType()) |

| **Methods inherited from interface javax.xml.crypto.**[**XMLStructure**](http://docs.google.com/javax/xml/crypto/XMLStructure.html) |
| --- |
| [isFeatureSupported](http://docs.google.com/javax/xml/crypto/XMLStructure.html#isFeatureSupported(java.lang.String)) |

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

### getTransforms

[List](http://docs.google.com/java/util/List.html) **getTransforms**()

Returns an [unmodifiable list](http://docs.google.com/java/util/Collections.html#unmodifiableList(java.util.List)) of [Transform](http://docs.google.com/javax/xml/crypto/dsig/Transform.html)s of this RetrievalMethod.

**Returns:**an unmodifiable list of Transform objects (may be empty but never null).

### getURI

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

Returns the URI of the referenced KeyInfo information.

**Specified by:**[getURI](http://docs.google.com/javax/xml/crypto/URIReference.html#getURI()) in interface [URIReference](http://docs.google.com/javax/xml/crypto/URIReference.html) **Returns:**the URI of the referenced KeyInfo information in RFC 2396 format (never null)

### dereference

[Data](http://docs.google.com/javax/xml/crypto/Data.html) **dereference**([XMLCryptoContext](http://docs.google.com/javax/xml/crypto/XMLCryptoContext.html) context)  
 throws [URIReferenceException](http://docs.google.com/javax/xml/crypto/URIReferenceException.html)

Dereferences the KeyInfo information referenced by this RetrievalMethod and applies the specified Transforms.

**Parameters:**context - an XMLCryptoContext that may contain additional useful information for dereferencing the URI. The context's baseURI and dereferencer parameters (if specified) are used to resolve and dereference this RetrievalMethod **Returns:**a Data object representing the raw contents of the KeyInfo information referenced by this RetrievalMethod. It is the caller's responsibility to convert the returned data to an appropriate KeyInfo object. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if context is null [URIReferenceException](http://docs.google.com/javax/xml/crypto/URIReferenceException.html) - if there is an error while dereferencing

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#3dy6vkm) |

[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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