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

## **java.security**

Class KeyRep

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

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

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

Standardized representation for serialized Key objects.

Note that a serialized Key may contain sensitive information which should not be exposed in untrusted environments. See the  [Security Appendix](http://docs.google.com/platform/serialization/spec/security.html) of the Serialization Specification for more information.

**Since:** 1.5 **See Also:**[Key](http://docs.google.com/java/security/Key.html), [KeyFactory](http://docs.google.com/java/security/KeyFactory.html), [SecretKeySpec](http://docs.google.com/javax/crypto/spec/SecretKeySpec.html), [X509EncodedKeySpec](http://docs.google.com/java/security/spec/X509EncodedKeySpec.html), [PKCS8EncodedKeySpec](http://docs.google.com/java/security/spec/PKCS8EncodedKeySpec.html), [Serialized Form](http://docs.google.com/serialized-form.html#java.security.KeyRep)

| **Nested Class Summary** | |
| --- | --- |
| static class | [**KeyRep.Type**](http://docs.google.com/java/security/KeyRep.Type.html)            Key type. |

| **Constructor Summary** | |
| --- | --- |
| [**KeyRep**](http://docs.google.com/java/security/KeyRep.html#KeyRep(java.security.KeyRep.Type,%20java.lang.String,%20java.lang.String,%20byte%5B%5D))([KeyRep.Type](http://docs.google.com/java/security/KeyRep.Type.html) type, [String](http://docs.google.com/java/lang/String.html) algorithm, [String](http://docs.google.com/java/lang/String.html) format, byte[] encoded)            Construct the alternate Key class. |

| **Method Summary** | |
| --- | --- |
| protected  [Object](http://docs.google.com/java/lang/Object.html) | [**readResolve**](http://docs.google.com/java/security/KeyRep.html#readResolve())()            Resolve the Key object. |

| **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** |
| --- |

### KeyRep

public **KeyRep**([KeyRep.Type](http://docs.google.com/java/security/KeyRep.Type.html) type,  
 [String](http://docs.google.com/java/lang/String.html) algorithm,  
 [String](http://docs.google.com/java/lang/String.html) format,  
 byte[] encoded)

Construct the alternate Key class.

**Parameters:**type - either one of Type.SECRET, Type.PUBLIC, or Type.PRIVATEalgorithm - the algorithm returned from Key.getAlgorithm()format - the encoding format returned from Key.getFormat()encoded - the encoded bytes returned from Key.getEncoded() **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if type is null, if algorithm is null, if format is null, or if encoded is null

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

### readResolve

protected [Object](http://docs.google.com/java/lang/Object.html) **readResolve**()  
 throws [ObjectStreamException](http://docs.google.com/java/io/ObjectStreamException.html)

Resolve the Key object.

This method supports three Type/format combinations:

* Type.SECRET/"RAW" - returns a SecretKeySpec object constructed using encoded key bytes and algorithm
* Type.PUBLIC/"X.509" - gets a KeyFactory instance for the key algorithm, constructs an X509EncodedKeySpec with the encoded key bytes, and generates a public key from the spec
* Type.PRIVATE/"PKCS#8" - gets a KeyFactory instance for the key algorithm, constructs a PKCS8EncodedKeySpec with the encoded key bytes, and generates a private key from the spec

**Returns:**the resolved Key object **Throws:** [ObjectStreamException](http://docs.google.com/java/io/ObjectStreamException.html) - if the Type/format combination is unrecognized, if the algorithm, key format, or encoded key bytes are unrecognized/invalid, of if the resolution of the key fails for any reason

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/KeyRep.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/java/security/KeyPairGeneratorSpi.html)   [**NEXT CLASS**](http://docs.google.com/java/security/KeyRep.Type.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/KeyRep.html)    [**NO FRAMES**](http://docs.google.com/KeyRep.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
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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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