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

**Uses of Interface**

**java.security.spec.KeySpec**

| Packages that use [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | |
| --- | --- |
| [**java.security**](#3znysh7) | Provides the classes and interfaces for the security framework. |
| [**java.security.spec**](#2et92p0) | Provides classes and interfaces for key specifications and algorithm parameter specifications. |
| [**javax.crypto**](#tyjcwt) | Provides the classes and interfaces for cryptographic operations. |
| [**javax.crypto.spec**](#3dy6vkm) | Provides classes and interfaces for key specifications and algorithm parameter specifications. |

| Uses of [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) in [java.security](http://docs.google.com/java/security/package-summary.html) | |
| --- | --- |

| Methods in [java.security](http://docs.google.com/java/security/package-summary.html) with type parameters of type [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | |
| --- | --- |
| protected abstract   | <T extends [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html)>  T | | --- | | **KeyFactorySpi.**[**engineGetKeySpec**](http://docs.google.com/java/security/KeyFactorySpi.html#engineGetKeySpec(java.security.Key,%20java.lang.Class))([Key](http://docs.google.com/java/security/Key.html) key, [Class](http://docs.google.com/java/lang/Class.html)<T> keySpec)            Returns a specification (key material) of the given key object. |
| | <T extends [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html)>  T | | --- | | **KeyFactory.**[**getKeySpec**](http://docs.google.com/java/security/KeyFactory.html#getKeySpec(java.security.Key,%20java.lang.Class))([Key](http://docs.google.com/java/security/Key.html) key, [Class](http://docs.google.com/java/lang/Class.html)<T> keySpec)            Returns a specification (key material) of the given key object. |

| Methods in [java.security](http://docs.google.com/java/security/package-summary.html) with parameters of type [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | |
| --- | --- |
| protected abstract  [PrivateKey](http://docs.google.com/java/security/PrivateKey.html) | **KeyFactorySpi.**[**engineGeneratePrivate**](http://docs.google.com/java/security/KeyFactorySpi.html#engineGeneratePrivate(java.security.spec.KeySpec))([KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) keySpec)            Generates a private key object from the provided key specification (key material). |
| protected abstract  [PublicKey](http://docs.google.com/java/security/PublicKey.html) | **KeyFactorySpi.**[**engineGeneratePublic**](http://docs.google.com/java/security/KeyFactorySpi.html#engineGeneratePublic(java.security.spec.KeySpec))([KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) keySpec)            Generates a public key object from the provided key specification (key material). |
| [PrivateKey](http://docs.google.com/java/security/PrivateKey.html) | **KeyFactory.**[**generatePrivate**](http://docs.google.com/java/security/KeyFactory.html#generatePrivate(java.security.spec.KeySpec))([KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) keySpec)            Generates a private key object from the provided key specification (key material). |
| [PublicKey](http://docs.google.com/java/security/PublicKey.html) | **KeyFactory.**[**generatePublic**](http://docs.google.com/java/security/KeyFactory.html#generatePublic(java.security.spec.KeySpec))([KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) keySpec)            Generates a public key object from the provided key specification (key material). |

| Uses of [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) in [java.security.spec](http://docs.google.com/java/security/spec/package-summary.html) | |
| --- | --- |

| Classes in [java.security.spec](http://docs.google.com/java/security/spec/package-summary.html) that implement [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | |
| --- | --- |
| class | [**DSAPrivateKeySpec**](http://docs.google.com/java/security/spec/DSAPrivateKeySpec.html)            This class specifies a DSA private key with its associated parameters. |
| class | [**DSAPublicKeySpec**](http://docs.google.com/java/security/spec/DSAPublicKeySpec.html)            This class specifies a DSA public key with its associated parameters. |
| class | [**ECPrivateKeySpec**](http://docs.google.com/java/security/spec/ECPrivateKeySpec.html)            This immutable class specifies an elliptic curve private key with its associated parameters. |
| class | [**ECPublicKeySpec**](http://docs.google.com/java/security/spec/ECPublicKeySpec.html)            This immutable class specifies an elliptic curve public key with its associated parameters. |
| class | [**EncodedKeySpec**](http://docs.google.com/java/security/spec/EncodedKeySpec.html)            This class represents a public or private key in encoded format. |
| class | [**PKCS8EncodedKeySpec**](http://docs.google.com/java/security/spec/PKCS8EncodedKeySpec.html)            This class represents the ASN.1 encoding of a private key, encoded according to the ASN.1 type PrivateKeyInfo. |
| class | [**RSAMultiPrimePrivateCrtKeySpec**](http://docs.google.com/java/security/spec/RSAMultiPrimePrivateCrtKeySpec.html)            This class specifies an RSA multi-prime private key, as defined in the PKCS#1 v2.1, using the Chinese Remainder Theorem (CRT) information values for efficiency. |
| class | [**RSAPrivateCrtKeySpec**](http://docs.google.com/java/security/spec/RSAPrivateCrtKeySpec.html)            This class specifies an RSA private key, as defined in the PKCS#1 standard, using the Chinese Remainder Theorem (CRT) information values for efficiency. |
| class | [**RSAPrivateKeySpec**](http://docs.google.com/java/security/spec/RSAPrivateKeySpec.html)            This class specifies an RSA private key. |
| class | [**RSAPublicKeySpec**](http://docs.google.com/java/security/spec/RSAPublicKeySpec.html)            This class specifies an RSA public key. |
| class | [**X509EncodedKeySpec**](http://docs.google.com/java/security/spec/X509EncodedKeySpec.html)            This class represents the ASN.1 encoding of a public key, encoded according to the ASN.1 type SubjectPublicKeyInfo. |

| Uses of [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) in [javax.crypto](http://docs.google.com/javax/crypto/package-summary.html) | |
| --- | --- |

| Methods in [javax.crypto](http://docs.google.com/javax/crypto/package-summary.html) that return [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | |
| --- | --- |
| protected abstract  [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | **SecretKeyFactorySpi.**[**engineGetKeySpec**](http://docs.google.com/javax/crypto/SecretKeyFactorySpi.html#engineGetKeySpec(javax.crypto.SecretKey,%20java.lang.Class))([SecretKey](http://docs.google.com/javax/crypto/SecretKey.html) key, [Class](http://docs.google.com/java/lang/Class.html) keySpec)            Returns a specification (key material) of the given key object in the requested format. |
| [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | **SecretKeyFactory.**[**getKeySpec**](http://docs.google.com/javax/crypto/SecretKeyFactory.html#getKeySpec(javax.crypto.SecretKey,%20java.lang.Class))([SecretKey](http://docs.google.com/javax/crypto/SecretKey.html) key, [Class](http://docs.google.com/java/lang/Class.html) keySpec)            Returns a specification (key material) of the given key object in the requested format. |

| Methods in [javax.crypto](http://docs.google.com/javax/crypto/package-summary.html) with parameters of type [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | |
| --- | --- |
| protected abstract  [SecretKey](http://docs.google.com/javax/crypto/SecretKey.html) | **SecretKeyFactorySpi.**[**engineGenerateSecret**](http://docs.google.com/javax/crypto/SecretKeyFactorySpi.html#engineGenerateSecret(java.security.spec.KeySpec))([KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) keySpec)            Generates a SecretKey object from the provided key specification (key material). |
| [SecretKey](http://docs.google.com/javax/crypto/SecretKey.html) | **SecretKeyFactory.**[**generateSecret**](http://docs.google.com/javax/crypto/SecretKeyFactory.html#generateSecret(java.security.spec.KeySpec))([KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) keySpec)            Generates a SecretKey object from the provided key specification (key material). |

| Uses of [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) in [javax.crypto.spec](http://docs.google.com/javax/crypto/spec/package-summary.html) | |
| --- | --- |

| Classes in [javax.crypto.spec](http://docs.google.com/javax/crypto/spec/package-summary.html) that implement [KeySpec](http://docs.google.com/java/security/spec/KeySpec.html) | |
| --- | --- |
| class | [**DESedeKeySpec**](http://docs.google.com/javax/crypto/spec/DESedeKeySpec.html)            This class specifies a DES-EDE ("triple-DES") key. |
| class | [**DESKeySpec**](http://docs.google.com/javax/crypto/spec/DESKeySpec.html)            This class specifies a DES key. |
| class | [**DHPrivateKeySpec**](http://docs.google.com/javax/crypto/spec/DHPrivateKeySpec.html)            This class specifies a Diffie-Hellman private key with its associated parameters. |
| class | [**DHPublicKeySpec**](http://docs.google.com/javax/crypto/spec/DHPublicKeySpec.html)            This class specifies a Diffie-Hellman public key with its associated parameters. |
| class | [**PBEKeySpec**](http://docs.google.com/javax/crypto/spec/PBEKeySpec.html)            A user-chosen password that can be used with password-based encryption (*PBE*). |
| class | [**SecretKeySpec**](http://docs.google.com/javax/crypto/spec/SecretKeySpec.html)            This class specifies a secret key in a provider-independent fashion. |

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

[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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