| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | Class | Use | **Tree** | [**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**](http://docs.google.com/java/rmi/server/package-tree.html)   [**NEXT**](http://docs.google.com/java/security/acl/package-tree.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/package-tree.html)    [**NO FRAMES**](http://docs.google.com/package-tree.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

Hierarchy For Package java.security

**Package Hierarchies:**[All Packages](http://docs.google.com/overview-tree.html)

## Class Hierarchy

* java.lang.[**Object**](http://docs.google.com/java/lang/Object.html)
  + java.security.[**AccessControlContext**](http://docs.google.com/java/security/AccessControlContext.html)
  + java.security.[**AccessController**](http://docs.google.com/java/security/AccessController.html)
  + java.security.[**AlgorithmParameterGenerator**](http://docs.google.com/java/security/AlgorithmParameterGenerator.html)
  + java.security.[**AlgorithmParameterGeneratorSpi**](http://docs.google.com/java/security/AlgorithmParameterGeneratorSpi.html)
  + java.security.[**AlgorithmParameters**](http://docs.google.com/java/security/AlgorithmParameters.html)
  + java.security.[**AlgorithmParametersSpi**](http://docs.google.com/java/security/AlgorithmParametersSpi.html)
  + java.lang.[**ClassLoader**](http://docs.google.com/java/lang/ClassLoader.html)
    - java.security.[**SecureClassLoader**](http://docs.google.com/java/security/SecureClassLoader.html)
  + java.security.[**CodeSigner**](http://docs.google.com/java/security/CodeSigner.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.security.[**CodeSource**](http://docs.google.com/java/security/CodeSource.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.util.[**Dictionary**](http://docs.google.com/java/util/Dictionary.html)<K,V>
    - java.util.[**Hashtable**](http://docs.google.com/java/util/Hashtable.html)<K,V> (implements java.lang.[Cloneable](http://docs.google.com/java/lang/Cloneable.html), java.util.[Map](http://docs.google.com/java/util/Map.html)<K,V>, java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
      * java.util.[**Properties**](http://docs.google.com/java/util/Properties.html)
        + java.security.[**Provider**](http://docs.google.com/java/security/Provider.html)

java.security.[**AuthProvider**](http://docs.google.com/java/security/AuthProvider.html)

* + java.security.[**GuardedObject**](http://docs.google.com/java/security/GuardedObject.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.security.[**Identity**](http://docs.google.com/java/security/Identity.html) (implements java.security.[Principal](http://docs.google.com/java/security/Principal.html), java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
    - java.security.[**IdentityScope**](http://docs.google.com/java/security/IdentityScope.html)
    - java.security.[**Signer**](http://docs.google.com/java/security/Signer.html)
  + java.io.[**InputStream**](http://docs.google.com/java/io/InputStream.html) (implements java.io.[Closeable](http://docs.google.com/java/io/Closeable.html))
    - java.io.[**FilterInputStream**](http://docs.google.com/java/io/FilterInputStream.html)
      * java.security.[**DigestInputStream**](http://docs.google.com/java/security/DigestInputStream.html)
  + java.security.[**KeyFactory**](http://docs.google.com/java/security/KeyFactory.html)
  + java.security.[**KeyFactorySpi**](http://docs.google.com/java/security/KeyFactorySpi.html)
  + java.security.[**KeyPair**](http://docs.google.com/java/security/KeyPair.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.security.[**KeyPairGeneratorSpi**](http://docs.google.com/java/security/KeyPairGeneratorSpi.html)
    - java.security.[**KeyPairGenerator**](http://docs.google.com/java/security/KeyPairGenerator.html)
  + java.security.[**KeyRep**](http://docs.google.com/java/security/KeyRep.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.security.[**KeyStore**](http://docs.google.com/java/security/KeyStore.html)
  + java.security.[**KeyStore.Builder**](http://docs.google.com/java/security/KeyStore.Builder.html)
  + java.security.[**KeyStore.CallbackHandlerProtection**](http://docs.google.com/java/security/KeyStore.CallbackHandlerProtection.html) (implements java.security.[KeyStore.ProtectionParameter](http://docs.google.com/java/security/KeyStore.ProtectionParameter.html))
  + java.security.[**KeyStore.PasswordProtection**](http://docs.google.com/java/security/KeyStore.PasswordProtection.html) (implements javax.security.auth.[Destroyable](http://docs.google.com/javax/security/auth/Destroyable.html), java.security.[KeyStore.ProtectionParameter](http://docs.google.com/java/security/KeyStore.ProtectionParameter.html))
  + java.security.[**KeyStore.PrivateKeyEntry**](http://docs.google.com/java/security/KeyStore.PrivateKeyEntry.html) (implements java.security.[KeyStore.Entry](http://docs.google.com/java/security/KeyStore.Entry.html))
  + java.security.[**KeyStore.SecretKeyEntry**](http://docs.google.com/java/security/KeyStore.SecretKeyEntry.html) (implements java.security.[KeyStore.Entry](http://docs.google.com/java/security/KeyStore.Entry.html))
  + java.security.[**KeyStore.TrustedCertificateEntry**](http://docs.google.com/java/security/KeyStore.TrustedCertificateEntry.html) (implements java.security.[KeyStore.Entry](http://docs.google.com/java/security/KeyStore.Entry.html))
  + java.security.[**KeyStoreSpi**](http://docs.google.com/java/security/KeyStoreSpi.html)
  + java.security.[**MessageDigestSpi**](http://docs.google.com/java/security/MessageDigestSpi.html)
    - java.security.[**MessageDigest**](http://docs.google.com/java/security/MessageDigest.html)
  + java.io.[**OutputStream**](http://docs.google.com/java/io/OutputStream.html) (implements java.io.[Closeable](http://docs.google.com/java/io/Closeable.html), java.io.[Flushable](http://docs.google.com/java/io/Flushable.html))
    - java.io.[**FilterOutputStream**](http://docs.google.com/java/io/FilterOutputStream.html)
      * java.security.[**DigestOutputStream**](http://docs.google.com/java/security/DigestOutputStream.html)
  + java.security.[**Permission**](http://docs.google.com/java/security/Permission.html) (implements java.security.[Guard](http://docs.google.com/java/security/Guard.html), java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
    - java.security.[**AllPermission**](http://docs.google.com/java/security/AllPermission.html)
    - java.security.[**BasicPermission**](http://docs.google.com/java/security/BasicPermission.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
      * java.security.[**SecurityPermission**](http://docs.google.com/java/security/SecurityPermission.html)
    - java.security.[**UnresolvedPermission**](http://docs.google.com/java/security/UnresolvedPermission.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.security.[**PermissionCollection**](http://docs.google.com/java/security/PermissionCollection.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
    - java.security.[**Permissions**](http://docs.google.com/java/security/Permissions.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.security.[**Policy**](http://docs.google.com/java/security/Policy.html)
  + java.security.[**PolicySpi**](http://docs.google.com/java/security/PolicySpi.html)
  + java.security.[**ProtectionDomain**](http://docs.google.com/java/security/ProtectionDomain.html)
  + java.security.[**Provider.Service**](http://docs.google.com/java/security/Provider.Service.html)
  + java.util.[**Random**](http://docs.google.com/java/util/Random.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
    - java.security.[**SecureRandom**](http://docs.google.com/java/security/SecureRandom.html)
  + java.security.[**SecureRandomSpi**](http://docs.google.com/java/security/SecureRandomSpi.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.security.[**Security**](http://docs.google.com/java/security/Security.html)
  + java.security.[**SignatureSpi**](http://docs.google.com/java/security/SignatureSpi.html)
    - java.security.[**Signature**](http://docs.google.com/java/security/Signature.html)
  + java.security.[**SignedObject**](http://docs.google.com/java/security/SignedObject.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.lang.[**Throwable**](http://docs.google.com/java/lang/Throwable.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
    - java.lang.[**Exception**](http://docs.google.com/java/lang/Exception.html)
      * java.security.[**GeneralSecurityException**](http://docs.google.com/java/security/GeneralSecurityException.html)
        + java.security.[**DigestException**](http://docs.google.com/java/security/DigestException.html)
        + java.security.[**InvalidAlgorithmParameterException**](http://docs.google.com/java/security/InvalidAlgorithmParameterException.html)
        + java.security.[**KeyException**](http://docs.google.com/java/security/KeyException.html)

java.security.[**InvalidKeyException**](http://docs.google.com/java/security/InvalidKeyException.html)

java.security.[**KeyManagementException**](http://docs.google.com/java/security/KeyManagementException.html)

* + - * + java.security.[**KeyStoreException**](http://docs.google.com/java/security/KeyStoreException.html)
        + java.security.[**NoSuchAlgorithmException**](http://docs.google.com/java/security/NoSuchAlgorithmException.html)
        + java.security.[**NoSuchProviderException**](http://docs.google.com/java/security/NoSuchProviderException.html)
        + java.security.[**SignatureException**](http://docs.google.com/java/security/SignatureException.html)
        + java.security.[**UnrecoverableEntryException**](http://docs.google.com/java/security/UnrecoverableEntryException.html)

java.security.[**UnrecoverableKeyException**](http://docs.google.com/java/security/UnrecoverableKeyException.html)

* + - * java.security.[**PrivilegedActionException**](http://docs.google.com/java/security/PrivilegedActionException.html)
      * java.lang.[**RuntimeException**](http://docs.google.com/java/lang/RuntimeException.html)
        + java.lang.[**IllegalArgumentException**](http://docs.google.com/java/lang/IllegalArgumentException.html)

java.security.[**InvalidParameterException**](http://docs.google.com/java/security/InvalidParameterException.html)

* + - * + java.security.[**ProviderException**](http://docs.google.com/java/security/ProviderException.html)
        + java.lang.[**SecurityException**](http://docs.google.com/java/lang/SecurityException.html)

java.security.[**AccessControlException**](http://docs.google.com/java/security/AccessControlException.html)

* + java.security.[**Timestamp**](http://docs.google.com/java/security/Timestamp.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.security.[**URIParameter**](http://docs.google.com/java/security/URIParameter.html) (implements javax.security.auth.login.[Configuration.Parameters](http://docs.google.com/javax/security/auth/login/Configuration.Parameters.html), java.security.[Policy.Parameters](http://docs.google.com/java/security/Policy.Parameters.html))

## Interface Hierarchy

* java.security.[**Certificate**](http://docs.google.com/java/security/Certificate.html)
* java.security.[**DomainCombiner**](http://docs.google.com/java/security/DomainCombiner.html)
* java.security.[**Guard**](http://docs.google.com/java/security/Guard.html)
* java.security.[**KeyStore.Entry**](http://docs.google.com/java/security/KeyStore.Entry.html)
* java.security.[**KeyStore.LoadStoreParameter**](http://docs.google.com/java/security/KeyStore.LoadStoreParameter.html)
* java.security.[**KeyStore.ProtectionParameter**](http://docs.google.com/java/security/KeyStore.ProtectionParameter.html)
* java.security.[**Policy.Parameters**](http://docs.google.com/java/security/Policy.Parameters.html)
* java.security.[**Principal**](http://docs.google.com/java/security/Principal.html)
* java.security.[**PrivilegedAction**](http://docs.google.com/java/security/PrivilegedAction.html)<T>
* java.security.[**PrivilegedExceptionAction**](http://docs.google.com/java/security/PrivilegedExceptionAction.html)<T>
* java.io.[**Serializable**](http://docs.google.com/java/io/Serializable.html)
  + java.security.[**Key**](http://docs.google.com/java/security/Key.html)
    - java.security.[**PrivateKey**](http://docs.google.com/java/security/PrivateKey.html)
    - java.security.[**PublicKey**](http://docs.google.com/java/security/PublicKey.html)

## Enum Hierarchy

* java.lang.[**Object**](http://docs.google.com/java/lang/Object.html)
  + java.lang.[**Enum**](http://docs.google.com/java/lang/Enum.html)<E> (implements java.lang.[Comparable](http://docs.google.com/java/lang/Comparable.html)<T>, java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
    - java.security.[**KeyRep.Type**](http://docs.google.com/java/security/KeyRep.Type.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | Class | Use | **Tree** | [**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**](http://docs.google.com/java/rmi/server/package-tree.html)   [**NEXT**](http://docs.google.com/java/security/acl/package-tree.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/package-tree.html)    [**NO FRAMES**](http://docs.google.com/package-tree.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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