| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Identity.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/GuardedObject.html)   [**NEXT CLASS**](http://docs.google.com/java/security/IdentityScope.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/Identity.html)    [**NO FRAMES**](http://docs.google.com/Identity.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#17dp8vu) |

## **java.security**

Class Identity

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

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Principal](http://docs.google.com/java/security/Principal.html) **Direct Known Subclasses:** [IdentityScope](http://docs.google.com/java/security/IdentityScope.html), [Signer](http://docs.google.com/java/security/Signer.html)**Deprecated.** *This class is no longer used. Its functionality has been replaced by java.security.KeyStore, the java.security.cert package, and java.security.Principal.*

[@Deprecated](http://docs.google.com/java/lang/Deprecated.html)  
public abstract class **Identity**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Principal](http://docs.google.com/java/security/Principal.html), [Serializable](http://docs.google.com/java/io/Serializable.html)

This class represents identities: real-world objects such as people, companies or organizations whose identities can be authenticated using their public keys. Identities may also be more abstract (or concrete) constructs, such as daemon threads or smart cards.

All Identity objects have a name and a public key. Names are immutable. Identities may also be scoped. That is, if an Identity is specified to have a particular scope, then the name and public key of the Identity are unique within that scope.

An Identity also has a set of certificates (all certifying its own public key). The Principal names specified in these certificates need not be the same, only the key.

An Identity can be subclassed, to include postal and email addresses, telephone numbers, images of faces and logos, and so on.

**See Also:**[IdentityScope](http://docs.google.com/java/security/IdentityScope.html), [Signer](http://docs.google.com/java/security/Signer.html), [Principal](http://docs.google.com/java/security/Principal.html), [Serialized Form](http://docs.google.com/serialized-form.html#java.security.Identity)

| **Constructor Summary** | |
| --- | --- |
| protected | [**Identity**](http://docs.google.com/java/security/Identity.html#Identity())()  **Deprecated.** Constructor for serialization only. |
|  | [**Identity**](http://docs.google.com/java/security/Identity.html#Identity(java.lang.String))([String](http://docs.google.com/java/lang/String.html) name)  **Deprecated.** Constructs an identity with the specified name and no scope. |
|  | [**Identity**](http://docs.google.com/java/security/Identity.html#Identity(java.lang.String,%20java.security.IdentityScope))([String](http://docs.google.com/java/lang/String.html) name, [IdentityScope](http://docs.google.com/java/security/IdentityScope.html) scope)  **Deprecated.** Constructs an identity with the specified name and scope. |

| **Method Summary** | |
| --- | --- |
| void | [**addCertificate**](http://docs.google.com/java/security/Identity.html#addCertificate(java.security.Certificate))([Certificate](http://docs.google.com/java/security/Certificate.html) certificate)  **Deprecated.** Adds a certificate for this identity. |
| [Certificate](http://docs.google.com/java/security/Certificate.html)[] | [**certificates**](http://docs.google.com/java/security/Identity.html#certificates())()  **Deprecated.** Returns a copy of all the certificates for this identity. |
| boolean | [**equals**](http://docs.google.com/java/security/Identity.html#equals(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) identity)  **Deprecated.** Tests for equality between the specified object and this identity. |
| [String](http://docs.google.com/java/lang/String.html) | [**getInfo**](http://docs.google.com/java/security/Identity.html#getInfo())()  **Deprecated.** Returns general information previously specified for this identity. |
| [String](http://docs.google.com/java/lang/String.html) | [**getName**](http://docs.google.com/java/security/Identity.html#getName())()  **Deprecated.** Returns this identity's name. |
| [PublicKey](http://docs.google.com/java/security/PublicKey.html) | [**getPublicKey**](http://docs.google.com/java/security/Identity.html#getPublicKey())()  **Deprecated.** Returns this identity's public key. |
| [IdentityScope](http://docs.google.com/java/security/IdentityScope.html) | [**getScope**](http://docs.google.com/java/security/Identity.html#getScope())()  **Deprecated.** Returns this identity's scope. |
| int | [**hashCode**](http://docs.google.com/java/security/Identity.html#hashCode())()  **Deprecated.** Returns a hashcode for this identity. |
| protected  boolean | [**identityEquals**](http://docs.google.com/java/security/Identity.html#identityEquals(java.security.Identity))([Identity](http://docs.google.com/java/security/Identity.html) identity)  **Deprecated.** Tests for equality between the specified identity and this identity. |
| void | [**removeCertificate**](http://docs.google.com/java/security/Identity.html#removeCertificate(java.security.Certificate))([Certificate](http://docs.google.com/java/security/Certificate.html) certificate)  **Deprecated.** Removes a certificate from this identity. |
| void | [**setInfo**](http://docs.google.com/java/security/Identity.html#setInfo(java.lang.String))([String](http://docs.google.com/java/lang/String.html) info)  **Deprecated.** Specifies a general information string for this identity. |
| void | [**setPublicKey**](http://docs.google.com/java/security/Identity.html#setPublicKey(java.security.PublicKey))([PublicKey](http://docs.google.com/java/security/PublicKey.html) key)  **Deprecated.** Sets this identity's public key. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/java/security/Identity.html#toString())()  **Deprecated.** Returns a short string describing this identity, telling its name and its scope (if any). |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/java/security/Identity.html#toString(boolean))(boolean detailed)  **Deprecated.** Returns a string representation of this identity, with optionally more details than that provided by the toString method without any arguments. |

| **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()), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [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** |
| --- |

### Identity

protected **Identity**()

**Deprecated.** Constructor for serialization only.

### Identity

public **Identity**([String](http://docs.google.com/java/lang/String.html) name,  
 [IdentityScope](http://docs.google.com/java/security/IdentityScope.html) scope)  
 throws [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html)

**Deprecated.** Constructs an identity with the specified name and scope.

**Parameters:**name - the identity name.scope - the scope of the identity. **Throws:** [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html) - if there is already an identity with the same name in the scope.

### Identity

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

**Deprecated.** Constructs an identity with the specified name and no scope.

**Parameters:**name - the identity name.

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

### getName

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

**Deprecated.** Returns this identity's name.

**Specified by:**[getName](http://docs.google.com/java/security/Principal.html#getName()) in interface [Principal](http://docs.google.com/java/security/Principal.html) **Returns:**the name of this identity.

### getScope

public final [IdentityScope](http://docs.google.com/java/security/IdentityScope.html) **getScope**()

**Deprecated.** Returns this identity's scope.

**Returns:**the scope of this identity.

### getPublicKey

public [PublicKey](http://docs.google.com/java/security/PublicKey.html) **getPublicKey**()

**Deprecated.** Returns this identity's public key.

**Returns:**the public key for this identity.**See Also:**[setPublicKey(java.security.PublicKey)](http://docs.google.com/java/security/Identity.html#setPublicKey(java.security.PublicKey))

### setPublicKey

public void **setPublicKey**([PublicKey](http://docs.google.com/java/security/PublicKey.html) key)  
 throws [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html)

**Deprecated.** Sets this identity's public key. The old key and all of this identity's certificates are removed by this operation.

First, if there is a security manager, its checkSecurityAccess method is called with "setIdentityPublicKey" as its argument to see if it's ok to set the public key.

**Parameters:**key - the public key for this identity. **Throws:** [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html) - if another identity in the identity's scope has the same public key, or if another exception occurs. [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - if a security manager exists and its checkSecurityAccess method doesn't allow setting the public key.**See Also:**[getPublicKey()](http://docs.google.com/java/security/Identity.html#getPublicKey()), [SecurityManager.checkSecurityAccess(java.lang.String)](http://docs.google.com/java/lang/SecurityManager.html#checkSecurityAccess(java.lang.String))

### setInfo

public void **setInfo**([String](http://docs.google.com/java/lang/String.html) info)

**Deprecated.** Specifies a general information string for this identity.

First, if there is a security manager, its checkSecurityAccess method is called with "setIdentityInfo" as its argument to see if it's ok to specify the information string.

**Parameters:**info - the information string. **Throws:** [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - if a security manager exists and its checkSecurityAccess method doesn't allow setting the information string.**See Also:**[getInfo()](http://docs.google.com/java/security/Identity.html#getInfo()), [SecurityManager.checkSecurityAccess(java.lang.String)](http://docs.google.com/java/lang/SecurityManager.html#checkSecurityAccess(java.lang.String))

### getInfo

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

**Deprecated.** Returns general information previously specified for this identity.

**Returns:**general information about this identity.**See Also:**[setInfo(java.lang.String)](http://docs.google.com/java/security/Identity.html#setInfo(java.lang.String))

### addCertificate

public void **addCertificate**([Certificate](http://docs.google.com/java/security/Certificate.html) certificate)  
 throws [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html)

**Deprecated.** Adds a certificate for this identity. If the identity has a public key, the public key in the certificate must be the same, and if the identity does not have a public key, the identity's public key is set to be that specified in the certificate.

First, if there is a security manager, its checkSecurityAccess method is called with "addIdentityCertificate" as its argument to see if it's ok to add a certificate.

**Parameters:**certificate - the certificate to be added. **Throws:** [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html) - if the certificate is not valid, if the public key in the certificate being added conflicts with this identity's public key, or if another exception occurs. [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - if a security manager exists and its checkSecurityAccess method doesn't allow adding a certificate.**See Also:**[SecurityManager.checkSecurityAccess(java.lang.String)](http://docs.google.com/java/lang/SecurityManager.html#checkSecurityAccess(java.lang.String))

### removeCertificate

public void **removeCertificate**([Certificate](http://docs.google.com/java/security/Certificate.html) certificate)  
 throws [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html)

**Deprecated.** Removes a certificate from this identity.

First, if there is a security manager, its checkSecurityAccess method is called with "removeIdentityCertificate" as its argument to see if it's ok to remove a certificate.

**Parameters:**certificate - the certificate to be removed. **Throws:** [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html) - if the certificate is missing, or if another exception occurs. [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - if a security manager exists and its checkSecurityAccess method doesn't allow removing a certificate.**See Also:**[SecurityManager.checkSecurityAccess(java.lang.String)](http://docs.google.com/java/lang/SecurityManager.html#checkSecurityAccess(java.lang.String))

### certificates

public [Certificate](http://docs.google.com/java/security/Certificate.html)[] **certificates**()

**Deprecated.** Returns a copy of all the certificates for this identity.

**Returns:**a copy of all the certificates for this identity.

### equals

public final boolean **equals**([Object](http://docs.google.com/java/lang/Object.html) identity)

**Deprecated.** Tests for equality between the specified object and this identity. This first tests to see if the entities actually refer to the same object, in which case it returns true. Next, it checks to see if the entities have the same name and the same scope. If they do, the method returns true. Otherwise, it calls [identityEquals](http://docs.google.com/java/security/Identity.html#identityEquals(java.security.Identity)), which subclasses should override.

**Specified by:**[equals](http://docs.google.com/java/security/Principal.html#equals(java.lang.Object)) in interface [Principal](http://docs.google.com/java/security/Principal.html)**Overrides:**[equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)) in class [Object](http://docs.google.com/java/lang/Object.html) **Parameters:**identity - the object to test for equality with this identity. **Returns:**true if the objects are considered equal, false otherwise.**See Also:**[identityEquals(java.security.Identity)](http://docs.google.com/java/security/Identity.html#identityEquals(java.security.Identity))

### identityEquals

protected boolean **identityEquals**([Identity](http://docs.google.com/java/security/Identity.html) identity)

**Deprecated.** Tests for equality between the specified identity and this identity. This method should be overriden by subclasses to test for equality. The default behavior is to return true if the names and public keys are equal.

**Parameters:**identity - the identity to test for equality with this identity. **Returns:**true if the identities are considered equal, false otherwise.**See Also:**[equals(java.lang.Object)](http://docs.google.com/java/security/Identity.html#equals(java.lang.Object))

### toString

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

**Deprecated.** Returns a short string describing this identity, telling its name and its scope (if any).

First, if there is a security manager, its checkSecurityAccess method is called with "printIdentity" as its argument to see if it's ok to return the string.

**Specified by:**[toString](http://docs.google.com/java/security/Principal.html#toString()) in interface [Principal](http://docs.google.com/java/security/Principal.html)**Overrides:**[toString](http://docs.google.com/java/lang/Object.html#toString()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**information about this identity, such as its name and the name of its scope (if any). **Throws:** [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - if a security manager exists and its checkSecurityAccess method doesn't allow returning a string describing this identity.**See Also:**[SecurityManager.checkSecurityAccess(java.lang.String)](http://docs.google.com/java/lang/SecurityManager.html#checkSecurityAccess(java.lang.String))

### toString

public [String](http://docs.google.com/java/lang/String.html) **toString**(boolean detailed)

**Deprecated.** Returns a string representation of this identity, with optionally more details than that provided by the toString method without any arguments.

First, if there is a security manager, its checkSecurityAccess method is called with "printIdentity" as its argument to see if it's ok to return the string.

**Parameters:**detailed - whether or not to provide detailed information. **Returns:**information about this identity. If detailed is true, then this method returns more information than that provided by the toString method without any arguments. **Throws:** [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - if a security manager exists and its checkSecurityAccess method doesn't allow returning a string describing this identity.**See Also:**[toString()](http://docs.google.com/java/security/Identity.html#toString()), [SecurityManager.checkSecurityAccess(java.lang.String)](http://docs.google.com/java/lang/SecurityManager.html#checkSecurityAccess(java.lang.String))

### hashCode

public int **hashCode**()

**Deprecated.** Returns a hashcode for this identity.

**Specified by:**[hashCode](http://docs.google.com/java/security/Principal.html#hashCode()) in interface [Principal](http://docs.google.com/java/security/Principal.html)**Overrides:**[hashCode](http://docs.google.com/java/lang/Object.html#hashCode()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a hashcode for this identity.**See Also:**[Object.equals(java.lang.Object)](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Identity.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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| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#17dp8vu) |

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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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