| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/RSAMultiPrimePrivateCrtKey.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/interfaces/RSAKey.html)   [**NEXT CLASS**](http://docs.google.com/java/security/interfaces/RSAPrivateCrtKey.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/interfaces/RSAMultiPrimePrivateCrtKey.html)    [**NO FRAMES**](http://docs.google.com/RSAMultiPrimePrivateCrtKey.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | CONSTR | [METHOD](#2et92p0) | DETAIL: [FIELD](#4d34og8) | CONSTR | [METHOD](#17dp8vu) |

## **java.security.interfaces**

Interface RSAMultiPrimePrivateCrtKey

**All Superinterfaces:** [Key](http://docs.google.com/java/security/Key.html), [PrivateKey](http://docs.google.com/java/security/PrivateKey.html), [RSAKey](http://docs.google.com/java/security/interfaces/RSAKey.html), [RSAPrivateKey](http://docs.google.com/java/security/interfaces/RSAPrivateKey.html), [Serializable](http://docs.google.com/java/io/Serializable.html)

public interface **RSAMultiPrimePrivateCrtKey**extends [RSAPrivateKey](http://docs.google.com/java/security/interfaces/RSAPrivateKey.html)

The interface to an RSA multi-prime private key, as defined in the PKCS#1 v2.1, using the *Chinese Remainder Theorem* (CRT) information values.

**Since:** 1.4 **See Also:**[RSAPrivateKeySpec](http://docs.google.com/java/security/spec/RSAPrivateKeySpec.html), [RSAMultiPrimePrivateCrtKeySpec](http://docs.google.com/java/security/spec/RSAMultiPrimePrivateCrtKeySpec.html), [RSAPrivateKey](http://docs.google.com/java/security/interfaces/RSAPrivateKey.html), [RSAPrivateCrtKey](http://docs.google.com/java/security/interfaces/RSAPrivateCrtKey.html)

| **Field Summary** | |
| --- | --- |
| static long | [**serialVersionUID**](http://docs.google.com/java/security/interfaces/RSAMultiPrimePrivateCrtKey.html#serialVersionUID) |

| **Method Summary** | |
| --- | --- |
| [BigInteger](http://docs.google.com/java/math/BigInteger.html) | [**getCrtCoefficient**](http://docs.google.com/java/security/interfaces/RSAMultiPrimePrivateCrtKey.html#getCrtCoefficient())()            Returns the crtCoefficient. |
| [RSAOtherPrimeInfo](http://docs.google.com/java/security/spec/RSAOtherPrimeInfo.html)[] | [**getOtherPrimeInfo**](http://docs.google.com/java/security/interfaces/RSAMultiPrimePrivateCrtKey.html#getOtherPrimeInfo())()            Returns the otherPrimeInfo or null if there are only two prime factors (p and q). |
| [BigInteger](http://docs.google.com/java/math/BigInteger.html) | [**getPrimeExponentP**](http://docs.google.com/java/security/interfaces/RSAMultiPrimePrivateCrtKey.html#getPrimeExponentP())()            Returns the primeExponentP. |
| [BigInteger](http://docs.google.com/java/math/BigInteger.html) | [**getPrimeExponentQ**](http://docs.google.com/java/security/interfaces/RSAMultiPrimePrivateCrtKey.html#getPrimeExponentQ())()            Returns the primeExponentQ. |
| [BigInteger](http://docs.google.com/java/math/BigInteger.html) | [**getPrimeP**](http://docs.google.com/java/security/interfaces/RSAMultiPrimePrivateCrtKey.html#getPrimeP())()            Returns the primeP. |
| [BigInteger](http://docs.google.com/java/math/BigInteger.html) | [**getPrimeQ**](http://docs.google.com/java/security/interfaces/RSAMultiPrimePrivateCrtKey.html#getPrimeQ())()            Returns the primeQ. |
| [BigInteger](http://docs.google.com/java/math/BigInteger.html) | [**getPublicExponent**](http://docs.google.com/java/security/interfaces/RSAMultiPrimePrivateCrtKey.html#getPublicExponent())()            Returns the public exponent. |

| **Methods inherited from interface java.security.interfaces.**[**RSAPrivateKey**](http://docs.google.com/java/security/interfaces/RSAPrivateKey.html) |
| --- |
| [getPrivateExponent](http://docs.google.com/java/security/interfaces/RSAPrivateKey.html#getPrivateExponent()) |

| **Methods inherited from interface java.security.**[**Key**](http://docs.google.com/java/security/Key.html) |
| --- |
| [getAlgorithm](http://docs.google.com/java/security/Key.html#getAlgorithm()), [getEncoded](http://docs.google.com/java/security/Key.html#getEncoded()), [getFormat](http://docs.google.com/java/security/Key.html#getFormat()) |

| **Methods inherited from interface java.security.interfaces.**[**RSAKey**](http://docs.google.com/java/security/interfaces/RSAKey.html) |
| --- |
| [getModulus](http://docs.google.com/java/security/interfaces/RSAKey.html#getModulus()) |

| **Field Detail** |
| --- |

### serialVersionUID

static final long **serialVersionUID**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.security.interfaces.RSAMultiPrimePrivateCrtKey.serialVersionUID)

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

### getPublicExponent

[BigInteger](http://docs.google.com/java/math/BigInteger.html) **getPublicExponent**()

Returns the public exponent.

**Returns:**the public exponent.

### getPrimeP

[BigInteger](http://docs.google.com/java/math/BigInteger.html) **getPrimeP**()

Returns the primeP.

**Returns:**the primeP.

### getPrimeQ

[BigInteger](http://docs.google.com/java/math/BigInteger.html) **getPrimeQ**()

Returns the primeQ.

**Returns:**the primeQ.

### getPrimeExponentP

[BigInteger](http://docs.google.com/java/math/BigInteger.html) **getPrimeExponentP**()

Returns the primeExponentP.

**Returns:**the primeExponentP.

### getPrimeExponentQ

[BigInteger](http://docs.google.com/java/math/BigInteger.html) **getPrimeExponentQ**()

Returns the primeExponentQ.

**Returns:**the primeExponentQ.

### getCrtCoefficient

[BigInteger](http://docs.google.com/java/math/BigInteger.html) **getCrtCoefficient**()

Returns the crtCoefficient.

**Returns:**the crtCoefficient.

### getOtherPrimeInfo

[RSAOtherPrimeInfo](http://docs.google.com/java/security/spec/RSAOtherPrimeInfo.html)[] **getOtherPrimeInfo**()

Returns the otherPrimeInfo or null if there are only two prime factors (p and q).

**Returns:**the otherPrimeInfo.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/RSAMultiPrimePrivateCrtKey.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/interfaces/RSAKey.html)   [**NEXT CLASS**](http://docs.google.com/java/security/interfaces/RSAPrivateCrtKey.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/interfaces/RSAMultiPrimePrivateCrtKey.html)    [**NO FRAMES**](http://docs.google.com/RSAMultiPrimePrivateCrtKey.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | CONSTR | [METHOD](#2et92p0) | DETAIL: [FIELD](#4d34og8) | CONSTR | [METHOD](#17dp8vu) |

[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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