| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ECParameterSpec.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/spec/ECGenParameterSpec.html)   [**NEXT CLASS**](http://docs.google.com/java/security/spec/ECPoint.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/spec/ECParameterSpec.html)    [**NO FRAMES**](http://docs.google.com/ECParameterSpec.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **java.security.spec**

Class ECParameterSpec

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

**All Implemented Interfaces:** [AlgorithmParameterSpec](http://docs.google.com/java/security/spec/AlgorithmParameterSpec.html)

public class **ECParameterSpec**extends [Object](http://docs.google.com/java/lang/Object.html)implements [AlgorithmParameterSpec](http://docs.google.com/java/security/spec/AlgorithmParameterSpec.html)

This immutable class specifies the set of domain parameters used with elliptic curve cryptography (ECC).

**Since:** 1.5 **See Also:**[AlgorithmParameterSpec](http://docs.google.com/java/security/spec/AlgorithmParameterSpec.html)

| **Constructor Summary** | |
| --- | --- |
| [**ECParameterSpec**](http://docs.google.com/java/security/spec/ECParameterSpec.html#ECParameterSpec(java.security.spec.EllipticCurve,%20java.security.spec.ECPoint,%20java.math.BigInteger,%20int))([EllipticCurve](http://docs.google.com/java/security/spec/EllipticCurve.html) curve, [ECPoint](http://docs.google.com/java/security/spec/ECPoint.html) g, [BigInteger](http://docs.google.com/java/math/BigInteger.html) n, int h)            Creates elliptic curve domain parameters based on the specified values. |

| **Method Summary** | |
| --- | --- |
| int | [**getCofactor**](http://docs.google.com/java/security/spec/ECParameterSpec.html#getCofactor())()            Returns the cofactor. |
| [EllipticCurve](http://docs.google.com/java/security/spec/EllipticCurve.html) | [**getCurve**](http://docs.google.com/java/security/spec/ECParameterSpec.html#getCurve())()            Returns the elliptic curve that this parameter defines. |
| [ECPoint](http://docs.google.com/java/security/spec/ECPoint.html) | [**getGenerator**](http://docs.google.com/java/security/spec/ECParameterSpec.html#getGenerator())()            Returns the generator which is also known as the base point. |
| [BigInteger](http://docs.google.com/java/math/BigInteger.html) | [**getOrder**](http://docs.google.com/java/security/spec/ECParameterSpec.html#getOrder())()            Returns the order of the generator. |

| **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** |
| --- |

### ECParameterSpec

public **ECParameterSpec**([EllipticCurve](http://docs.google.com/java/security/spec/EllipticCurve.html) curve,  
 [ECPoint](http://docs.google.com/java/security/spec/ECPoint.html) g,  
 [BigInteger](http://docs.google.com/java/math/BigInteger.html) n,  
 int h)

Creates elliptic curve domain parameters based on the specified values.

**Parameters:**curve - the elliptic curve which this parameter defines.g - the generator which is also known as the base point.n - the order of the generator g.h - the cofactor. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if curve, g, or n is null. [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if n or h is not positive.

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

### getCurve

public [EllipticCurve](http://docs.google.com/java/security/spec/EllipticCurve.html) **getCurve**()

Returns the elliptic curve that this parameter defines.

**Returns:**the elliptic curve that this parameter defines.

### getGenerator

public [ECPoint](http://docs.google.com/java/security/spec/ECPoint.html) **getGenerator**()

Returns the generator which is also known as the base point.

**Returns:**the generator which is also known as the base point.

### getOrder

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

Returns the order of the generator.

**Returns:**the order of the generator.

### getCofactor

public int **getCofactor**()

Returns the cofactor.

**Returns:**the cofactor.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ECParameterSpec.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/spec/ECGenParameterSpec.html)   [**NEXT CLASS**](http://docs.google.com/java/security/spec/ECPoint.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/spec/ECParameterSpec.html)    [**NO FRAMES**](http://docs.google.com/ECParameterSpec.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

[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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