| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/IvParameterSpec.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/javax/crypto/spec/DHPublicKeySpec.html)   [**NEXT CLASS**](http://docs.google.com/javax/crypto/spec/OAEPParameterSpec.html) | [**FRAMES**](http://docs.google.com/index.html?javax/crypto/spec/IvParameterSpec.html)    [**NO FRAMES**](http://docs.google.com/IvParameterSpec.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#2s8eyo1) |

## **javax.crypto.spec**

Class IvParameterSpec

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.crypto.spec.IvParameterSpec**

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

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

This class specifies an *initialization vector* (IV). Examples which use IVs are ciphers in feedback mode, e.g., DES in CBC mode and RSA ciphers with OAEP encoding operation.

**Since:** 1.4

| **Constructor Summary** | |
| --- | --- |
| [**IvParameterSpec**](http://docs.google.com/javax/crypto/spec/IvParameterSpec.html#IvParameterSpec(byte%5B%5D))(byte[] iv)            Creates an IvParameterSpec object using the bytes in iv as the IV. |
| [**IvParameterSpec**](http://docs.google.com/javax/crypto/spec/IvParameterSpec.html#IvParameterSpec(byte%5B%5D,%20int,%20int))(byte[] iv, int offset, int len)            Creates an IvParameterSpec object using the first len bytes in iv, beginning at offset inclusive, as the IV. |

| **Method Summary** | |
| --- | --- |
| byte[] | [**getIV**](http://docs.google.com/javax/crypto/spec/IvParameterSpec.html#getIV())()            Returns the initialization vector (IV). |

| **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** |
| --- |

### IvParameterSpec

public **IvParameterSpec**(byte[] iv)

Creates an IvParameterSpec object using the bytes in iv as the IV.

**Parameters:**iv - the buffer with the IV. The contents of the buffer are copied to protect against subsequent modification. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if iv is null

### IvParameterSpec

public **IvParameterSpec**(byte[] iv,  
 int offset,  
 int len)

Creates an IvParameterSpec object using the first len bytes in iv, beginning at offset inclusive, as the IV.

The bytes that constitute the IV are those between iv[offset] and iv[offset+len-1] inclusive.

**Parameters:**iv - the buffer with the IV. The first len bytes of the buffer beginning at offset inclusive are copied to protect against subsequent modification.offset - the offset in iv where the IV starts.len - the number of IV bytes. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if iv is null or (iv.length - offset < len) [ArrayIndexOutOfBoundsException](http://docs.google.com/java/lang/ArrayIndexOutOfBoundsException.html) - is thrown if offset or len index bytes outside the iv.

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

### getIV

public byte[] **getIV**()

Returns the initialization vector (IV).

**Returns:**the initialization vector (IV). Returns a new array each time this method is called.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/IvParameterSpec.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/javax/crypto/spec/DHPublicKeySpec.html)   [**NEXT CLASS**](http://docs.google.com/javax/crypto/spec/OAEPParameterSpec.html) | [**FRAMES**](http://docs.google.com/index.html?javax/crypto/spec/IvParameterSpec.html)    [**NO FRAMES**](http://docs.google.com/IvParameterSpec.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#2s8eyo1) |

[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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