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

## **javax.net.ssl**

Class SSLContextSpi

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.net.ssl.SSLContextSpi**

public abstract class **SSLContextSpi**extends [Object](http://docs.google.com/java/lang/Object.html)

This class defines the *Service Provider Interface* (**SPI**) for the SSLContext class.

All the abstract methods in this class must be implemented by each cryptographic service provider who wishes to supply the implementation of a particular SSL context.

**Since:** 1.4 **See Also:**[SSLContext](http://docs.google.com/javax/net/ssl/SSLContext.html)

| **Constructor Summary** | |
| --- | --- |
| [**SSLContextSpi**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#SSLContextSpi())() |

| **Method Summary** | |
| --- | --- |
| protected abstract  [SSLEngine](http://docs.google.com/javax/net/ssl/SSLEngine.html) | [**engineCreateSSLEngine**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineCreateSSLEngine())()            Creates a new SSLEngine using this context. |
| protected abstract  [SSLEngine](http://docs.google.com/javax/net/ssl/SSLEngine.html) | [**engineCreateSSLEngine**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineCreateSSLEngine(java.lang.String,%20int))([String](http://docs.google.com/java/lang/String.html) host, int port)            Creates a SSLEngine using this context. |
| protected abstract  [SSLSessionContext](http://docs.google.com/javax/net/ssl/SSLSessionContext.html) | [**engineGetClientSessionContext**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineGetClientSessionContext())()            Returns a client SSLSessionContext object for this context. |
| protected  [SSLParameters](http://docs.google.com/javax/net/ssl/SSLParameters.html) | [**engineGetDefaultSSLParameters**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineGetDefaultSSLParameters())()            Returns a copy of the SSLParameters indicating the default settings for this SSL context. |
| protected abstract  [SSLSessionContext](http://docs.google.com/javax/net/ssl/SSLSessionContext.html) | [**engineGetServerSessionContext**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineGetServerSessionContext())()            Returns a server SSLSessionContext object for this context. |
| protected abstract  [SSLServerSocketFactory](http://docs.google.com/javax/net/ssl/SSLServerSocketFactory.html) | [**engineGetServerSocketFactory**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineGetServerSocketFactory())()            Returns a ServerSocketFactory object for this context. |
| protected abstract  [SSLSocketFactory](http://docs.google.com/javax/net/ssl/SSLSocketFactory.html) | [**engineGetSocketFactory**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineGetSocketFactory())()            Returns a SocketFactory object for this context. |
| protected  [SSLParameters](http://docs.google.com/javax/net/ssl/SSLParameters.html) | [**engineGetSupportedSSLParameters**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineGetSupportedSSLParameters())()            Returns a copy of the SSLParameters indicating the maximum supported settings for this SSL context. |
| protected abstract  void | [**engineInit**](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineInit(javax.net.ssl.KeyManager%5B%5D,%20javax.net.ssl.TrustManager%5B%5D,%20java.security.SecureRandom))([KeyManager](http://docs.google.com/javax/net/ssl/KeyManager.html)[] km, [TrustManager](http://docs.google.com/javax/net/ssl/TrustManager.html)[] tm, [SecureRandom](http://docs.google.com/java/security/SecureRandom.html) sr)            Initializes this context. |

| **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** |
| --- |

### SSLContextSpi

public **SSLContextSpi**()

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

### engineInit

protected abstract void **engineInit**([KeyManager](http://docs.google.com/javax/net/ssl/KeyManager.html)[] km,  
 [TrustManager](http://docs.google.com/javax/net/ssl/TrustManager.html)[] tm,  
 [SecureRandom](http://docs.google.com/java/security/SecureRandom.html) sr)  
 throws [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html)

Initializes this context.

**Parameters:**km - the sources of authentication keystm - the sources of peer authentication trust decisionssr - the source of randomness **Throws:** [KeyManagementException](http://docs.google.com/java/security/KeyManagementException.html) - if this operation fails**See Also:**[SSLContext.init(KeyManager [], TrustManager [], SecureRandom)](http://docs.google.com/javax/net/ssl/SSLContext.html#init(javax.net.ssl.KeyManager%5B%5D,%20javax.net.ssl.TrustManager%5B%5D,%20java.security.SecureRandom))

### engineGetSocketFactory

protected abstract [SSLSocketFactory](http://docs.google.com/javax/net/ssl/SSLSocketFactory.html) **engineGetSocketFactory**()

Returns a SocketFactory object for this context.

**Returns:**the SocketFactory object **Throws:** [IllegalStateException](http://docs.google.com/java/lang/IllegalStateException.html) - if the SSLContextImpl requires initialization and the engineInit() has not been called**See Also:**[SSLContext.getSocketFactory()](http://docs.google.com/javax/net/ssl/SSLContext.html#getSocketFactory())

### engineGetServerSocketFactory

protected abstract [SSLServerSocketFactory](http://docs.google.com/javax/net/ssl/SSLServerSocketFactory.html) **engineGetServerSocketFactory**()

Returns a ServerSocketFactory object for this context.

**Returns:**the ServerSocketFactory object **Throws:** [IllegalStateException](http://docs.google.com/java/lang/IllegalStateException.html) - if the SSLContextImpl requires initialization and the engineInit() has not been called**See Also:**[SSLContext.getServerSocketFactory()](http://docs.google.com/javax/net/ssl/SSLContext.html#getServerSocketFactory())

### engineCreateSSLEngine

protected abstract [SSLEngine](http://docs.google.com/javax/net/ssl/SSLEngine.html) **engineCreateSSLEngine**()

Creates a new SSLEngine using this context.

Applications using this factory method are providing no hints for an internal session reuse strategy. If hints are desired, [engineCreateSSLEngine(String, int)](http://docs.google.com/javax/net/ssl/SSLContextSpi.html#engineCreateSSLEngine(java.lang.String,%20int)) should be used instead.

Some cipher suites (such as Kerberos) require remote hostname information, in which case this factory method should not be used.

**Returns:**the SSLEngine Object **Throws:** [IllegalStateException](http://docs.google.com/java/lang/IllegalStateException.html) - if the SSLContextImpl requires initialization and the engineInit() has not been called**Since:** 1.5 **See Also:**[SSLContext.createSSLEngine()](http://docs.google.com/javax/net/ssl/SSLContext.html#createSSLEngine())

### engineCreateSSLEngine

protected abstract [SSLEngine](http://docs.google.com/javax/net/ssl/SSLEngine.html) **engineCreateSSLEngine**([String](http://docs.google.com/java/lang/String.html) host,  
 int port)

Creates a SSLEngine using this context.

Applications using this factory method are providing hints for an internal session reuse strategy.

Some cipher suites (such as Kerberos) require remote hostname information, in which case peerHost needs to be specified.

**Parameters:**host - the non-authoritative name of the hostport - the non-authoritative port **Returns:**the SSLEngine Object **Throws:** [IllegalStateException](http://docs.google.com/java/lang/IllegalStateException.html) - if the SSLContextImpl requires initialization and the engineInit() has not been called**Since:** 1.5 **See Also:**[SSLContext.createSSLEngine(String, int)](http://docs.google.com/javax/net/ssl/SSLContext.html#createSSLEngine(java.lang.String,%20int))

### engineGetServerSessionContext

protected abstract [SSLSessionContext](http://docs.google.com/javax/net/ssl/SSLSessionContext.html) **engineGetServerSessionContext**()

Returns a server SSLSessionContext object for this context.

**Returns:**the SSLSessionContext object**See Also:**[SSLContext.getServerSessionContext()](http://docs.google.com/javax/net/ssl/SSLContext.html#getServerSessionContext())

### engineGetClientSessionContext

protected abstract [SSLSessionContext](http://docs.google.com/javax/net/ssl/SSLSessionContext.html) **engineGetClientSessionContext**()

Returns a client SSLSessionContext object for this context.

**Returns:**the SSLSessionContext object**See Also:**[SSLContext.getClientSessionContext()](http://docs.google.com/javax/net/ssl/SSLContext.html#getClientSessionContext())

### engineGetDefaultSSLParameters

protected [SSLParameters](http://docs.google.com/javax/net/ssl/SSLParameters.html) **engineGetDefaultSSLParameters**()

Returns a copy of the SSLParameters indicating the default settings for this SSL context.

The parameters will always have the ciphersuite and protocols arrays set to non-null values.

The default implementation obtains the parameters from an SSLSocket created by calling the [SocketFactory.createSocket()](http://docs.google.com/javax/net/SocketFactory.html#createSocket()) method of this context's SocketFactory.

**Returns:**a copy of the SSLParameters object with the default settings **Throws:** [UnsupportedOperationException](http://docs.google.com/java/lang/UnsupportedOperationException.html) - if the default SSL parameters could not be obtained.**Since:** 1.6

### engineGetSupportedSSLParameters

protected [SSLParameters](http://docs.google.com/javax/net/ssl/SSLParameters.html) **engineGetSupportedSSLParameters**()

Returns a copy of the SSLParameters indicating the maximum supported settings for this SSL context.

The parameters will always have the ciphersuite and protocols arrays set to non-null values.

The default implementation obtains the parameters from an SSLSocket created by calling the [SocketFactory.createSocket()](http://docs.google.com/javax/net/SocketFactory.html#createSocket()) method of this context's SocketFactory.

**Returns:**a copy of the SSLParameters object with the maximum supported settings **Throws:** [UnsupportedOperationException](http://docs.google.com/java/lang/UnsupportedOperationException.html) - if the supported SSL parameters could not be obtained.**Since:** 1.6

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/SSLContextSpi.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/net/ssl/SSLContext.html)   [**NEXT CLASS**](http://docs.google.com/javax/net/ssl/SSLEngine.html) | [**FRAMES**](http://docs.google.com/index.html?javax/net/ssl/SSLContextSpi.html)    [**NO FRAMES**](http://docs.google.com/SSLContextSpi.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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