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

## **javax.script**

Class ScriptEngineManager

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.script.ScriptEngineManager**

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

The ScriptEngineManager implements a discovery and instantiation mechanism for ScriptEngine classes and also maintains a collection of key/value pairs storing state shared by all engines created by the Manager. This class uses the [service provider](http://docs.google.com/technotes/guides/jar/jar.html#Service%20Provider) mechanism to enumerate all the implementations of ScriptEngineFactory.

The ScriptEngineManager provides a method to return an array of all these factories as well as utility methods which look up factories on the basis of language name, file extension and mime type.

The Bindings of key/value pairs, referred to as the "Global Scope" maintained by the manager is available to all instances of ScriptEngine created by the ScriptEngineManager. The values in the Bindings are generally exposed in all scripts.

**Since:** 1.6

| **Constructor Summary** | |
| --- | --- |
| [**ScriptEngineManager**](http://docs.google.com/javax/script/ScriptEngineManager.html#ScriptEngineManager())()            If the thread context ClassLoader can be accessed by the caller, then the effect of calling this constructor is the same as calling ScriptEngineManager(Thread.currentThread().getContextClassLoader()). |
| [**ScriptEngineManager**](http://docs.google.com/javax/script/ScriptEngineManager.html#ScriptEngineManager(java.lang.ClassLoader))([ClassLoader](http://docs.google.com/java/lang/ClassLoader.html) loader)            This constructor loads the implementations of ScriptEngineFactory visible to the given ClassLoader using the [service provider](http://docs.google.com/technotes/guides/jar/jar.html#Service%20Provider) mechanism.  If loader is null, the script engine factories that are bundled with the platform and that are in the usual extension directories (installed extensions) are loaded. |

| **Method Summary** | |
| --- | --- |
| [Object](http://docs.google.com/java/lang/Object.html) | [**get**](http://docs.google.com/javax/script/ScriptEngineManager.html#get(java.lang.String))([String](http://docs.google.com/java/lang/String.html) key)            Gets the value for the specified key in the Global Scope |
| [Bindings](http://docs.google.com/javax/script/Bindings.html) | [**getBindings**](http://docs.google.com/javax/script/ScriptEngineManager.html#getBindings())()            getBindings returns the value of the globalScope field. |
| [ScriptEngine](http://docs.google.com/javax/script/ScriptEngine.html) | [**getEngineByExtension**](http://docs.google.com/javax/script/ScriptEngineManager.html#getEngineByExtension(java.lang.String))([String](http://docs.google.com/java/lang/String.html) extension)            Look up and create a ScriptEngine for a given extension. |
| [ScriptEngine](http://docs.google.com/javax/script/ScriptEngine.html) | [**getEngineByMimeType**](http://docs.google.com/javax/script/ScriptEngineManager.html#getEngineByMimeType(java.lang.String))([String](http://docs.google.com/java/lang/String.html) mimeType)            Look up and create a ScriptEngine for a given mime type. |
| [ScriptEngine](http://docs.google.com/javax/script/ScriptEngine.html) | [**getEngineByName**](http://docs.google.com/javax/script/ScriptEngineManager.html#getEngineByName(java.lang.String))([String](http://docs.google.com/java/lang/String.html) shortName)            Looks up and creates a ScriptEngine for a given name. |
| [List](http://docs.google.com/java/util/List.html)<[ScriptEngineFactory](http://docs.google.com/javax/script/ScriptEngineFactory.html)> | [**getEngineFactories**](http://docs.google.com/javax/script/ScriptEngineManager.html#getEngineFactories())()            Returns an array whose elements are instances of all the ScriptEngineFactory classes found by the discovery mechanism. |
| void | [**put**](http://docs.google.com/javax/script/ScriptEngineManager.html#put(java.lang.String,%20java.lang.Object))([String](http://docs.google.com/java/lang/String.html) key, [Object](http://docs.google.com/java/lang/Object.html) value)            Sets the specified key/value pair in the Global Scope. |
| void | [**registerEngineExtension**](http://docs.google.com/javax/script/ScriptEngineManager.html#registerEngineExtension(java.lang.String,%20javax.script.ScriptEngineFactory))([String](http://docs.google.com/java/lang/String.html) extension, [ScriptEngineFactory](http://docs.google.com/javax/script/ScriptEngineFactory.html) factory)            Registers a ScriptEngineFactory to handle an extension. |
| void | [**registerEngineMimeType**](http://docs.google.com/javax/script/ScriptEngineManager.html#registerEngineMimeType(java.lang.String,%20javax.script.ScriptEngineFactory))([String](http://docs.google.com/java/lang/String.html) type, [ScriptEngineFactory](http://docs.google.com/javax/script/ScriptEngineFactory.html) factory)            Registers a ScriptEngineFactory to handle a mime type. |
| void | [**registerEngineName**](http://docs.google.com/javax/script/ScriptEngineManager.html#registerEngineName(java.lang.String,%20javax.script.ScriptEngineFactory))([String](http://docs.google.com/java/lang/String.html) name, [ScriptEngineFactory](http://docs.google.com/javax/script/ScriptEngineFactory.html) factory)            Registers a ScriptEngineFactory to handle a language name. |
| void | [**setBindings**](http://docs.google.com/javax/script/ScriptEngineManager.html#setBindings(javax.script.Bindings))([Bindings](http://docs.google.com/javax/script/Bindings.html) bindings)            setBindings stores the specified Bindings in the globalScope field. |

| **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** |
| --- |

### ScriptEngineManager

public **ScriptEngineManager**()

If the thread context ClassLoader can be accessed by the caller, then the effect of calling this constructor is the same as calling ScriptEngineManager(Thread.currentThread().getContextClassLoader()). Otherwise, the effect is the same as calling ScriptEngineManager(null).

**See Also:**[Thread.getContextClassLoader()](http://docs.google.com/java/lang/Thread.html#getContextClassLoader())

### ScriptEngineManager

public **ScriptEngineManager**([ClassLoader](http://docs.google.com/java/lang/ClassLoader.html) loader)

This constructor loads the implementations of ScriptEngineFactory visible to the given ClassLoader using the [service provider](http://docs.google.com/technotes/guides/jar/jar.html#Service%20Provider) mechanism.

If loader is null, the script engine factories that are bundled with the platform and that are in the usual extension directories (installed extensions) are loaded.

**Parameters:**loader - ClassLoader used to discover script engine factories.

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

### setBindings

public void **setBindings**([Bindings](http://docs.google.com/javax/script/Bindings.html) bindings)

setBindings stores the specified Bindings in the globalScope field. ScriptEngineManager sets this Bindings as global bindings for ScriptEngine objects created by it.

**Parameters:**bindings - The specified Bindings **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if bindings is null.

### getBindings

public [Bindings](http://docs.google.com/javax/script/Bindings.html) **getBindings**()

getBindings returns the value of the globalScope field. ScriptEngineManager sets this Bindings as global bindings for ScriptEngine objects created by it.

**Returns:**The globalScope field.

### put

public void **put**([String](http://docs.google.com/java/lang/String.html) key,  
 [Object](http://docs.google.com/java/lang/Object.html) value)

Sets the specified key/value pair in the Global Scope.

**Parameters:**key - Key to setvalue - Value to set. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if key is null. [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if key is empty string.

### get

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

Gets the value for the specified key in the Global Scope

**Parameters:**key - The key whose value is to be returned. **Returns:**The value for the specified key.

### getEngineByName

public [ScriptEngine](http://docs.google.com/javax/script/ScriptEngine.html) **getEngineByName**([String](http://docs.google.com/java/lang/String.html) shortName)

Looks up and creates a ScriptEngine for a given name. The algorithm first searches for a ScriptEngineFactory that has been registered as a handler for the specified name using the registerEngineName method.

If one is not found, it searches the array of ScriptEngineFactory instances stored by the constructor for one with the specified name. If a ScriptEngineFactory is found by either method, it is used to create instance of ScriptEngine.

**Parameters:**shortName - The short name of the ScriptEngine implementation. returned by the getNames method of its ScriptEngineFactory. **Returns:**A ScriptEngine created by the factory located in the search. Returns null if no such factory was found. The ScriptEngineManager sets its own globalScope Bindings as the GLOBAL\_SCOPE Bindings of the newly created ScriptEngine. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if shortName is null.

### getEngineByExtension

public [ScriptEngine](http://docs.google.com/javax/script/ScriptEngine.html) **getEngineByExtension**([String](http://docs.google.com/java/lang/String.html) extension)

Look up and create a ScriptEngine for a given extension. The algorithm used by getEngineByName is used except that the search starts by looking for a ScriptEngineFactory registered to handle the given extension using registerEngineExtension.

**Parameters:**extension - The given extension **Returns:**The engine to handle scripts with this extension. Returns null if not found. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if extension is null.

### getEngineByMimeType

public [ScriptEngine](http://docs.google.com/javax/script/ScriptEngine.html) **getEngineByMimeType**([String](http://docs.google.com/java/lang/String.html) mimeType)

Look up and create a ScriptEngine for a given mime type. The algorithm used by getEngineByName is used except that the search starts by looking for a ScriptEngineFactory registered to handle the given mime type using registerEngineMimeType.

**Parameters:**mimeType - The given mime type **Returns:**The engine to handle scripts with this mime type. Returns null if not found. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if mimeType is null.

### getEngineFactories

public [List](http://docs.google.com/java/util/List.html)<[ScriptEngineFactory](http://docs.google.com/javax/script/ScriptEngineFactory.html)> **getEngineFactories**()

Returns an array whose elements are instances of all the ScriptEngineFactory classes found by the discovery mechanism.

**Returns:**List of all discovered ScriptEngineFactorys.

### registerEngineName

public void **registerEngineName**([String](http://docs.google.com/java/lang/String.html) name,  
 [ScriptEngineFactory](http://docs.google.com/javax/script/ScriptEngineFactory.html) factory)

Registers a ScriptEngineFactory to handle a language name. Overrides any such association found using the Discovery mechanism.

**Parameters:**name - The name to be associated with the ScriptEngineFactory.factory - The class to associate with the given name. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if any of the parameters is null.

### registerEngineMimeType

public void **registerEngineMimeType**([String](http://docs.google.com/java/lang/String.html) type,  
 [ScriptEngineFactory](http://docs.google.com/javax/script/ScriptEngineFactory.html) factory)

Registers a ScriptEngineFactory to handle a mime type. Overrides any such association found using the Discovery mechanism.

**Parameters:**type - The mime type to be associated with the ScriptEngineFactory.factory - The class to associate with the given mime type. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if any of the parameters is null.

### registerEngineExtension

public void **registerEngineExtension**([String](http://docs.google.com/java/lang/String.html) extension,  
 [ScriptEngineFactory](http://docs.google.com/javax/script/ScriptEngineFactory.html) factory)

Registers a ScriptEngineFactory to handle an extension. Overrides any such association found using the Discovery mechanism.

**Parameters:**extension - The extension type to be associated with the ScriptEngineFactory.factory - The class to associate with the given extension. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if any of the parameters is null.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ScriptEngineManager.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/script/ScriptEngineFactory.html)   [**NEXT CLASS**](http://docs.google.com/javax/script/ScriptException.html) | [**FRAMES**](http://docs.google.com/index.html?javax/script/ScriptEngineManager.html)    [**NO FRAMES**](http://docs.google.com/ScriptEngineManager.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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