| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/util/concurrent/Callable.html) | **Use** | [**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   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/util/concurrent//class-useCallable.html)    [**NO FRAMES**](http://docs.google.com/Callable.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Interface**

**java.util.concurrent.Callable**

| Packages that use [Callable](http://docs.google.com/java/util/concurrent/Callable.html) | |
| --- | --- |
| [**java.util.concurrent**](#3znysh7) | Utility classes commonly useful in concurrent programming. |
| [**javax.tools**](#2et92p0) | Provides interfaces for tools which can be invoked from a program, for example, compilers. |

| Uses of [Callable](http://docs.google.com/java/util/concurrent/Callable.html) in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) | |
| --- | --- |

| Methods in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) that return [Callable](http://docs.google.com/java/util/concurrent/Callable.html) | |
| --- | --- |
| static [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<[Object](http://docs.google.com/java/lang/Object.html)> | **Executors.**[**callable**](http://docs.google.com/java/util/concurrent/Executors.html#callable(java.security.PrivilegedAction))([PrivilegedAction](http://docs.google.com/java/security/PrivilegedAction.html)<?> action)            Returns a [Callable](http://docs.google.com/java/util/concurrent/Callable.html) object that, when called, runs the given privileged action and returns its result. |
| static [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<[Object](http://docs.google.com/java/lang/Object.html)> | **Executors.**[**callable**](http://docs.google.com/java/util/concurrent/Executors.html#callable(java.security.PrivilegedExceptionAction))([PrivilegedExceptionAction](http://docs.google.com/java/security/PrivilegedExceptionAction.html)<?> action)            Returns a [Callable](http://docs.google.com/java/util/concurrent/Callable.html) object that, when called, runs the given privileged exception action and returns its result. |
| static [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<[Object](http://docs.google.com/java/lang/Object.html)> | **Executors.**[**callable**](http://docs.google.com/java/util/concurrent/Executors.html#callable(java.lang.Runnable))([Runnable](http://docs.google.com/java/lang/Runnable.html) task)            Returns a [Callable](http://docs.google.com/java/util/concurrent/Callable.html) object that, when called, runs the given task and returns null. |
| static   | <T> [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> | | --- | | **Executors.**[**callable**](http://docs.google.com/java/util/concurrent/Executors.html#callable(java.lang.Runnable,%20T))([Runnable](http://docs.google.com/java/lang/Runnable.html) task, T result)            Returns a [Callable](http://docs.google.com/java/util/concurrent/Callable.html) object that, when called, runs the given task and returns the given result. |
| static   | <T> [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> | | --- | | **Executors.**[**privilegedCallable**](http://docs.google.com/java/util/concurrent/Executors.html#privilegedCallable(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> callable)            Returns a [Callable](http://docs.google.com/java/util/concurrent/Callable.html) object that will, when called, execute the given callable under the current access control context. |
| static   | <T> [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> | | --- | | **Executors.**[**privilegedCallableUsingCurrentClassLoader**](http://docs.google.com/java/util/concurrent/Executors.html#privilegedCallableUsingCurrentClassLoader(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> callable)            Returns a [Callable](http://docs.google.com/java/util/concurrent/Callable.html) object that will, when called, execute the given callable under the current access control context, with the current context class loader as the context class loader. |

| Methods in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) with parameters of type [Callable](http://docs.google.com/java/util/concurrent/Callable.html) | |
| --- | --- |
| protected   | <V> [RunnableScheduledFuture](http://docs.google.com/java/util/concurrent/RunnableScheduledFuture.html)<V> | | --- | | **ScheduledThreadPoolExecutor.**[**decorateTask**](http://docs.google.com/java/util/concurrent/ScheduledThreadPoolExecutor.html#decorateTask(java.util.concurrent.Callable,%20java.util.concurrent.RunnableScheduledFuture))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<V> callable, [RunnableScheduledFuture](http://docs.google.com/java/util/concurrent/RunnableScheduledFuture.html)<V> task)            Modifies or replaces the task used to execute a callable. |
| protected   | <T> [RunnableFuture](http://docs.google.com/java/util/concurrent/RunnableFuture.html)<T> | | --- | | **AbstractExecutorService.**[**newTaskFor**](http://docs.google.com/java/util/concurrent/AbstractExecutorService.html#newTaskFor(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> callable)            Returns a RunnableFuture for the given callable task. |
| static   | <T> [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> | | --- | | **Executors.**[**privilegedCallable**](http://docs.google.com/java/util/concurrent/Executors.html#privilegedCallable(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> callable)            Returns a [Callable](http://docs.google.com/java/util/concurrent/Callable.html) object that will, when called, execute the given callable under the current access control context. |
| static   | <T> [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> | | --- | | **Executors.**[**privilegedCallableUsingCurrentClassLoader**](http://docs.google.com/java/util/concurrent/Executors.html#privilegedCallableUsingCurrentClassLoader(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> callable)            Returns a [Callable](http://docs.google.com/java/util/concurrent/Callable.html) object that will, when called, execute the given callable under the current access control context, with the current context class loader as the context class loader. |
| | <V> [ScheduledFuture](http://docs.google.com/java/util/concurrent/ScheduledFuture.html)<V> | | --- | | **ScheduledThreadPoolExecutor.**[**schedule**](http://docs.google.com/java/util/concurrent/ScheduledThreadPoolExecutor.html#schedule(java.util.concurrent.Callable,%20long,%20java.util.concurrent.TimeUnit))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<V> callable, long delay, [TimeUnit](http://docs.google.com/java/util/concurrent/TimeUnit.html) unit) |
| | <V> [ScheduledFuture](http://docs.google.com/java/util/concurrent/ScheduledFuture.html)<V> | | --- | | **ScheduledExecutorService.**[**schedule**](http://docs.google.com/java/util/concurrent/ScheduledExecutorService.html#schedule(java.util.concurrent.Callable,%20long,%20java.util.concurrent.TimeUnit))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<V> callable, long delay, [TimeUnit](http://docs.google.com/java/util/concurrent/TimeUnit.html) unit)            Creates and executes a ScheduledFuture that becomes enabled after the given delay. |
| | <T> [Future](http://docs.google.com/java/util/concurrent/Future.html)<T> | | --- | | **ScheduledThreadPoolExecutor.**[**submit**](http://docs.google.com/java/util/concurrent/ScheduledThreadPoolExecutor.html#submit(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> task) |
| | <T> [Future](http://docs.google.com/java/util/concurrent/Future.html)<T> | | --- | | **ExecutorService.**[**submit**](http://docs.google.com/java/util/concurrent/ExecutorService.html#submit(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> task)            Submits a value-returning task for execution and returns a Future representing the pending results of the task. |
| | <T> [Future](http://docs.google.com/java/util/concurrent/Future.html)<T> | | --- | | **AbstractExecutorService.**[**submit**](http://docs.google.com/java/util/concurrent/AbstractExecutorService.html#submit(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T> task) |
| [Future](http://docs.google.com/java/util/concurrent/Future.html)<[V](http://docs.google.com/java/util/concurrent/ExecutorCompletionService.html)> | **ExecutorCompletionService.**[**submit**](http://docs.google.com/java/util/concurrent/ExecutorCompletionService.html#submit(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<[V](http://docs.google.com/java/util/concurrent/ExecutorCompletionService.html)> task) |
| [Future](http://docs.google.com/java/util/concurrent/Future.html)<[V](http://docs.google.com/java/util/concurrent/CompletionService.html)> | **CompletionService.**[**submit**](http://docs.google.com/java/util/concurrent/CompletionService.html#submit(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<[V](http://docs.google.com/java/util/concurrent/CompletionService.html)> task)            Submits a value-returning task for execution and returns a Future representing the pending results of the task. |

| Method parameters in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) with type arguments of type [Callable](http://docs.google.com/java/util/concurrent/Callable.html) | |
| --- | --- |
| | <T> [List](http://docs.google.com/java/util/List.html)<[Future](http://docs.google.com/java/util/concurrent/Future.html)<T>> | | --- | | **ExecutorService.**[**invokeAll**](http://docs.google.com/java/util/concurrent/ExecutorService.html#invokeAll(java.util.Collection))([Collection](http://docs.google.com/java/util/Collection.html)<? extends [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T>> tasks)            Executes the given tasks, returning a list of Futures holding their status and results when all complete. |
| | <T> [List](http://docs.google.com/java/util/List.html)<[Future](http://docs.google.com/java/util/concurrent/Future.html)<T>> | | --- | | **AbstractExecutorService.**[**invokeAll**](http://docs.google.com/java/util/concurrent/AbstractExecutorService.html#invokeAll(java.util.Collection))([Collection](http://docs.google.com/java/util/Collection.html)<? extends [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T>> tasks) |
| | <T> [List](http://docs.google.com/java/util/List.html)<[Future](http://docs.google.com/java/util/concurrent/Future.html)<T>> | | --- | | **ExecutorService.**[**invokeAll**](http://docs.google.com/java/util/concurrent/ExecutorService.html#invokeAll(java.util.Collection,%20long,%20java.util.concurrent.TimeUnit))([Collection](http://docs.google.com/java/util/Collection.html)<? extends [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T>> tasks, long timeout, [TimeUnit](http://docs.google.com/java/util/concurrent/TimeUnit.html) unit)            Executes the given tasks, returning a list of Futures holding their status and results when all complete or the timeout expires, whichever happens first. |
| | <T> [List](http://docs.google.com/java/util/List.html)<[Future](http://docs.google.com/java/util/concurrent/Future.html)<T>> | | --- | | **AbstractExecutorService.**[**invokeAll**](http://docs.google.com/java/util/concurrent/AbstractExecutorService.html#invokeAll(java.util.Collection,%20long,%20java.util.concurrent.TimeUnit))([Collection](http://docs.google.com/java/util/Collection.html)<? extends [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T>> tasks, long timeout, [TimeUnit](http://docs.google.com/java/util/concurrent/TimeUnit.html) unit) |
| | <T> T | | --- | | **ExecutorService.**[**invokeAny**](http://docs.google.com/java/util/concurrent/ExecutorService.html#invokeAny(java.util.Collection))([Collection](http://docs.google.com/java/util/Collection.html)<? extends [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T>> tasks)            Executes the given tasks, returning the result of one that has completed successfully (i.e., without throwing an exception), if any do. |
| | <T> T | | --- | | **AbstractExecutorService.**[**invokeAny**](http://docs.google.com/java/util/concurrent/AbstractExecutorService.html#invokeAny(java.util.Collection))([Collection](http://docs.google.com/java/util/Collection.html)<? extends [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T>> tasks) |
| | <T> T | | --- | | **ExecutorService.**[**invokeAny**](http://docs.google.com/java/util/concurrent/ExecutorService.html#invokeAny(java.util.Collection,%20long,%20java.util.concurrent.TimeUnit))([Collection](http://docs.google.com/java/util/Collection.html)<? extends [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T>> tasks, long timeout, [TimeUnit](http://docs.google.com/java/util/concurrent/TimeUnit.html) unit)            Executes the given tasks, returning the result of one that has completed successfully (i.e., without throwing an exception), if any do before the given timeout elapses. |
| | <T> T | | --- | | **AbstractExecutorService.**[**invokeAny**](http://docs.google.com/java/util/concurrent/AbstractExecutorService.html#invokeAny(java.util.Collection,%20long,%20java.util.concurrent.TimeUnit))([Collection](http://docs.google.com/java/util/Collection.html)<? extends [Callable](http://docs.google.com/java/util/concurrent/Callable.html)<T>> tasks, long timeout, [TimeUnit](http://docs.google.com/java/util/concurrent/TimeUnit.html) unit) |

| Constructors in [java.util.concurrent](http://docs.google.com/java/util/concurrent/package-summary.html) with parameters of type [Callable](http://docs.google.com/java/util/concurrent/Callable.html) | |
| --- | --- |
| [**FutureTask**](http://docs.google.com/java/util/concurrent/FutureTask.html#FutureTask(java.util.concurrent.Callable))([Callable](http://docs.google.com/java/util/concurrent/Callable.html)<[V](http://docs.google.com/java/util/concurrent/FutureTask.html)> callable)            Creates a FutureTask that will upon running, execute the given Callable. |

| Uses of [Callable](http://docs.google.com/java/util/concurrent/Callable.html) in [javax.tools](http://docs.google.com/javax/tools/package-summary.html) | |
| --- | --- |

| Subinterfaces of [Callable](http://docs.google.com/java/util/concurrent/Callable.html) in [javax.tools](http://docs.google.com/javax/tools/package-summary.html) | |
| --- | --- |
| static interface | [**JavaCompiler.CompilationTask**](http://docs.google.com/javax/tools/JavaCompiler.CompilationTask.html)            Interface representing a future for a compilation task. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/util/concurrent/Callable.html) | **Use** | [**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   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/util/concurrent//class-useCallable.html)    [**NO FRAMES**](http://docs.google.com/Callable.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[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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