4.10.1

* Docs  
  [User Manual](http://docs.google.com/userguide/userguide.html)  
  [Guides and Tutorials](https://guides.gradle.org)  
  [DSL Reference](http://docs.google.com/dsl/)  
  [Javadoc](http://docs.google.com/javadoc/)  
  [Release Notes](http://docs.google.com/release-notes.html)
* [Forums](https://discuss.gradle.org/)
* [Training](https://gradle.org/training/)
* [Try Gradle Enterprise](https://gradle.com/enterprise)
* [User Manual Home](http://docs.google.com/userguide/userguide.html)
* [DSL Reference Home](http://docs.google.com/dsl/)
* [Release Notes](http://docs.google.com/release-notes.html)
  + [Methods](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#N1806C)

### Build script blocks

* [allprojects { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:allprojects(groovy.lang.Closure))
* [artifacts { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:artifacts(groovy.lang.Closure))
* [buildscript { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:buildscript(groovy.lang.Closure))
* [configurations { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:configurations(groovy.lang.Closure))
* [dependencies { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:dependencies(groovy.lang.Closure))
* [repositories { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:repositories(groovy.lang.Closure))
* [sourceSets { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:sourceSets(groovy.lang.Closure))
* [subprojects { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:subprojects(groovy.lang.Closure))
* [publishing { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:publishing(groovy.lang.Closure))

### Core types

* [Project](http://docs.google.com/org.gradle.api.Project.html)
* [Task](http://docs.google.com/org.gradle.api.Task.html)
* [Gradle](http://docs.google.com/org.gradle.api.invocation.Gradle.html)
* [Settings](http://docs.google.com/org.gradle.api.initialization.Settings.html)
* [IncludedBuild](http://docs.google.com/org.gradle.api.initialization.IncludedBuild.html)
* [Script](http://docs.google.com/org.gradle.api.Script.html)
* [JavaToolChain](http://docs.google.com/org.gradle.jvm.toolchain.JavaToolChain.html)
* [SourceSet](http://docs.google.com/org.gradle.api.tasks.SourceSet.html)
* [SourceSetOutput](http://docs.google.com/org.gradle.api.tasks.SourceSetOutput.html)
* [SourceDirectorySet](http://docs.google.com/org.gradle.api.file.SourceDirectorySet.html)
* [IncrementalTaskInputs](http://docs.google.com/org.gradle.api.tasks.incremental.IncrementalTaskInputs.html)
* [Configuration](http://docs.google.com/org.gradle.api.artifacts.Configuration.html)
* [ResolutionStrategy](http://docs.google.com/org.gradle.api.artifacts.ResolutionStrategy.html)
* [ArtifactResolutionQuery](http://docs.google.com/org.gradle.api.artifacts.query.ArtifactResolutionQuery.html)
* [ComponentSelection](http://docs.google.com/org.gradle.api.artifacts.ComponentSelection.html)
* [ComponentSelectionRules](http://docs.google.com/org.gradle.api.artifacts.ComponentSelectionRules.html)
* [ExtensionAware](http://docs.google.com/org.gradle.api.plugins.ExtensionAware.html)
* [ExtraPropertiesExtension](http://docs.google.com/org.gradle.api.plugins.ExtraPropertiesExtension.html)
* [PluginDependenciesSpec](http://docs.google.com/org.gradle.plugin.use.PluginDependenciesSpec.html)
* [PluginDependencySpec](http://docs.google.com/org.gradle.plugin.use.PluginDependencySpec.html)
* [PluginManagementSpec](http://docs.google.com/org.gradle.plugin.management.PluginManagementSpec.html)
* [ResourceHandler](http://docs.google.com/org.gradle.api.resources.ResourceHandler.html)
* [TextResourceFactory](http://docs.google.com/org.gradle.api.resources.TextResourceFactory.html)

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* [PublishingExtension](http://docs.google.com/org.gradle.api.publish.PublishingExtension.html)
* [IvyPublication](http://docs.google.com/org.gradle.api.publish.ivy.IvyPublication.html)
* [IvyArtifact](http://docs.google.com/org.gradle.api.publish.ivy.IvyArtifact.html)
* [IvyArtifactSet](http://docs.google.com/org.gradle.api.publish.ivy.IvyArtifactSet.html)
* [IvyModuleDescriptorSpec](http://docs.google.com/org.gradle.api.publish.ivy.IvyModuleDescriptorSpec.html)
* [IvyModuleDescriptorAuthor](http://docs.google.com/org.gradle.api.publish.ivy.IvyModuleDescriptorAuthor.html)
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* [MavenArtifact](http://docs.google.com/org.gradle.api.publish.maven.MavenArtifact.html)
* [MavenArtifactSet](http://docs.google.com/org.gradle.api.publish.maven.MavenArtifactSet.html)
* [MavenPom](http://docs.google.com/org.gradle.api.publish.maven.MavenPom.html)
* [MavenPomCiManagement](http://docs.google.com/org.gradle.api.publish.maven.MavenPomCiManagement.html)
* [MavenPomContributor](http://docs.google.com/org.gradle.api.publish.maven.MavenPomContributor.html)
* [MavenPomContributorSpec](http://docs.google.com/org.gradle.api.publish.maven.MavenPomContributorSpec.html)
* [MavenPomDeveloper](http://docs.google.com/org.gradle.api.publish.maven.MavenPomDeveloper.html)
* [MavenPomDeveloperSpec](http://docs.google.com/org.gradle.api.publish.maven.MavenPomDeveloperSpec.html)
* [MavenPomDistributionManagement](http://docs.google.com/org.gradle.api.publish.maven.MavenPomDistributionManagement.html)
* [MavenPomIssueManagement](http://docs.google.com/org.gradle.api.publish.maven.MavenPomIssueManagement.html)
* [MavenPomLicense](http://docs.google.com/org.gradle.api.publish.maven.MavenPomLicense.html)
* [MavenPomLicenseSpec](http://docs.google.com/org.gradle.api.publish.maven.MavenPomLicenseSpec.html)
* [MavenPomMailingList](http://docs.google.com/org.gradle.api.publish.maven.MavenPomMailingList.html)
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* [TaskContainer](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html)
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* [DependencyHandler](http://docs.google.com/org.gradle.api.artifacts.dsl.DependencyHandler.html)
* [ArtifactHandler](http://docs.google.com/org.gradle.api.artifacts.dsl.ArtifactHandler.html)

### Build Cache types

* [BuildCacheConfiguration](http://docs.google.com/org.gradle.caching.configuration.BuildCacheConfiguration.html)
* [DirectoryBuildCache](http://docs.google.com/org.gradle.caching.local.DirectoryBuildCache.html)
* [HttpBuildCache](http://docs.google.com/org.gradle.caching.http.HttpBuildCache.html)

### Input Normalization types

* [InputNormalizationHandler](http://docs.google.com/org.gradle.normalization.InputNormalizationHandler.html)
* [InputNormalization](http://docs.google.com/org.gradle.normalization.InputNormalization.html)
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### Help Task types

* [TaskReportTask](http://docs.google.com/org.gradle.api.tasks.diagnostics.TaskReportTask.html)
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* [DependencyReportTask](http://docs.google.com/org.gradle.api.tasks.diagnostics.DependencyReportTask.html)
* [DependencyInsightReportTask](http://docs.google.com/org.gradle.api.tasks.diagnostics.DependencyInsightReportTask.html)
* [PropertyReportTask](http://docs.google.com/org.gradle.api.tasks.diagnostics.PropertyReportTask.html)
* [ComponentReport](http://docs.google.com/org.gradle.api.reporting.components.ComponentReport.html)
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* [ModelReport](http://docs.google.com/org.gradle.api.reporting.model.ModelReport.html)

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* [AntlrTask](http://docs.google.com/org.gradle.api.plugins.antlr.AntlrTask.html)
* [BuildEnvironmentReportTask](http://docs.google.com/org.gradle.api.tasks.diagnostics.BuildEnvironmentReportTask.html)
* [Checkstyle](http://docs.google.com/org.gradle.api.plugins.quality.Checkstyle.html)
* [CodeNarc](http://docs.google.com/org.gradle.api.plugins.quality.CodeNarc.html)
* [CompareGradleBuilds](http://docs.google.com/org.gradle.api.plugins.buildcomparison.gradle.CompareGradleBuilds.html)
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* [JacocoReport](http://docs.google.com/org.gradle.testing.jacoco.tasks.JacocoReport.html)
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* [Jar](http://docs.google.com/org.gradle.api.tasks.bundling.Jar.html)
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* [Tar](http://docs.google.com/org.gradle.api.tasks.bundling.Tar.html)
* [AbstractTestTask](http://docs.google.com/org.gradle.api.tasks.testing.AbstractTestTask.html)
* [Test](http://docs.google.com/org.gradle.api.tasks.testing.Test.html)
* [TestReport](http://docs.google.com/org.gradle.api.tasks.testing.TestReport.html)
* [Upload](http://docs.google.com/org.gradle.api.tasks.Upload.html)
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* [CustomizableHtmlReport](http://docs.google.com/org.gradle.api.reporting.CustomizableHtmlReport.html)
* [SingleFileReport](http://docs.google.com/org.gradle.api.reporting.SingleFileReport.html)
* [DirectoryReport](http://docs.google.com/org.gradle.api.reporting.DirectoryReport.html)
* [FindBugsXmlReport](http://docs.google.com/org.gradle.api.plugins.quality.FindBugsXmlReport.html)
* [Report](http://docs.google.com/org.gradle.api.reporting.Report.html)
* [Reporting](http://docs.google.com/org.gradle.api.reporting.Reporting.html)
* [ReportContainer](http://docs.google.com/org.gradle.api.reporting.ReportContainer.html)
* [ReportingExtension](http://docs.google.com/org.gradle.api.reporting.ReportingExtension.html)

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* [EclipseModel](http://docs.google.com/org.gradle.plugins.ide.eclipse.model.EclipseModel.html)
* [EclipseProject](http://docs.google.com/org.gradle.plugins.ide.eclipse.model.EclipseProject.html)
* [EclipseClasspath](http://docs.google.com/org.gradle.plugins.ide.eclipse.model.EclipseClasspath.html)
* [EclipseJdt](http://docs.google.com/org.gradle.plugins.ide.eclipse.model.EclipseJdt.html)
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* [EclipseWtpComponent](http://docs.google.com/org.gradle.plugins.ide.eclipse.model.EclipseWtpComponent.html)
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* [IdeaModel](http://docs.google.com/org.gradle.plugins.ide.idea.model.IdeaModel.html)
* [IdeaProject](http://docs.google.com/org.gradle.plugins.ide.idea.model.IdeaProject.html)
* [IdeaModule](http://docs.google.com/org.gradle.plugins.ide.idea.model.IdeaModule.html)
* [IdeaWorkspace](http://docs.google.com/org.gradle.plugins.ide.idea.model.IdeaWorkspace.html)
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### Eclipse/IDEA task types

* [GenerateEclipseProject](http://docs.google.com/org.gradle.plugins.ide.eclipse.GenerateEclipseProject.html)
* [GenerateEclipseClasspath](http://docs.google.com/org.gradle.plugins.ide.eclipse.GenerateEclipseClasspath.html)
* [GenerateEclipseJdt](http://docs.google.com/org.gradle.plugins.ide.eclipse.GenerateEclipseJdt.html)
* [GenerateEclipseWtpComponent](http://docs.google.com/org.gradle.plugins.ide.eclipse.GenerateEclipseWtpComponent.html)
* [GenerateEclipseWtpFacet](http://docs.google.com/org.gradle.plugins.ide.eclipse.GenerateEclipseWtpFacet.html)
* [GenerateIdeaModule](http://docs.google.com/org.gradle.plugins.ide.idea.GenerateIdeaModule.html)
* [GenerateIdeaProject](http://docs.google.com/org.gradle.plugins.ide.idea.GenerateIdeaProject.html)
* [GenerateIdeaWorkspace](http://docs.google.com/org.gradle.plugins.ide.idea.GenerateIdeaWorkspace.html)

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* [PrebuiltLibrary](http://docs.google.com/org.gradle.nativeplatform.PrebuiltLibrary.html)
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* [PrebuiltStaticLibraryBinary](http://docs.google.com/org.gradle.nativeplatform.PrebuiltStaticLibraryBinary.html)
* [NativeComponentSpec](http://docs.google.com/org.gradle.nativeplatform.NativeComponentSpec.html)
* [NativeExecutableSpec](http://docs.google.com/org.gradle.nativeplatform.NativeExecutableSpec.html)
* [NativeLibrarySpec](http://docs.google.com/org.gradle.nativeplatform.NativeLibrarySpec.html)
* [NativeTestSuiteSpec](http://docs.google.com/org.gradle.nativeplatform.test.NativeTestSuiteSpec.html)
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* [GoogleTestTestSuiteSpec](http://docs.google.com/org.gradle.nativeplatform.test.googletest.GoogleTestTestSuiteSpec.html)
* [NativeBinarySpec](http://docs.google.com/org.gradle.nativeplatform.NativeBinarySpec.html)
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* [NativeTestSuiteBinarySpec](http://docs.google.com/org.gradle.nativeplatform.test.NativeTestSuiteBinarySpec.html)
* [CUnitTestSuiteBinarySpec](http://docs.google.com/org.gradle.nativeplatform.test.cunit.CUnitTestSuiteBinarySpec.html)
* [GoogleTestTestSuiteBinarySpec](http://docs.google.com/org.gradle.nativeplatform.test.googletest.GoogleTestTestSuiteBinarySpec.html)
* [NativePlatform](http://docs.google.com/org.gradle.nativeplatform.platform.NativePlatform.html)
* [BuildType](http://docs.google.com/org.gradle.nativeplatform.BuildType.html)
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* [VisualStudioProject](http://docs.google.com/org.gradle.ide.visualstudio.VisualStudioProject.html)
* [VisualStudioSolution](http://docs.google.com/org.gradle.ide.visualstudio.VisualStudioSolution.html)
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### Native component task types

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* [CCompile](http://docs.google.com/org.gradle.language.c.tasks.CCompile.html)
* [Assemble](http://docs.google.com/org.gradle.language.assembler.tasks.Assemble.html)
* [ObjectiveCCompile](http://docs.google.com/org.gradle.language.objectivec.tasks.ObjectiveCCompile.html)
* [ObjectiveCppCompile](http://docs.google.com/org.gradle.language.objectivecpp.tasks.ObjectiveCppCompile.html)
* [WindowsResourceCompile](http://docs.google.com/org.gradle.language.rc.tasks.WindowsResourceCompile.html)
* [LinkExecutable](http://docs.google.com/org.gradle.nativeplatform.tasks.LinkExecutable.html)
* [LinkSharedLibrary](http://docs.google.com/org.gradle.nativeplatform.tasks.LinkSharedLibrary.html)
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TaskContainer

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| API Documentation: | [TaskContainer](http://docs.google.com/javadoc/org/gradle/api/tasks/TaskContainer.html) |
| --- | --- |

A TaskContainer is responsible for managing a set of [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) instances.

You can obtain a TaskContainer instance by calling [Project.getTasks()](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:tasks), or using the tasks property in your build script.

Properties

No properties

Methods

| Method | Description |
| --- | --- |
| [containerWithType](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:containerWithType(java.lang.Class))(type) | Incubating  Creates a regular container that wraps the polymorphic container presenting all elements of a specified type. |
| [create](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String))(name) | Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and adds it to this container. |
| [create](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20groovy.lang.Closure))(name, configureClosure) | Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name adds it to this container. The given closure is used to configure the task before it is returned by this method. |
| [create](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class))(name, type) | Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and type, and adds it to this container. |
| [create](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class,%20java.lang.Object%5B%5D))(name, type, constructorArgs) | Incubating  Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and type, passing the given arguments to the @Inject-annotated constructor, and adds it to this container. All values passed to the task constructor must be non-null; otherwise a NullPointerException will be thrown |
| [create](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class,%20org.gradle.api.Action))(name, type, configuration) | Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and type, configures it with the given action, and adds it to this container. |
| [create](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20org.gradle.api.Action))(name, configureAction) | Creates a new item with the given name, adding it to this container, then configuring it with the given action. |
| [create](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.util.Map))(options) | Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) and adds it to this container. A map of creation options can be passed to this method to control how the task is created. The following options are available: |
| [create](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.util.Map,%20groovy.lang.Closure))(options, configureClosure) | Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) adds it to this container. A map of creation options can be passed to this method to control how the task is created. See [TaskContainer.create(java.util.Map)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.util.Map)) for the list of options available. The given closure is used to configure the task before it is returned by this method. |
| [findByPath](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:findByPath(java.lang.String))(path) | Locates a task by path. You can supply a task name, a relative path, or an absolute path. Relative paths are interpreted relative to the project for this container. This method returns null if no task with the given path exists. |
| [getByName](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:getByName(java.lang.String))(name) | Locates an object by name, failing if there is no such object. |
| [getByName](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:getByName(java.lang.String,%20groovy.lang.Closure))(name, configureClosure) | Locates an object by name, failing if there is no such object. The given configure closure is executed against the object before it is returned from this method. The object is passed to the closure as its delegate. |
| [getByName](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:getByName(java.lang.String,%20org.gradle.api.Action))(name, configureAction) | Locates an object by name, failing if there is no such object. The given configure action is executed against the object before it is returned from this method. |
| [getByPath](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:getByPath(java.lang.String))(path) | Locates a task by path. You can supply a task name, a relative path, or an absolute path. Relative paths are interpreted relative to the project for this container. This method throws an exception if no task with the given path exists. |
| [maybeCreate](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:maybeCreate(java.lang.String))(name) | Looks for an item with the given name, creating and adding it to this container if it does not exist. |
| [maybeCreate](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:maybeCreate(java.lang.String,%20java.lang.Class))(name, type) | Incubating  Looks for an item with the given name and type, creating and adding it to this container if it does not exist. |
| [named](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:named(java.lang.String))(name) | Incubating  Locates a task by name, without triggering its creation or configuration, failing if there is no such object. |
| [register](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:register(java.lang.String))(name) | Incubating  Defines a new task, which will be created when it is required. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method. |
| [register](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:register(java.lang.String,%20java.lang.Class))(name, type) | Incubating  Defines a new task, which will be created when it is required. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method. |
| [register](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:register(java.lang.String,%20java.lang.Class,%20java.lang.Object%5B%5D))(name, type, constructorArgs) | Incubating  Defines a new task, which will be created when it is required passing the given arguments to the @Inject-annotated constructor. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method. All values passed to the task constructor must be non-null; otherwise a NullPointerException will be thrown |
| [register](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:register(java.lang.String,%20java.lang.Class,%20org.gradle.api.Action))(name, type, configurationAction) | Incubating  Defines a new task, which will be created and configured when it is required. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method. |
| [register](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:register(java.lang.String,%20org.gradle.api.Action))(name, configurationAction) | Incubating  Defines a new task, which will be created and configured when it is required. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method. |
| [replace](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:replace(java.lang.String))(name) | Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and adds it to this container, replacing any existing task with the same name. |
| [replace](http://docs.google.com/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:replace(java.lang.String,%20java.lang.Class))(name, type) | Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and type, and adds it to this container, replacing any existing task of the same name. |

Script blocks

No script blocks

Method details

[**NamedDomainObjectContainer**](http://docs.google.com/dsl/org.gradle.api.NamedDomainObjectContainer.html)<U> containerWithType([**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<U> type)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Creates a regular container that wraps the polymorphic container presenting all elements of a specified type.

[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html) create([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name)

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and adds it to this container.

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html) create([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) configureClosure)

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name adds it to this container. The given closure is used to configure the task before it is returned by this method.

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

T create([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<T> type)

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and type, and adds it to this container.

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

T create([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<T> type, [**Object**](http://download.oracle.com/javase/8/docs/api/java/lang/Object.html)... constructorArgs)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and type, passing the given arguments to the @Inject-annotated constructor, and adds it to this container. All values passed to the task constructor must be non-null; otherwise a NullPointerException will be thrown

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

T create([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<T> type, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super T> configuration)

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and type, configures it with the given action, and adds it to this container.

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

T create([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super T> configureAction)

Creates a new item with the given name, adding it to this container, then configuring it with the given action.

[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html) create([**Map**](http://download.oracle.com/javase/8/docs/api/java/util/Map.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html), ?> options)

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) and adds it to this container. A map of creation options can be passed to this method to control how the task is created. The following options are available:

| Option | Description | Default Value |
| --- | --- | --- |
| name | The name of the task to create. | None. Must be specified. |
| type | The class of the task to create. | [DefaultTask](http://docs.google.com/dsl/org.gradle.api.DefaultTask.html) |
| action | The closure or [Action](http://docs.google.com/javadoc/org/gradle/api/Action.html) to execute when the task executes. See [Task.doFirst(org.gradle.api.Action)](http://docs.google.com/dsl/org.gradle.api.Task.html#org.gradle.api.Task:doFirst(org.gradle.api.Action)). | null |
| overwrite | Replace an existing task? | false |
| dependsOn | The dependencies of the task. See [here](http://docs.google.com/Task.html#dependencies) for more details. | [] |
| group | The group of the task. | null |
| description | The description of the task. | null |
| constructorArgs | The arguments to pass to the task class constructor. | null |

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

If a task with the given name already exists in this container and the overwrite option is not set to true, an exception is thrown.

[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html) create([**Map**](http://download.oracle.com/javase/8/docs/api/java/util/Map.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html), ?> options, [**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) configureClosure)

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) adds it to this container. A map of creation options can be passed to this method to control how the task is created. See [TaskContainer.create(java.util.Map)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.util.Map)) for the list of options available. The given closure is used to configure the task before it is returned by this method.

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html) findByPath([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) path)

Locates a task by path. You can supply a task name, a relative path, or an absolute path. Relative paths are interpreted relative to the project for this container. This method returns null if no task with the given path exists.

T getByName([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name)

Locates an object by name, failing if there is no such object.

T getByName([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) configureClosure)

Locates an object by name, failing if there is no such object. The given configure closure is executed against the object before it is returned from this method. The object is passed to the closure as its delegate.

T getByName([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super T> configureAction)

Locates an object by name, failing if there is no such object. The given configure action is executed against the object before it is returned from this method.

[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html) getByPath([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) path)

Locates a task by path. You can supply a task name, a relative path, or an absolute path. Relative paths are interpreted relative to the project for this container. This method throws an exception if no task with the given path exists.

T maybeCreate([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name)

Looks for an item with the given name, creating and adding it to this container if it does not exist.

U maybeCreate([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<U> type)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Looks for an item with the given name and type, creating and adding it to this container if it does not exist.

[**TaskProvider**](http://docs.google.com/javadoc/org/gradle/api/tasks/TaskProvider.html)<T> named([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Locates a task by name, without triggering its creation or configuration, failing if there is no such object.

[**TaskProvider**](http://docs.google.com/javadoc/org/gradle/api/tasks/TaskProvider.html)<[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html)> register([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Defines a new task, which will be created when it is required. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method.

It is generally more efficient to use this method instead of [TaskContainer.create(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String)), as that methods will eagerly create he task, regardless of whether that task is required for the current build or not. This method, on the other hand, will defer creation until required.

[**TaskProvider**](http://docs.google.com/javadoc/org/gradle/api/tasks/TaskProvider.html)<T> register([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<T> type)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Defines a new task, which will be created when it is required. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method.

It is generally more efficient to use this method instead of [TaskContainer.create(java.lang.String, java.lang.Class, org.gradle.api.Action)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class,%20org.gradle.api.Action)) or [TaskContainer.create(java.lang.String, java.lang.Class)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class)), as those methods will eagerly create and configure the task, regardless of whether that task is required for the current build or not. This method, on the other hand, will defer creation until required.

[**TaskProvider**](http://docs.google.com/javadoc/org/gradle/api/tasks/TaskProvider.html)<T> register([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<T> type, [**Object**](http://download.oracle.com/javase/8/docs/api/java/lang/Object.html)... constructorArgs)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Defines a new task, which will be created when it is required passing the given arguments to the @Inject-annotated constructor. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method. All values passed to the task constructor must be non-null; otherwise a NullPointerException will be thrown

It is generally more efficient to use this method instead of [TaskContainer.create(java.lang.String, java.lang.Class, org.gradle.api.Action)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class,%20org.gradle.api.Action)) or [TaskContainer.create(java.lang.String, java.lang.Class)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class)), as those methods will eagerly create and configure the task, regardless of whether that task is required for the current build or not. This method, on the other hand, will defer creation until required.

[**TaskProvider**](http://docs.google.com/javadoc/org/gradle/api/tasks/TaskProvider.html)<T> register([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<T> type, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super T> configurationAction)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Defines a new task, which will be created and configured when it is required. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method.

It is generally more efficient to use this method instead of [TaskContainer.create(java.lang.String, java.lang.Class, org.gradle.api.Action)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class,%20org.gradle.api.Action)) or [TaskContainer.create(java.lang.String, java.lang.Class)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String,%20java.lang.Class)), as those methods will eagerly create and configure the task, regardless of whether that task is required for the current build or not. This method, on the other hand, will defer creation and configuration until required.

[**TaskProvider**](http://docs.google.com/javadoc/org/gradle/api/tasks/TaskProvider.html)<[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html)> register([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html)> configurationAction)

Note: This method is [incubating](http://docs.google.com/userguide/feature_lifecycle.html) and may change in a future version of Gradle.

Defines a new task, which will be created and configured when it is required. A task is 'required' when the task is located using query methods such as [TaskCollection.getByName(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskCollection.html#org.gradle.api.tasks.TaskCollection:getByName(java.lang.String)), when the task is added to the task graph for execution or when [Provider.get()](http://docs.google.com/javadoc/org/gradle/api/provider/Provider.html#get--) is called on the return value of this method.

It is generally more efficient to use this method instead of [NamedDomainObjectContainer.create(java.lang.String, org.gradle.api.Action)](http://docs.google.com/dsl/org.gradle.api.NamedDomainObjectContainer.html#org.gradle.api.NamedDomainObjectContainer:create(java.lang.String,%20org.gradle.api.Action)) or [TaskContainer.create(java.lang.String)](http://docs.google.com/dsl/org.gradle.api.tasks.TaskContainer.html#org.gradle.api.tasks.TaskContainer:create(java.lang.String)), as those methods will eagerly create and configure the task, regardless of whether that task is required for the current build or not. This method, on the other hand, will defer creation and configuration until required.

[**Task**](http://docs.google.com/dsl/org.gradle.api.Task.html) replace([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name)

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and adds it to this container, replacing any existing task with the same name.

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

T replace([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) name, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<T> type)

Creates a [Task](http://docs.google.com/dsl/org.gradle.api.Task.html) with the given name and type, and adds it to this container, replacing any existing task of the same name.

After the task is added, it is made available as a property of the project, so that you can reference the task by name in your build file. See [here](http://docs.google.com/Project.html#properties) for more details.

**Docs**

* [User Manual](http://docs.google.com/userguide/userguide.html)
* [DSL Reference](http://docs.google.com/dsl/)
* [Release Notes](http://docs.google.com/release-notes.html)
* [Javadoc](http://docs.google.com/javadoc/)

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