4.10.1

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  [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/)
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* [publishing { }](http://docs.google.com/org.gradle.api.Project.html#org.gradle.api.Project:publishing(groovy.lang.Closure))

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* [BuildEnvironmentReportTask](http://docs.google.com/org.gradle.api.tasks.diagnostics.BuildEnvironmentReportTask.html)
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* [IdeaWorkspace](http://docs.google.com/org.gradle.plugins.ide.idea.model.IdeaWorkspace.html)
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* [GenerateIdeaModule](http://docs.google.com/org.gradle.plugins.ide.idea.GenerateIdeaModule.html)
* [GenerateIdeaProject](http://docs.google.com/org.gradle.plugins.ide.idea.GenerateIdeaProject.html)
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* [CUnitTestSuiteSpec](http://docs.google.com/org.gradle.nativeplatform.test.cunit.CUnitTestSuiteSpec.html)
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Sync

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

Synchronizes the contents of a destination directory with some source directories and files.

This task is like the [Copy](http://docs.google.com/dsl/org.gradle.api.tasks.Copy.html) task, except the destination directory will only contain the files copied. All files that exist in the destination directory will be deleted before copying files, unless a [Sync.preserve(org.gradle.api.Action)](http://docs.google.com/dsl/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:preserve(org.gradle.api.Action)) is specified.

Examples:

// Sync can be used like a Copy task  
// See the Copy documentation for more examples  
task syncDependencies(type: Sync) {  
 from 'my/shared/dependencyDir'  
 into 'build/deps/compile'  
}  
  
// You can preserve output that already exists in the  
// destination directory. Files matching the preserve  
// filter will not be deleted.  
task sync(type: Sync) {  
 from 'source'  
 into 'dest'  
 preserve {  
 include 'extraDir/\*\*'  
 include 'dir1/\*\*'  
 exclude 'dir1/extra.txt'  
 }  
}

Properties

| Property | Description |
| --- | --- |
| [caseSensitive](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:caseSensitive) | Specifies whether case-sensitive pattern matching should be used. |
| [destinationDir](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:destinationDir) | The directory to copy files into. |
| [dirMode](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:dirMode) | The Unix permissions to use for the target directories. null means that existing permissions are preserved. It is dependent on the copy action implementation whether these permissions will actually be applied. |
| [duplicatesStrategy](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:duplicatesStrategy) | The strategy to use when trying to copy more than one file to the same destination. |
| [excludes](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:excludes) | The set of exclude patterns. |
| [fileMode](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:fileMode) | The Unix permissions to use for the target files. null means that existing permissions are preserved. It is dependent on the copy action implementation whether these permissions will actually be applied. |
| [includeEmptyDirs](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:includeEmptyDirs) | Tells if empty target directories will be included in the copy. |
| [includes](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:includes) | The set of include patterns. |
| [preserve](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:preserve) | Incubating  The filter that defines which files to preserve in the destination directory. |
| [source](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:source) | The source files for this task. |

Methods

| Method | Description |
| --- | --- |
| [eachFile](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:eachFile(groovy.lang.Closure))(closure) | Adds an action to be applied to each file as it about to be copied into its destination. The given closure is called with a [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) as its parameter. Actions are executed in the order added, and are inherited from the parent spec. |
| [eachFile](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:eachFile(org.gradle.api.Action))(action) | Adds an action to be applied to each file as it is about to be copied into its destination. The action can change the destination path of the file, filter the contents of the file, or exclude the file from the result entirely. Actions are executed in the order added, and are inherited from the parent spec. |
| [exclude](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:exclude(groovy.lang.Closure))(excludeSpec) | Adds an exclude spec. This method may be called multiple times to append new specs.The given closure is passed a [FileTreeElement](http://docs.google.com/javadoc/org/gradle/api/file/FileTreeElement.html) as its parameter. The closure should return true or false. Example: |
| [exclude](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:exclude(java.lang.Iterable))(excludes) | Adds an ANT style exclude pattern. This method may be called multiple times to append new patterns and multiple patterns may be specified in a single call. If excludes are not provided, then no files will be excluded. If excludes are provided, then files must not match any exclude pattern to be processed. |
| [exclude](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:exclude(java.lang.String%5B%5D))(excludes) | Adds an ANT style exclude pattern. This method may be called multiple times to append new patterns and multiple patterns may be specified in a single call. If excludes are not provided, then no files will be excluded. If excludes are provided, then files must not match any exclude pattern to be processed. |
| [exclude](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:exclude(org.gradle.api.specs.Spec))(excludeSpec) | Adds an exclude spec. This method may be called multiple times to append new specs. If excludes are not provided, then no files will be excluded. If excludes are provided, then files must not match any exclude pattern to be processed. |
| [expand](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:expand(java.util.Map))(properties) | Expands property references in each file as it is copied. More specifically, each file is transformed using Groovy's [SimpleTemplateEngine](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/text/SimpleTemplateEngine.html). This means you can use simple property references, such as $property or ${property} in the file. You can also include arbitrary Groovy code in the file, such as ${version ?: 'unknown'} or ${classpath\*.name.join(' ')} |
| [filesMatching](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:filesMatching(java.lang.Iterable,%20org.gradle.api.Action))(patterns, action) | Configure the [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) for each file whose path matches any of the specified Ant-style patterns. This is equivalent to using eachFile() and selectively applying a configuration based on the file's path. |
| [filesMatching](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:filesMatching(java.lang.String,%20org.gradle.api.Action))(pattern, action) | Configure the [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) for each file whose path matches the specified Ant-style pattern. This is equivalent to using eachFile() and selectively applying a configuration based on the file's path. |
| [filesNotMatching](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:filesNotMatching(java.lang.Iterable,%20org.gradle.api.Action))(patterns, action) | Configure the [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) for each file whose path does not match any of the specified Ant-style patterns. This is equivalent to using eachFile() and selectively applying a configuration based on the file's path. |
| [filesNotMatching](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:filesNotMatching(java.lang.String,%20org.gradle.api.Action))(pattern, action) | Configure the [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) for each file whose path does not match the specified Ant-style pattern. This is equivalent to using eachFile() and selectively applying a configuration based on the file's path. |
| [filter](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:filter(groovy.lang.Closure))(closure) | Adds a content filter based on the provided closure. The Closure will be called with each line (stripped of line endings) and should return a String to replace the line or null to remove the line. If every line is removed, the result will be an empty file, not an absent one. |
| [filter](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:filter(java.lang.Class))(filterType) | Adds a content filter to be used during the copy. Multiple calls to filter, add additional filters to the filter chain. Each filter should implement java.io.FilterReader. Include org.apache.tools.ant.filters.\* for access to all the standard Ant filters. |
| [filter](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:filter(java.util.Map,%20java.lang.Class))(properties, filterType) | Adds a content filter to be used during the copy. Multiple calls to filter, add additional filters to the filter chain. Each filter should implement java.io.FilterReader. Include org.apache.tools.ant.filters.\* for access to all the standard Ant filters. |
| [filter](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:filter(org.gradle.api.Transformer))(transformer) | Adds a content filter based on the provided transformer. The Closure will be called with each line (stripped of line endings) and should return a String to replace the line or null to remove the line. If every line is removed, the result will be an empty file, not an absent one. |
| [from](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:from(java.lang.Object,%20groovy.lang.Closure))(sourcePath, c) | Specifies the source files or directories for a copy and creates a child CopySourceSpec. The given source path is evaluated as per [Project.files(java.lang.Object[])](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:files(java.lang.Object%5B%5D)) . |
| [from](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:from(java.lang.Object,%20org.gradle.api.Action))(sourcePath, configureAction) | Specifies the source files or directories for a copy and creates a child CopySpec. The given source path is evaluated as per [Project.files(java.lang.Object[])](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:files(java.lang.Object%5B%5D)) . |
| [from](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:from(java.lang.Object%5B%5D))(sourcePaths) | Specifies source files or directories for a copy. The given paths are evaluated as per [Project.files(java.lang.Object[])](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:files(java.lang.Object%5B%5D)). |
| [include](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:include(groovy.lang.Closure))(includeSpec) | Adds an include spec. This method may be called multiple times to append new specs. The given closure is passed a [FileTreeElement](http://docs.google.com/javadoc/org/gradle/api/file/FileTreeElement.html) as its parameter. If includes are not provided, then all files in this container will be included. If includes are provided, then a file must match at least one of the include patterns or specs to be included. |
| [include](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:include(java.lang.Iterable))(includes) | Adds an ANT style include pattern. This method may be called multiple times to append new patterns and multiple patterns may be specified in a single call. If includes are not provided, then all files in this container will be included. If includes are provided, then a file must match at least one of the include patterns to be processed. |
| [include](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:include(java.lang.String%5B%5D))(includes) | Adds an ANT style include pattern. This method may be called multiple times to append new patterns and multiple patterns may be specified in a single call. If includes are not provided, then all files in this container will be included. If includes are provided, then a file must match at least one of the include patterns to be processed. |
| [include](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:include(org.gradle.api.specs.Spec))(includeSpec) | Adds an include spec. This method may be called multiple times to append new specs. If includes are not provided, then all files in this container will be included. If includes are provided, then a file must match at least one of the include patterns or specs to be included. |
| [into](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:into(java.lang.Object))(destDir) | Specifies the destination directory for a copy. The destination is evaluated as per [Project.file(java.lang.Object)](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:file(java.lang.Object)). |
| [into](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:into(java.lang.Object,%20groovy.lang.Closure))(destPath, configureClosure) | Creates and configures a child CopySpec with the given destination path. The destination is evaluated as per [Project.file(java.lang.Object)](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:file(java.lang.Object)). |
| [into](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:into(java.lang.Object,%20org.gradle.api.Action))(destPath, copySpec) | Creates and configures a child CopySpec with the given destination path. The destination is evaluated as per [Project.file(java.lang.Object)](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:file(java.lang.Object)). |
| [preserve](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:preserve(org.gradle.api.Action))(action) | Incubating  Configures the filter that defines which files to preserve in the destination directory. |
| [rename](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:rename(groovy.lang.Closure))(closure) | Renames a source file. The closure will be called with a single parameter, the name of the file. The closure should return a String object with a new target name. The closure may return null, in which case the original name will be used. |
| [rename](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:rename(java.lang.String,%20java.lang.String))(sourceRegEx, replaceWith) | Renames files based on a regular expression. Uses java.util.regex type of regular expressions. Note that the replace string should use the '$1' syntax to refer to capture groups in the source regular expression. Files that do not match the source regular expression will be copied with the original name. |
| [rename](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:rename(java.util.regex.Pattern,%20java.lang.String))(sourceRegEx, replaceWith) | Renames files based on a regular expression. See [CopyProcessingSpec.rename(java.lang.String, java.lang.String)](http://docs.google.com/javadoc/org/gradle/api/file/CopyProcessingSpec.html#rename-java.lang.String,%20java.lang.String-). |
| [rename](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:rename(org.gradle.api.Transformer))(renamer) | Renames a source file. The function will be called with a single parameter, the name of the file. The function should return a new target name. The function may return null, in which case the original name will be used. |
| [with](http://docs.google.com/org.gradle.api.tasks.Sync.html#org.gradle.api.tasks.Sync:with(org.gradle.api.file.CopySpec%5B%5D))(sourceSpecs) | Adds the given specs as a child of this spec. |

Script blocks

No script blocks

Property details

boolean caseSensitive

Specifies whether case-sensitive pattern matching should be used.

Default:true

[**File**](http://download.oracle.com/javase/8/docs/api/java/io/File.html) destinationDir

The directory to copy files into.

Default:null

[**Integer**](http://download.oracle.com/javase/8/docs/api/java/lang/Integer.html) dirMode

The Unix permissions to use for the target directories. null means that existing permissions are preserved. It is dependent on the copy action implementation whether these permissions will actually be applied.

Default:null

[**DuplicatesStrategy**](http://docs.google.com/javadoc/org/gradle/api/file/DuplicatesStrategy.html) duplicatesStrategy

The strategy to use when trying to copy more than one file to the same destination.

The value can be set with a case insensitive string of the enum value (e.g. 'exclude' for [DuplicatesStrategy.EXCLUDE](http://docs.google.com/javadoc/org/gradle/api/file/DuplicatesStrategy.html#EXCLUDE)).

This strategy can be overridden for individual files by using [CopySpec.eachFile(org.gradle.api.Action)](http://docs.google.com/javadoc/org/gradle/api/file/CopySpec.html#eachFile-org.gradle.api.Action-) or [CopySpec.filesMatching(java.lang.String, org.gradle.api.Action)](http://docs.google.com/javadoc/org/gradle/api/file/CopySpec.html#filesMatching-java.lang.String,%20org.gradle.api.Action-).

Default:null

[**Set**](http://download.oracle.com/javase/8/docs/api/java/util/Set.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)> excludes

The set of exclude patterns.

Default:[]

[**Integer**](http://download.oracle.com/javase/8/docs/api/java/lang/Integer.html) fileMode

The Unix permissions to use for the target files. null means that existing permissions are preserved. It is dependent on the copy action implementation whether these permissions will actually be applied.

Default:null

boolean includeEmptyDirs

Tells if empty target directories will be included in the copy.

Default:true

[**Set**](http://download.oracle.com/javase/8/docs/api/java/util/Set.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)> includes

The set of include patterns.

Default:[]

[**PatternFilterable**](http://docs.google.com/javadoc/org/gradle/api/tasks/util/PatternFilterable.html) preserve (read-only)

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

The filter that defines which files to preserve in the destination directory.

Default:empty

[**FileCollection**](http://docs.google.com/javadoc/org/gradle/api/file/FileCollection.html) source (read-only)

The source files for this task.

Default:[]

Method details

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) eachFile([**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) closure)

Adds an action to be applied to each file as it about to be copied into its destination. The given closure is called with a [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) as its parameter. Actions are executed in the order added, and are inherited from the parent spec.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) eachFile([**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**FileCopyDetails**](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html)> action)

Adds an action to be applied to each file as it is about to be copied into its destination. The action can change the destination path of the file, filter the contents of the file, or exclude the file from the result entirely. Actions are executed in the order added, and are inherited from the parent spec.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) exclude([**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) excludeSpec)

Adds an exclude spec. This method may be called multiple times to append new specs.The given closure is passed a [FileTreeElement](http://docs.google.com/javadoc/org/gradle/api/file/FileTreeElement.html) as its parameter. The closure should return true or false. Example:

copySpec {  
 from 'source'  
 into 'destination'  
 //an example of excluding files from certain configuration:  
 exclude { it.file in configurations.someConf.files }  
}

If excludes are not provided, then no files will be excluded. If excludes are provided, then files must not match any exclude pattern to be processed.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) exclude([**Iterable**](http://download.oracle.com/javase/8/docs/api/java/lang/Iterable.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)> excludes)

Adds an ANT style exclude pattern. This method may be called multiple times to append new patterns and multiple patterns may be specified in a single call. If excludes are not provided, then no files will be excluded. If excludes are provided, then files must not match any exclude pattern to be processed.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) exclude([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)... excludes)

Adds an ANT style exclude pattern. This method may be called multiple times to append new patterns and multiple patterns may be specified in a single call. If excludes are not provided, then no files will be excluded. If excludes are provided, then files must not match any exclude pattern to be processed.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) exclude([**Spec**](http://docs.google.com/javadoc/org/gradle/api/specs/Spec.html)<[**FileTreeElement**](http://docs.google.com/javadoc/org/gradle/api/file/FileTreeElement.html)> excludeSpec)

Adds an exclude spec. This method may be called multiple times to append new specs. If excludes are not provided, then no files will be excluded. If excludes are provided, then files must not match any exclude pattern to be processed.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) expand([**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), ?> properties)

Expands property references in each file as it is copied. More specifically, each file is transformed using Groovy's [SimpleTemplateEngine](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/text/SimpleTemplateEngine.html). This means you can use simple property references, such as $property or ${property} in the file. You can also include arbitrary Groovy code in the file, such as ${version ?: 'unknown'} or ${classpath\*.name.join(' ')}

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) filesMatching([**Iterable**](http://download.oracle.com/javase/8/docs/api/java/lang/Iterable.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)> patterns, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**FileCopyDetails**](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html)> action)

Configure the [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) for each file whose path matches any of the specified Ant-style patterns. This is equivalent to using eachFile() and selectively applying a configuration based on the file's path.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) filesMatching([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) pattern, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**FileCopyDetails**](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html)> action)

Configure the [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) for each file whose path matches the specified Ant-style pattern. This is equivalent to using eachFile() and selectively applying a configuration based on the file's path.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) filesNotMatching([**Iterable**](http://download.oracle.com/javase/8/docs/api/java/lang/Iterable.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)> patterns, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**FileCopyDetails**](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html)> action)

Configure the [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) for each file whose path does not match any of the specified Ant-style patterns. This is equivalent to using eachFile() and selectively applying a configuration based on the file's path.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) filesNotMatching([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) pattern, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**FileCopyDetails**](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html)> action)

Configure the [FileCopyDetails](http://docs.google.com/javadoc/org/gradle/api/file/FileCopyDetails.html) for each file whose path does not match the specified Ant-style pattern. This is equivalent to using eachFile() and selectively applying a configuration based on the file's path.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) filter([**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) closure)

Adds a content filter based on the provided closure. The Closure will be called with each line (stripped of line endings) and should return a String to replace the line or null to remove the line. If every line is removed, the result will be an empty file, not an absent one.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) filter([**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<? extends [**FilterReader**](http://download.oracle.com/javase/8/docs/api/java/io/FilterReader.html)> filterType)

Adds a content filter to be used during the copy. Multiple calls to filter, add additional filters to the filter chain. Each filter should implement java.io.FilterReader. Include org.apache.tools.ant.filters.\* for access to all the standard Ant filters.

Examples:

filter(StripJavaComments)  
filter(com.mycompany.project.CustomFilter)

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) filter([**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), ?> properties, [**Class**](http://download.oracle.com/javase/8/docs/api/java/lang/Class.html)<? extends [**FilterReader**](http://download.oracle.com/javase/8/docs/api/java/io/FilterReader.html)> filterType)

Adds a content filter to be used during the copy. Multiple calls to filter, add additional filters to the filter chain. Each filter should implement java.io.FilterReader. Include org.apache.tools.ant.filters.\* for access to all the standard Ant filters.

Filter properties may be specified using groovy map syntax.

Examples:

filter(HeadFilter, lines:25, skip:2)  
filter(ReplaceTokens, tokens:[copyright:'2009', version:'2.3.1'])

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) filter([**Transformer**](http://docs.google.com/javadoc/org/gradle/api/Transformer.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html), [**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)> transformer)

Adds a content filter based on the provided transformer. The Closure will be called with each line (stripped of line endings) and should return a String to replace the line or null to remove the line. If every line is removed, the result will be an empty file, not an absent one.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) from([**Object**](http://download.oracle.com/javase/8/docs/api/java/lang/Object.html) sourcePath, [**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) c)

Specifies the source files or directories for a copy and creates a child CopySourceSpec. The given source path is evaluated as per [Project.files(java.lang.Object[])](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:files(java.lang.Object%5B%5D)) .

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) from([**Object**](http://download.oracle.com/javase/8/docs/api/java/lang/Object.html) sourcePath, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**CopySpec**](http://docs.google.com/javadoc/org/gradle/api/file/CopySpec.html)> configureAction)

Specifies the source files or directories for a copy and creates a child CopySpec. The given source path is evaluated as per [Project.files(java.lang.Object[])](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:files(java.lang.Object%5B%5D)) .

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) from([**Object**](http://download.oracle.com/javase/8/docs/api/java/lang/Object.html)... sourcePaths)

Specifies source files or directories for a copy. The given paths are evaluated as per [Project.files(java.lang.Object[])](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:files(java.lang.Object%5B%5D)).

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) include([**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) includeSpec)

Adds an include spec. This method may be called multiple times to append new specs. The given closure is passed a [FileTreeElement](http://docs.google.com/javadoc/org/gradle/api/file/FileTreeElement.html) as its parameter. If includes are not provided, then all files in this container will be included. If includes are provided, then a file must match at least one of the include patterns or specs to be included.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) include([**Iterable**](http://download.oracle.com/javase/8/docs/api/java/lang/Iterable.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)> includes)

Adds an ANT style include pattern. This method may be called multiple times to append new patterns and multiple patterns may be specified in a single call. If includes are not provided, then all files in this container will be included. If includes are provided, then a file must match at least one of the include patterns to be processed.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) include([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)... includes)

Adds an ANT style include pattern. This method may be called multiple times to append new patterns and multiple patterns may be specified in a single call. If includes are not provided, then all files in this container will be included. If includes are provided, then a file must match at least one of the include patterns to be processed.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) include([**Spec**](http://docs.google.com/javadoc/org/gradle/api/specs/Spec.html)<[**FileTreeElement**](http://docs.google.com/javadoc/org/gradle/api/file/FileTreeElement.html)> includeSpec)

Adds an include spec. This method may be called multiple times to append new specs. If includes are not provided, then all files in this container will be included. If includes are provided, then a file must match at least one of the include patterns or specs to be included.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) into([**Object**](http://download.oracle.com/javase/8/docs/api/java/lang/Object.html) destDir)

Specifies the destination directory for a copy. The destination is evaluated as per [Project.file(java.lang.Object)](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:file(java.lang.Object)).

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) into([**Object**](http://download.oracle.com/javase/8/docs/api/java/lang/Object.html) destPath, [**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) configureClosure)

Creates and configures a child CopySpec with the given destination path. The destination is evaluated as per [Project.file(java.lang.Object)](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:file(java.lang.Object)).

[**CopySpec**](http://docs.google.com/javadoc/org/gradle/api/file/CopySpec.html) into([**Object**](http://download.oracle.com/javase/8/docs/api/java/lang/Object.html) destPath, [**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**CopySpec**](http://docs.google.com/javadoc/org/gradle/api/file/CopySpec.html)> copySpec)

Creates and configures a child CopySpec with the given destination path. The destination is evaluated as per [Project.file(java.lang.Object)](http://docs.google.com/dsl/org.gradle.api.Project.html#org.gradle.api.Project:file(java.lang.Object)).

[**Sync**](http://docs.google.com/dsl/org.gradle.api.tasks.Sync.html) preserve([**Action**](http://docs.google.com/javadoc/org/gradle/api/Action.html)<? super [**PatternFilterable**](http://docs.google.com/javadoc/org/gradle/api/tasks/util/PatternFilterable.html)> action)

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

Configures the filter that defines which files to preserve in the destination directory.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) rename([**Closure**](http://docs.groovy-lang.org/2.4.15/html/gapi/groovy/lang/Closure.html) closure)

Renames a source file. The closure will be called with a single parameter, the name of the file. The closure should return a String object with a new target name. The closure may return null, in which case the original name will be used.

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) rename([**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) sourceRegEx, [**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) replaceWith)

Renames files based on a regular expression. Uses java.util.regex type of regular expressions. Note that the replace string should use the '$1' syntax to refer to capture groups in the source regular expression. Files that do not match the source regular expression will be copied with the original name.

Example:

rename '(.\*)\_OEM\_BLUE\_(.\*)', '$1$2'

would map the file 'style\_OEM\_BLUE\_.css' to 'style.css'

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) rename([**Pattern**](http://download.oracle.com/javase/8/docs/api/java/util/regex/Pattern.html) sourceRegEx, [**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html) replaceWith)

Renames files based on a regular expression. See [CopyProcessingSpec.rename(java.lang.String, java.lang.String)](http://docs.google.com/javadoc/org/gradle/api/file/CopyProcessingSpec.html#rename-java.lang.String,%20java.lang.String-).

[**AbstractCopyTask**](http://docs.google.com/dsl/org.gradle.api.tasks.AbstractCopyTask.html) rename([**Transformer**](http://docs.google.com/javadoc/org/gradle/api/Transformer.html)<[**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html), [**String**](http://download.oracle.com/javase/8/docs/api/java/lang/String.html)> renamer)

Renames a source file. The function will be called with a single parameter, the name of the file. The function should return a new target name. The function may return null, in which case the original name will be used.

[**CopySpec**](http://docs.google.com/javadoc/org/gradle/api/file/CopySpec.html) with([**CopySpec**](http://docs.google.com/javadoc/org/gradle/api/file/CopySpec.html)... sourceSpecs)

Adds the given specs as a child of this spec.

def contentSpec = copySpec {  
 from("content") {  
 include "\*\*/\*.txt"  
 }  
}  
  
task copy(type: Copy) {  
 into "$buildDir/copy"  
 with contentSpec  
}

**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)
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