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Uses of Package

org.apache.commons.collections4

* Packages that use [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

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| * Package | * Description |
| * [org.apache.commons.collections4](#3znysh7) | * This package contains the interfaces and utilities shared across all the subpackages of this component. |
| * [org.apache.commons.collections4.bag](#2et92p0) | * This package contains implementations of the [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) and [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html) interfaces. |
| * [org.apache.commons.collections4.bidimap](#tyjcwt) | * This package contains implementations of the [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html), [OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html) and [SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html) interfaces. |
| * [org.apache.commons.collections4.collection](#3dy6vkm) | * This package contains implementations of the [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) interface. |
| * [org.apache.commons.collections4.comparators](#1t3h5sf) | * This package contains implementations of the [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) interface. |
| * [org.apache.commons.collections4.functors](#4d34og8) | * This package contains implementations of the [Closure](http://docs.google.com/org/apache/commons/collections4/Closure.html), [Predicate](http://docs.google.com/org/apache/commons/collections4/Predicate.html), [Transformer](http://docs.google.com/org/apache/commons/collections4/Transformer.html) and [Factory](http://docs.google.com/org/apache/commons/collections4/Factory.html) interfaces. |
| * [org.apache.commons.collections4.iterators](#2s8eyo1) | * This package contains implementations of the [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) interface. |
| * [org.apache.commons.collections4.keyvalue](#17dp8vu) | * This package contains implementations of collection and map related key/value classes. |
| * [org.apache.commons.collections4.list](#3rdcrjn) | * This package contains implementations of the [List](https://docs.oracle.com/javase/7/docs/api/java/util/List.html?is-external=true) interface. |
| * [org.apache.commons.collections4.map](#26in1rg) | * This package contains implementations of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true), [IterableMap](http://docs.google.com/org/apache/commons/collections4/IterableMap.html), [OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html) and [SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) interfaces. |
| * [org.apache.commons.collections4.multimap](#lnxbz9) | * This package contains implementations of the [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) interfaces. |
| * [org.apache.commons.collections4.multiset](#35nkun2) | * This package contains implementations of the [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) interface. |
| * [org.apache.commons.collections4.queue](#1ksv4uv) | * This package contains implementations for the [Queue](https://docs.oracle.com/javase/7/docs/api/java/util/Queue.html?is-external=true) interface. |
| * [org.apache.commons.collections4.sequence](#44sinio) | * This package provides classes to compare two sequences of objects. |
| * [org.apache.commons.collections4.set](#2jxsxqh) | * This package contains implementations of the [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true), [SortedSet](https://docs.oracle.com/javase/7/docs/api/java/util/SortedSet.html?is-external=true) and [NavigableSet](https://docs.oracle.com/javase/7/docs/api/java/util/NavigableSet.html?is-external=true) interfaces. |
| * [org.apache.commons.collections4.splitmap](#z337ya) | * The "split map" concept is that of an object that implements the [Put](http://docs.google.com/org/apache/commons/collections4/Put.html) and [Get](http://docs.google.com/org/apache/commons/collections4/Get.html) interfaces, with *differing* generic types. |
| * [org.apache.commons.collections4.trie](#3j2qqm3) | * This package contains implementations of the [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) interface. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

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| * Class and Description |
| * [Bag](http://docs.google.com/org/apache/commons/collections4/class-use/Bag.html#org.apache.commons.collections4) Defines a collection that counts the number of times an object appears in the collection. |
| * [BidiMap](http://docs.google.com/org/apache/commons/collections4/class-use/BidiMap.html#org.apache.commons.collections4) Defines a map that allows bidirectional lookup between key and values. |
| * [Closure](http://docs.google.com/org/apache/commons/collections4/class-use/Closure.html#org.apache.commons.collections4) Defines a functor interface implemented by classes that do something. |
| * [Equator](http://docs.google.com/org/apache/commons/collections4/class-use/Equator.html#org.apache.commons.collections4) An equation function, which determines equality between objects of type T. |
| * [Factory](http://docs.google.com/org/apache/commons/collections4/class-use/Factory.html#org.apache.commons.collections4) Defines a functor interface implemented by classes that create objects. |
| * [FluentIterable](http://docs.google.com/org/apache/commons/collections4/class-use/FluentIterable.html#org.apache.commons.collections4) A FluentIterable provides a powerful yet simple API for manipulating Iterable instances in a fluent manner. |
| * [Get](http://docs.google.com/org/apache/commons/collections4/class-use/Get.html#org.apache.commons.collections4) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableGet](http://docs.google.com/org/apache/commons/collections4/class-use/IterableGet.html#org.apache.commons.collections4) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableMap](http://docs.google.com/org/apache/commons/collections4/class-use/IterableMap.html#org.apache.commons.collections4) Defines a map that can be iterated directly without needing to create an entry set. |
| * [IterableSortedMap](http://docs.google.com/org/apache/commons/collections4/class-use/IterableSortedMap.html#org.apache.commons.collections4) [SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) + [OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html). |
| * [ListValuedMap](http://docs.google.com/org/apache/commons/collections4/class-use/ListValuedMap.html#org.apache.commons.collections4) Defines a map that holds a list of values against each key. |
| * [MapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/MapIterator.html#org.apache.commons.collections4) Defines an iterator that operates over a Map. |
| * [MultiMap](http://docs.google.com/org/apache/commons/collections4/class-use/MultiMap.html#org.apache.commons.collections4) Deprecated.  since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead |
| * [MultiSet](http://docs.google.com/org/apache/commons/collections4/class-use/MultiSet.html#org.apache.commons.collections4) Defines a collection that counts the number of times an object appears in the collection. |
| * [MultiSet.Entry](http://docs.google.com/org/apache/commons/collections4/class-use/MultiSet.Entry.html#org.apache.commons.collections4) An unmodifiable entry for an element and its occurrence as contained in a MultiSet. |
| * [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/class-use/MultiValuedMap.html#org.apache.commons.collections4) Defines a map that holds a collection of values against each key. |
| * [OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedBidiMap.html#org.apache.commons.collections4) Defines a map that allows bidirectional lookup between key and values and retains and provides access to an ordering. |
| * [OrderedIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedIterator.html#org.apache.commons.collections4) Defines an iterator that operates over an ordered container. |
| * [OrderedMap](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMap.html#org.apache.commons.collections4) Defines a map that maintains order and allows both forward and backward iteration through that order. |
| * [OrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMapIterator.html#org.apache.commons.collections4) Defines an iterator that operates over an ordered Map. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [Put](http://docs.google.com/org/apache/commons/collections4/class-use/Put.html#org.apache.commons.collections4) The "write" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [ResettableIterator](http://docs.google.com/org/apache/commons/collections4/class-use/ResettableIterator.html#org.apache.commons.collections4) Defines an iterator that can be reset back to an initial state. |
| * [ResettableListIterator](http://docs.google.com/org/apache/commons/collections4/class-use/ResettableListIterator.html#org.apache.commons.collections4) Defines a list iterator that can be reset back to an initial state. |
| * [SetUtils.SetView](http://docs.google.com/org/apache/commons/collections4/class-use/SetUtils.SetView.html#org.apache.commons.collections4) An unmodifiable **view** of a set that may be backed by other sets. |
| * [SetValuedMap](http://docs.google.com/org/apache/commons/collections4/class-use/SetValuedMap.html#org.apache.commons.collections4) Defines a map that holds a set of values against each key. |
| * [SortedBag](http://docs.google.com/org/apache/commons/collections4/class-use/SortedBag.html#org.apache.commons.collections4) Defines a type of Bag that maintains a sorted order among its unique representative members. |
| * [SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/class-use/SortedBidiMap.html#org.apache.commons.collections4) Defines a map that allows bidirectional lookup between key and values and retains both keys and values in sorted order. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4) Defines a functor interface implemented by classes that transform one object into another. |
| * [Trie](http://docs.google.com/org/apache/commons/collections4/class-use/Trie.html#org.apache.commons.collections4) Defines the interface for a prefix tree, an ordered tree data structure. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

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| * Class and Description |
| * [Bag](http://docs.google.com/org/apache/commons/collections4/class-use/Bag.html#org.apache.commons.collections4.bag) Defines a collection that counts the number of times an object appears in the collection. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.bag) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [SortedBag](http://docs.google.com/org/apache/commons/collections4/class-use/SortedBag.html#org.apache.commons.collections4.bag) Defines a type of Bag that maintains a sorted order among its unique representative members. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.bag) Defines a functor interface implemented by classes that transform one object into another. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.bag) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

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| * Class and Description |
| * [BidiMap](http://docs.google.com/org/apache/commons/collections4/class-use/BidiMap.html#org.apache.commons.collections4.bidimap) Defines a map that allows bidirectional lookup between key and values. |
| * [Get](http://docs.google.com/org/apache/commons/collections4/class-use/Get.html#org.apache.commons.collections4.bidimap) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableGet](http://docs.google.com/org/apache/commons/collections4/class-use/IterableGet.html#org.apache.commons.collections4.bidimap) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableMap](http://docs.google.com/org/apache/commons/collections4/class-use/IterableMap.html#org.apache.commons.collections4.bidimap) Defines a map that can be iterated directly without needing to create an entry set. |
| * [IterableSortedMap](http://docs.google.com/org/apache/commons/collections4/class-use/IterableSortedMap.html#org.apache.commons.collections4.bidimap) [SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) + [OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html). |
| * [KeyValue](http://docs.google.com/org/apache/commons/collections4/class-use/KeyValue.html#org.apache.commons.collections4.bidimap) Defines a simple key value pair. |
| * [MapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/MapIterator.html#org.apache.commons.collections4.bidimap) Defines an iterator that operates over a Map. |
| * [OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedBidiMap.html#org.apache.commons.collections4.bidimap) Defines a map that allows bidirectional lookup between key and values and retains and provides access to an ordering. |
| * [OrderedIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedIterator.html#org.apache.commons.collections4.bidimap) Defines an iterator that operates over an ordered container. |
| * [OrderedMap](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMap.html#org.apache.commons.collections4.bidimap) Defines a map that maintains order and allows both forward and backward iteration through that order. |
| * [OrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMapIterator.html#org.apache.commons.collections4.bidimap) Defines an iterator that operates over an ordered Map. |
| * [Put](http://docs.google.com/org/apache/commons/collections4/class-use/Put.html#org.apache.commons.collections4.bidimap) The "write" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [ResettableIterator](http://docs.google.com/org/apache/commons/collections4/class-use/ResettableIterator.html#org.apache.commons.collections4.bidimap) Defines an iterator that can be reset back to an initial state. |
| * [SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/class-use/SortedBidiMap.html#org.apache.commons.collections4.bidimap) Defines a map that allows bidirectional lookup between key and values and retains both keys and values in sorted order. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.bidimap) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

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| * Class and Description |
| * [Bag](http://docs.google.com/org/apache/commons/collections4/class-use/Bag.html#org.apache.commons.collections4.collection) Defines a collection that counts the number of times an object appears in the collection. |
| * [BoundedCollection](http://docs.google.com/org/apache/commons/collections4/class-use/BoundedCollection.html#org.apache.commons.collections4.collection) Defines a collection that is bounded in size. |
| * [MultiMap](http://docs.google.com/org/apache/commons/collections4/class-use/MultiMap.html#org.apache.commons.collections4.collection) Deprecated.  since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead |
| * [MultiSet](http://docs.google.com/org/apache/commons/collections4/class-use/MultiSet.html#org.apache.commons.collections4.collection) Defines a collection that counts the number of times an object appears in the collection. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.collection) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.collection) Defines a functor interface implemented by classes that transform one object into another. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.collection) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

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| * Class and Description |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.comparators) Defines a functor interface implemented by classes that transform one object into another. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

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| * Class and Description |
| * [Closure](http://docs.google.com/org/apache/commons/collections4/class-use/Closure.html#org.apache.commons.collections4.functors) Defines a functor interface implemented by classes that do something. |
| * [Equator](http://docs.google.com/org/apache/commons/collections4/class-use/Equator.html#org.apache.commons.collections4.functors) An equation function, which determines equality between objects of type T. |
| * [Factory](http://docs.google.com/org/apache/commons/collections4/class-use/Factory.html#org.apache.commons.collections4.functors) Defines a functor interface implemented by classes that create objects. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.functors) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.functors) Defines a functor interface implemented by classes that transform one object into another. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

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| * Class and Description |
| * [MapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/MapIterator.html#org.apache.commons.collections4.iterators) Defines an iterator that operates over a Map. |
| * [OrderedIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedIterator.html#org.apache.commons.collections4.iterators) Defines an iterator that operates over an ordered container. |
| * [OrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMapIterator.html#org.apache.commons.collections4.iterators) Defines an iterator that operates over an ordered Map. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.iterators) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [ResettableIterator](http://docs.google.com/org/apache/commons/collections4/class-use/ResettableIterator.html#org.apache.commons.collections4.iterators) Defines an iterator that can be reset back to an initial state. |
| * [ResettableListIterator](http://docs.google.com/org/apache/commons/collections4/class-use/ResettableListIterator.html#org.apache.commons.collections4.iterators) Defines a list iterator that can be reset back to an initial state. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.iterators) Defines a functor interface implemented by classes that transform one object into another. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.iterators) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

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| * Class and Description |
| * [KeyValue](http://docs.google.com/org/apache/commons/collections4/class-use/KeyValue.html#org.apache.commons.collections4.keyvalue) Defines a simple key value pair. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.keyvalue) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

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| * Class and Description |
| * [BoundedCollection](http://docs.google.com/org/apache/commons/collections4/class-use/BoundedCollection.html#org.apache.commons.collections4.list) Defines a collection that is bounded in size. |
| * [Factory](http://docs.google.com/org/apache/commons/collections4/class-use/Factory.html#org.apache.commons.collections4.list) Defines a functor interface implemented by classes that create objects. |
| * [OrderedIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedIterator.html#org.apache.commons.collections4.list) Defines an iterator that operates over an ordered container. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.list) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.list) Defines a functor interface implemented by classes that transform one object into another. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.list) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

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| * Class and Description |
| * [BoundedMap](http://docs.google.com/org/apache/commons/collections4/class-use/BoundedMap.html#org.apache.commons.collections4.map) Defines a map that is bounded in size. |
| * [Factory](http://docs.google.com/org/apache/commons/collections4/class-use/Factory.html#org.apache.commons.collections4.map) Defines a functor interface implemented by classes that create objects. |
| * [Get](http://docs.google.com/org/apache/commons/collections4/class-use/Get.html#org.apache.commons.collections4.map) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableGet](http://docs.google.com/org/apache/commons/collections4/class-use/IterableGet.html#org.apache.commons.collections4.map) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableMap](http://docs.google.com/org/apache/commons/collections4/class-use/IterableMap.html#org.apache.commons.collections4.map) Defines a map that can be iterated directly without needing to create an entry set. |
| * [IterableSortedMap](http://docs.google.com/org/apache/commons/collections4/class-use/IterableSortedMap.html#org.apache.commons.collections4.map) [SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) + [OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html). |
| * [KeyValue](http://docs.google.com/org/apache/commons/collections4/class-use/KeyValue.html#org.apache.commons.collections4.map) Defines a simple key value pair. |
| * [MapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/MapIterator.html#org.apache.commons.collections4.map) Defines an iterator that operates over a Map. |
| * [MultiMap](http://docs.google.com/org/apache/commons/collections4/class-use/MultiMap.html#org.apache.commons.collections4.map) Deprecated.  since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead |
| * [OrderedIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedIterator.html#org.apache.commons.collections4.map) Defines an iterator that operates over an ordered container. |
| * [OrderedMap](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMap.html#org.apache.commons.collections4.map) Defines a map that maintains order and allows both forward and backward iteration through that order. |
| * [OrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMapIterator.html#org.apache.commons.collections4.map) Defines an iterator that operates over an ordered Map. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.map) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [Put](http://docs.google.com/org/apache/commons/collections4/class-use/Put.html#org.apache.commons.collections4.map) The "write" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [ResettableIterator](http://docs.google.com/org/apache/commons/collections4/class-use/ResettableIterator.html#org.apache.commons.collections4.map) Defines an iterator that can be reset back to an initial state. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.map) Defines a functor interface implemented by classes that transform one object into another. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.map) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

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| * Class and Description |
| * [ListValuedMap](http://docs.google.com/org/apache/commons/collections4/class-use/ListValuedMap.html#org.apache.commons.collections4.multimap) Defines a map that holds a list of values against each key. |
| * [MapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/MapIterator.html#org.apache.commons.collections4.multimap) Defines an iterator that operates over a Map. |
| * [MultiSet](http://docs.google.com/org/apache/commons/collections4/class-use/MultiSet.html#org.apache.commons.collections4.multimap) Defines a collection that counts the number of times an object appears in the collection. |
| * [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/class-use/MultiValuedMap.html#org.apache.commons.collections4.multimap) Defines a map that holds a collection of values against each key. |
| * [SetValuedMap](http://docs.google.com/org/apache/commons/collections4/class-use/SetValuedMap.html#org.apache.commons.collections4.multimap) Defines a map that holds a set of values against each key. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.multimap) Defines a functor interface implemented by classes that transform one object into another. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.multimap) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

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| * Class and Description |
| * [MultiSet](http://docs.google.com/org/apache/commons/collections4/class-use/MultiSet.html#org.apache.commons.collections4.multiset) Defines a collection that counts the number of times an object appears in the collection. |
| * [MultiSet.Entry](http://docs.google.com/org/apache/commons/collections4/class-use/MultiSet.Entry.html#org.apache.commons.collections4.multiset) An unmodifiable entry for an element and its occurrence as contained in a MultiSet. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.multiset) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.multiset) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.queue](http://docs.google.com/org/apache/commons/collections4/queue/package-summary.html)

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| * Class and Description |
| * [BoundedCollection](http://docs.google.com/org/apache/commons/collections4/class-use/BoundedCollection.html#org.apache.commons.collections4.queue) Defines a collection that is bounded in size. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.queue) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.queue) Defines a functor interface implemented by classes that transform one object into another. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.queue) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

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| * Class and Description |
| * [Equator](http://docs.google.com/org/apache/commons/collections4/class-use/Equator.html#org.apache.commons.collections4.sequence) An equation function, which determines equality between objects of type T. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

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| * Class and Description |
| * [OrderedIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedIterator.html#org.apache.commons.collections4.set) Defines an iterator that operates over an ordered container. |
| * [Predicate](http://docs.google.com/org/apache/commons/collections4/class-use/Predicate.html#org.apache.commons.collections4.set) Defines a functor interface implemented by classes that perform a predicate test on an object. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.set) Defines a functor interface implemented by classes that transform one object into another. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.set) Marker interface for collections, maps and iterators that are unmodifiable. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.splitmap](http://docs.google.com/org/apache/commons/collections4/splitmap/package-summary.html)

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| * Class and Description |
| * [Get](http://docs.google.com/org/apache/commons/collections4/class-use/Get.html#org.apache.commons.collections4.splitmap) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableGet](http://docs.google.com/org/apache/commons/collections4/class-use/IterableGet.html#org.apache.commons.collections4.splitmap) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [MapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/MapIterator.html#org.apache.commons.collections4.splitmap) Defines an iterator that operates over a Map. |
| * [Put](http://docs.google.com/org/apache/commons/collections4/class-use/Put.html#org.apache.commons.collections4.splitmap) The "write" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [Transformer](http://docs.google.com/org/apache/commons/collections4/class-use/Transformer.html#org.apache.commons.collections4.splitmap) Defines a functor interface implemented by classes that transform one object into another. |

* Classes in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) used by [org.apache.commons.collections4.trie](http://docs.google.com/org/apache/commons/collections4/trie/package-summary.html)

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| * Class and Description |
| * [Get](http://docs.google.com/org/apache/commons/collections4/class-use/Get.html#org.apache.commons.collections4.trie) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableGet](http://docs.google.com/org/apache/commons/collections4/class-use/IterableGet.html#org.apache.commons.collections4.trie) The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [IterableMap](http://docs.google.com/org/apache/commons/collections4/class-use/IterableMap.html#org.apache.commons.collections4.trie) Defines a map that can be iterated directly without needing to create an entry set. |
| * [IterableSortedMap](http://docs.google.com/org/apache/commons/collections4/class-use/IterableSortedMap.html#org.apache.commons.collections4.trie) [SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) + [OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html). |
| * [OrderedMap](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMap.html#org.apache.commons.collections4.trie) Defines a map that maintains order and allows both forward and backward iteration through that order. |
| * [OrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/class-use/OrderedMapIterator.html#org.apache.commons.collections4.trie) Defines an iterator that operates over an ordered Map. |
| * [Put](http://docs.google.com/org/apache/commons/collections4/class-use/Put.html#org.apache.commons.collections4.trie) The "write" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface. |
| * [Trie](http://docs.google.com/org/apache/commons/collections4/class-use/Trie.html#org.apache.commons.collections4.trie) Defines the interface for a prefix tree, an ordered tree data structure. |
| * [Unmodifiable](http://docs.google.com/org/apache/commons/collections4/class-use/Unmodifiable.html#org.apache.commons.collections4.trie) Marker interface for collections, maps and iterators that are unmodifiable. |

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