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Uses of Class

org.apache.commons.collections4.map.AbstractMapDecorator

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

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| * Package | * Description |
| * [org.apache.commons.collections4.bidimap](#3znysh7) | * 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.map](#2et92p0) | * 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. |

### Uses of [**AbstractMapDecorator**](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html) in [**org.apache.commons.collections4.bidimap**](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)Subclasses of [AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html) in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

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| * + Modifier and Type | * + Class and Description |
| * + class | * + [AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)<K,V> Provides a base decorator that enables additional functionality to be added to a BidiMap via decoration. |
| * + class | * + [AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)<K,V> Provides a base decorator that enables additional functionality to be added to an OrderedBidiMap via decoration. |
| * + class | * + [AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)<K,V> Provides a base decorator that enables additional functionality to be added to a SortedBidiMap via decoration. |
| * + protected static class | * + [DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)<K,V> Internal sorted map view. |
| * + class | * + [UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)<K,V> Decorates another [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html) to ensure it can't be altered. |
| * + class | * + [UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)<K,V> Decorates another [OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html) to ensure it can't be altered. |
| * + class | * + [UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)<K,V> Decorates another [SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html) to ensure it can't be altered. |

### Uses of [**AbstractMapDecorator**](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html) in [**org.apache.commons.collections4.map**](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)Subclasses of [AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html) in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

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| * + Modifier and Type | * + Class and Description |
| * + class | * + [AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)<K,V> Provides a base decorator that enables additional functionality to be added to an OrderedMap via decoration. |
| * + class | * + [AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)<K,V> Provides a base decorator that enables additional functionality to be added to a Map via decoration. |
| * + class | * + [DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)<K,V> Decorates another Map returning a default value if the map does not contain the requested key. |
| * + class | * + [FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)<K,V> Decorates another Map to fix the size, preventing add/remove. |
| * + class | * + [FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)<K,V> Decorates another SortedMap to fix the size blocking add/remove. |
| * + class | * + [LazyMap](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)<K,V> Decorates another Map to create objects in the map on demand. |
| * + class | * + [LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)<K,V> Decorates another SortedMap to create objects in the map on demand. |
| * + class | * + [ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)<K,V> Decorates a Map to ensure that the order of addition is retained using a List to maintain order. |
| * + class | * + [MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)<K,V> A Map implementation that uses multiple keys to map the value. |
| * + class | * + [MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)<K,V> Deprecated.  since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead |
| * + class | * + [PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)<K,V> Decorates a Map to evict expired entries once their expiration time has been reached. |
| * + class | * + [PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)<K,V> Decorates another Map to validate that additions match a specified predicate. |
| * + class | * + [PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)<K,V> Decorates another SortedMap to validate that additions match a specified predicate. |
| * + class | * + [TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)<K,V> Decorates another Map to transform objects that are added. |
| * + class | * + [TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)<K,V> Decorates another SortedMap to transform objects that are added. |
| * + class | * + [UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)<K,V> Decorates another Map to ensure it can't be altered. |
| * + class | * + [UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)<K,V> Decorates another OrderedMap to ensure it can't be altered. |
| * + class | * + [UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)<K,V> Decorates another SortedMap to ensure it can't be altered. |

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