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Uses of Interface

org.apache.commons.collections4.KeyValue

* Packages that use [KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.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.keyvalue](#2et92p0) | * This package contains implementations of collection and map related key/value classes. |
| * [org.apache.commons.collections4.map](#tyjcwt) | * 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 [**KeyValue**](http://docs.google.com/org/apache/commons/collections4/KeyValue.html) in [**org.apache.commons.collections4.bidimap**](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)Classes in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html) that implement [KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)

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| * + Modifier and Type | * + Class and Description |
| * + protected static class | * + [AbstractDualBidiMap.MapEntry](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html)<K,V> Inner class MapEntry. |

### Uses of [**KeyValue**](http://docs.google.com/org/apache/commons/collections4/KeyValue.html) in [**org.apache.commons.collections4.keyvalue**](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)Classes in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html) that implement [KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)

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| * + Modifier and Type | * + Class and Description |
| * + class | * + [AbstractKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)<K,V> Abstract pair class to assist with creating KeyValue and [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) implementations. |
| * + class | * + [AbstractMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html)<K,V> Abstract Pair class to assist with creating correct [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) implementations. |
| * + class | * + [AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)<K,V> Provides a base decorator that allows additional functionality to be added to a [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true). |
| * + class | * + [DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)<K,V> A mutable KeyValue pair that does not implement [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true). |
| * + class | * + [DefaultMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html)<K,V> A restricted implementation of [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) that prevents the [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) contract from being broken. |
| * + class | * + [TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)<K,V> A [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) tied to a map underneath. |
| * + class | * + [UnmodifiableMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html)<K,V> A [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) that throws UnsupportedOperationException when setValue is called. |

* + Constructors in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html) with parameters of type [KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)

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| * + Constructor and Description |
| * + [DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#DefaultKeyValue-org.apache.commons.collections4.KeyValue-)([KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)<? extends [K](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html),? extends [V](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)> pair) Constructs a new pair from the specified KeyValue. |
| * + [DefaultMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html#DefaultMapEntry-org.apache.commons.collections4.KeyValue-)([KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)<? extends [K](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html),? extends [V](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html)> pair) Constructs a new entry from the specified KeyValue. |
| * + [UnmodifiableMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html#UnmodifiableMapEntry-org.apache.commons.collections4.KeyValue-)([KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)<? extends [K](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html),? extends [V](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html)> pair) Constructs a new entry from the specified KeyValue. |

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

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| --- | --- |
| * + Modifier and Type | * + Class and Description |
| * + protected static class | * + [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<K,V> HashEntry used to store the data. |
| * + protected static class | * + [AbstractLinkedMap.LinkEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html)<K,V> LinkEntry that stores the data. |
| * + protected static class | * + [AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)<K,V> A MapEntry implementation for the map. |
| * + class | * + [SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)<K,V> A Map implementation that holds a single item and is fixed size. |

* + Constructors in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html) with parameters of type [KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)

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| * + Constructor and Description |
| * + [SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#SingletonMap-org.apache.commons.collections4.KeyValue-)([KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)> keyValue) Constructor specifying the key and value as a KeyValue. |

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* Prev
* Next
* [Frames](http://docs.google.com/index.html?org/apache/commons/collections4/class-use/KeyValue.html)
* [No Frames](http://docs.google.com/KeyValue.html)
* [All Classes](http://docs.google.com/allclasses-noframe.html)

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