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Uses of Interface

org.apache.commons.collections4.Put

* Packages that use [Put](http://docs.google.com/org/apache/commons/collections4/Put.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.bidimap](#2et92p0) | * 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](#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. |
| * [org.apache.commons.collections4.splitmap](#3dy6vkm) | * 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](#1t3h5sf) | * This package contains implementations of the [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) interface. |

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

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| * + Modifier and Type | * + Interface and Description |
| * + interface | * + [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html)<K,V> Defines a map that allows bidirectional lookup between key and values. |
| * + interface | * + [BoundedMap](http://docs.google.com/org/apache/commons/collections4/BoundedMap.html)<K,V> Defines a map that is bounded in size. |
| * + interface | * + [IterableMap](http://docs.google.com/org/apache/commons/collections4/IterableMap.html)<K,V> Defines a map that can be iterated directly without needing to create an entry set. |
| * + interface | * + [IterableSortedMap](http://docs.google.com/org/apache/commons/collections4/IterableSortedMap.html)<K,V> [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). |
| * + interface | * + [MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)<K,V> Deprecated.  since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead |
| * + interface | * + [OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html)<K,V> Defines a map that allows bidirectional lookup between key and values and retains and provides access to an ordering. |
| * + interface | * + [OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html)<K,V> Defines a map that maintains order and allows both forward and backward iteration through that order. |
| * + interface | * + [SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html)<K,V> Defines a map that allows bidirectional lookup between key and values and retains both keys and values in sorted order. |
| * + interface | * + [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html)<K,V> Defines the interface for a prefix tree, an ordered tree data structure. |

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

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| * + Modifier and Type | * + Method and Description |
| * + static <K,V> [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true)<K,V> | * + SplitMapUtils.[writableMap](http://docs.google.com/org/apache/commons/collections4/SplitMapUtils.html#writableMap-org.apache.commons.collections4.Put-)([Put](http://docs.google.com/org/apache/commons/collections4/Put.html)<K,V> put) Get the specified [Put](http://docs.google.com/org/apache/commons/collections4/Put.html) as an instanceof [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true). |

### Uses of [**Put**](http://docs.google.com/org/apache/commons/collections4/Put.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 [Put](http://docs.google.com/org/apache/commons/collections4/Put.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 | * + [AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)<K,V> Abstract [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html) implemented using two maps. |
| * + 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. |
| * + class | * + [DualHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html)<K,V> Implementation of [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html) that uses two [HashMap](https://docs.oracle.com/javase/7/docs/api/java/util/HashMap.html?is-external=true) instances. |
| * + class | * + [DualLinkedHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html)<K,V> Implementation of BidiMap that uses two LinkedHashMap instances. |
| * + class | * + [DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)<K,V> Implementation of [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html) that uses two [TreeMap](https://docs.oracle.com/javase/7/docs/api/java/util/TreeMap.html?is-external=true) instances. |
| * + protected static class | * + [DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)<K,V> Internal sorted map view. |
| * + class | * + [TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)<K extends [Comparable](https://docs.oracle.com/javase/7/docs/api/java/lang/Comparable.html?is-external=true)<K>,V extends [Comparable](https://docs.oracle.com/javase/7/docs/api/java/lang/Comparable.html?is-external=true)<V>> Red-Black tree-based implementation of BidiMap where all objects added implement the Comparable interface. |
| * + 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 [**Put**](http://docs.google.com/org/apache/commons/collections4/Put.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 [Put](http://docs.google.com/org/apache/commons/collections4/Put.html)

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| * + Modifier and Type | * + Class and Description |
| * + class | * + [AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)<K,V> An abstract implementation of a hash-based map which provides numerous points for subclasses to override. |
| * + class | * + [AbstractIterableMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractIterableMap.html)<K,V> Provide a basic [IterableMap](http://docs.google.com/org/apache/commons/collections4/IterableMap.html) implementation. |
| * + class | * + [AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)<K,V> An abstract implementation of a hash-based map that links entries to create an ordered map and which provides numerous points for subclasses to override. |
| * + class | * + [AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)<K,V> Provides a base decorator that enables additional functionality to be added to a Map via decoration. |
| * + 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 | * + [AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)<K,V> An abstract implementation of a hash-based map that allows the entries to be removed by the garbage collector. |
| * + 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 | * + [CaseInsensitiveMap](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)<K,V> A case-insensitive Map. |
| * + class | * + [CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)<K,V> Decorates a map of other maps to provide a single unified view. |
| * + 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 | * + [Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)<K,V> A Map implementation that stores data in simple fields until the size is greater than 3. |
| * + class | * + [HashedMap](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html)<K,V> A Map implementation that is a general purpose alternative to HashMap. |
| * + 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 | * + [LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)<K,V> A Map implementation that maintains the order of the entries. |
| * + 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 | * + [LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)<K,V> A Map implementation with a fixed maximum size which removes the least recently used entry if an entry is added when full. |
| * + 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 | * + [ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)<K,V> A Map implementation that allows mappings to be removed by the garbage collector and matches keys and values based on == not equals(). |
| * + class | * + [ReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html)<K,V> A Map implementation that allows mappings to be removed by the garbage collector. |
| * + 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. |
| * + class | * + [StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)<K,V> A StaticBucketMap is an efficient, thread-safe implementation of java.util.Map that performs well in in a highly thread-contentious environment. |
| * + 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. |

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

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| * + Modifier and Type | * + Class and Description |
| * + class | * + [TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)<J,K,U,V> Decorates another [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) to transform objects that are added. |

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

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| * + Modifier and Type | * + Class and Description |
| * + class | * + [AbstractBitwiseTrie](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html)<K,V> This class provides some basic [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) functionality and utility methods for actual bitwise [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) implementations. |
| * + class | * + [PatriciaTrie](http://docs.google.com/org/apache/commons/collections4/trie/PatriciaTrie.html)<E> Implementation of a PATRICIA Trie (Practical Algorithm to Retrieve Information Coded in Alphanumeric). |
| * + class | * + [UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)<K,V> An unmodifiable [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html). |

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