JavaScript is disabled on your browser.

[Skip navigation links](#1fob9te)

* [Overview](http://docs.google.com/overview-summary.html)
* [Package](http://docs.google.com/package-summary.html)
* Class
* [Use](http://docs.google.com/class-use/AbstractReferenceMap.ReferenceEntry.html)
* [Tree](http://docs.google.com/package-tree.html)
* [Deprecated](http://docs.google.com/deprecated-list.html)
* [Index](http://docs.google.com/index-all.html)
* [Help](http://docs.google.com/help-doc.html)
* [Prev Class](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)
* [Next Class](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html)
* [Frames](http://docs.google.com/index.html?org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)
* [No Frames](http://docs.google.com/AbstractReferenceMap.ReferenceEntry.html)
* [All Classes](http://docs.google.com/allclasses-noframe.html)
* Summary:
* Nested |
* [Field](#2et92p0) |
* [Constr](#tyjcwt) |
* [Method](#3dy6vkm)
* Detail:
* Field |
* [Constr](#17dp8vu) |
* [Method](#lnxbz9)

org.apache.commons.collections4.map

## Class AbstractReferenceMap.ReferenceEntry<K,V>

* [java.lang.Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true)
  + [org.apache.commons.collections4.map.AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<K,V>
    - org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceEntry<K,V>
* All Implemented Interfaces: [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true)<K,V>, [KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)<K,V> Enclosing class: [AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)>  
    
  protected static class AbstractReferenceMap.ReferenceEntry<K,V>  
  extends [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<K,V>  
  A MapEntry implementation for the map.  
  If getKey() or getValue() returns null, it means the mapping is stale and should be removed.Since: 3.1

### Field Summary

### Fields inherited from class org.apache.commons.collections4.map.[**AbstractHashedMap.HashEntry**](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)[hashCode](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#hashCode), [key](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#key), [next](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#next), [value](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#value)

### Constructor SummaryConstructors

|  |
| --- |
| * + Constructor and Description |
| * + [ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#ReferenceEntry-org.apache.commons.collections4.map.AbstractReferenceMap-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-K-V-)([AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> parent, [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> next, int hashCode, [K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) key, [V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) value) Creates a new entry object for the ReferenceMap. |

### Method SummaryAll Methods Instance Methods Concrete Methods

|  |  |
| --- | --- |
| * + Modifier and Type | * + Method and Description |
| * + boolean | * + [equals](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#equals-java.lang.Object-)([Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true) obj) Compares this map entry to another. |
| * + [K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) | * + [getKey](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#getKey--)() Gets the key from the entry. |
| * + [V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) | * + [getValue](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#getValue--)() Gets the value from the entry. |
| * + int | * + [hashCode](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#hashCode--)() Gets the hashcode of the entry using temporary hard references. |
| * + protected [AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> | * + [next](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#next--)() Gets the next entry in the bucket. |
| * + protected void | * + [nullValue](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#nullValue--)() This method can be overriden to provide custom logic to purge value |
| * + protected void | * + [onPurge](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#onPurge--)() This is the callback for custom "after purge" logic |
| * + protected boolean | * + [purge](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#purge-java.lang.ref.Reference-)([Reference](https://docs.oracle.com/javase/7/docs/api/java/lang/ref/Reference.html?is-external=true)<?> ref) Purges the specified reference |
| * + [V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) | * + [setValue](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#setValue-V-)([V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) obj) Sets the value of the entry. |
| * + protected <T> [Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true) | * + [toReference](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#toReference-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-T-int-)([AbstractReferenceMap.ReferenceStrength](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html) type, T referent, int hash) Constructs a reference of the given type to the given referent. |

### Methods inherited from class org.apache.commons.collections4.map.[**AbstractHashedMap.HashEntry**](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)[toString](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#toString--)

### Methods inherited from class java.lang.[**Object**](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true)[clone](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true#clone--), [finalize](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true#finalize--), [getClass](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true#getClass--), [notify](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true#notify--), [notifyAll](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true#notifyAll--), [wait](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true#wait--), [wait](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true#wait-long-), [wait](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true#wait-long-int-)

### Methods inherited from interface java.util.[**Map.Entry**](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true)[comparingByKey](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#comparingByKey--), [comparingByKey](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#comparingByKey-java.util.Comparator-), [comparingByValue](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#comparingByValue--), [comparingByValue](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#comparingByValue-java.util.Comparator-)

### Constructor Detail

#### ReferenceEntry public ReferenceEntry([AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> parent, [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> next, int hashCode, [K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) key, [V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) value) Creates a new entry object for the ReferenceMap.Parameters: parent - the parent map next - the next entry in the hash bucket hashCode - the hash code of the key key - the key value - the value

### Method Detail

#### getKey public [K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) getKey() Gets the key from the entry. This method dereferences weak and soft keys and thus may return null.Specified by: [getKey](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#getKey--) in interface [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Specified by: [getKey](http://docs.google.com/org/apache/commons/collections4/KeyValue.html#getKey--) in interface [KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Overrides: [getKey](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#getKey--) in class [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Returns: the key, which may be null if it was garbage collected

#### getValue public [V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) getValue() Gets the value from the entry. This method dereferences weak and soft value and thus may return null.Specified by: [getValue](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#getValue--) in interface [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Specified by: [getValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html#getValue--) in interface [KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Overrides: [getValue](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#getValue--) in class [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Returns: the value, which may be null if it was garbage collected

#### setValue public [V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) setValue([V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html) obj) Sets the value of the entry.Specified by: [setValue](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#setValue-V-) in interface [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Overrides: [setValue](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#setValue-V-) in class [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Parameters: obj - the object to store Returns: the previous value

#### equals public boolean equals([Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true) obj) Compares this map entry to another. This implementation uses isEqualKey and isEqualValue on the main map for comparison.Specified by: [equals](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#equals-java.lang.Object-) in interface [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Overrides: [equals](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#equals-java.lang.Object-) in class [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Parameters: obj - the other map entry to compare to Returns: true if equal, false if not

#### hashCode public int hashCode() Gets the hashcode of the entry using temporary hard references. This implementation uses hashEntry on the main map.Specified by: [hashCode](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true#hashCode--) in interface [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Overrides: [hashCode](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#hashCode--) in class [AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> Returns: the hashcode of the entry

#### toReference protected <T> [Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true) toReference([AbstractReferenceMap.ReferenceStrength](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html) type, T referent, int hash) Constructs a reference of the given type to the given referent. The reference is registered with the queue for later purging.Type Parameters: T - the type of the referenced object Parameters: type - HARD, SOFT or WEAK referent - the object to refer to hash - the hash code of the *key* of the mapping; this number might be different from referent.hashCode() if the referent represents a value and not a key Returns: the reference to the object

#### onPurge protected void onPurge() This is the callback for custom "after purge" logic

#### purge protected boolean purge([Reference](https://docs.oracle.com/javase/7/docs/api/java/lang/ref/Reference.html?is-external=true)<?> ref) Purges the specified referenceParameters: ref - the reference to purge Returns: true or false

#### next protected [AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> next() Gets the next entry in the bucket.Returns: the next entry in the bucket

#### nullValue protected void nullValue() This method can be overriden to provide custom logic to purge value

[Skip navigation links](#1pxezwc)

* [Overview](http://docs.google.com/overview-summary.html)
* [Package](http://docs.google.com/package-summary.html)
* Class
* [Use](http://docs.google.com/class-use/AbstractReferenceMap.ReferenceEntry.html)
* [Tree](http://docs.google.com/package-tree.html)
* [Deprecated](http://docs.google.com/deprecated-list.html)
* [Index](http://docs.google.com/index-all.html)
* [Help](http://docs.google.com/help-doc.html)
* [Prev Class](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)
* [Next Class](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html)
* [Frames](http://docs.google.com/index.html?org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)
* [No Frames](http://docs.google.com/AbstractReferenceMap.ReferenceEntry.html)
* [All Classes](http://docs.google.com/allclasses-noframe.html)
* Summary:
* Nested |
* [Field](#2et92p0) |
* [Constr](#tyjcwt) |
* [Method](#3dy6vkm)
* Detail:
* Field |
* [Constr](#17dp8vu) |
* [Method](#lnxbz9)

Copyright © 2001–2019 [The Apache Software Foundation](https://www.apache.org/). All rights reserved.