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/AbstractHashedMap.KeySet.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/AbstractHashedMap.HashMapIterator.html)
* [Next Class](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySetIterator.html)
* [Frames](http://docs.google.com/index.html?org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)
* [No Frames](http://docs.google.com/AbstractHashedMap.KeySet.html)
* [All Classes](http://docs.google.com/allclasses-noframe.html)
* Summary:
* Nested |
* Field |
* [Constr](#3znysh7) |
* [Method](#2et92p0)
* Detail:
* Field |
* [Constr](#3rdcrjn) |
* [Method](#lnxbz9)

org.apache.commons.collections4.map

## Class AbstractHashedMap.KeySet<K>

* [java.lang.Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true)
  + [java.util.AbstractCollection](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true)<E>
    - [java.util.AbstractSet](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractSet.html?is-external=true)<K>
      * org.apache.commons.collections4.map.AbstractHashedMap.KeySet<K>
* All Implemented Interfaces: [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true)<K>, [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)<K>, [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)<K> Enclosing class: [AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)>  
    
  protected static class AbstractHashedMap.KeySet<K>  
  extends [AbstractSet](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractSet.html?is-external=true)<K>  
  KeySet implementation.

### Constructor SummaryConstructors

|  |  |
| --- | --- |
| * + Modifier | * + Constructor and Description |
| * + protected | * + [KeySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#KeySet-org.apache.commons.collections4.map.AbstractHashedMap-)([AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html),?> parent) |

### Method SummaryAll Methods Instance Methods Concrete Methods

|  |  |
| --- | --- |
| * + Modifier and Type | * + Method and Description |
| * + void | * + [clear](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#clear--)() |
| * + boolean | * + [contains](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#contains-java.lang.Object-)([Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true) key) |
| * + [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> | * + [iterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#iterator--)() |
| * + boolean | * + [remove](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#remove-java.lang.Object-)([Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true) key) |
| * + int | * + [size](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#size--)() |

### Methods inherited from class java.util.[**AbstractSet**](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractSet.html?is-external=true)[equals](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractSet.html?is-external=true#equals-java.lang.Object-), [hashCode](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractSet.html?is-external=true#hashCode--), [removeAll](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractSet.html?is-external=true#removeAll-java.util.Collection-)

### Methods inherited from class java.util.[**AbstractCollection**](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true)[add](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#add-E-), [addAll](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#addAll-java.util.Collection-), [containsAll](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#containsAll-java.util.Collection-), [isEmpty](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#isEmpty--), [retainAll](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#retainAll-java.util.Collection-), [toArray](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#toArray--), [toArray](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#toArray-T:A-), [toString](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#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.[**Set**](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)[add](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#add-E-), [addAll](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#addAll-java.util.Collection-), [containsAll](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#containsAll-java.util.Collection-), [isEmpty](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#isEmpty--), [retainAll](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#retainAll-java.util.Collection-), [spliterator](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#spliterator--), [toArray](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#toArray--), [toArray](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#toArray-T:A-)

### Methods inherited from interface java.util.[**Collection**](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)[parallelStream](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true#parallelStream--), [removeIf](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true#removeIf-java.util.function.Predicate-), [stream](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true#stream--)

### Methods inherited from interface java.lang.[**Iterable**](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true)[forEach](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true#forEach-java.util.function.Consumer-)

### Constructor Detail

#### KeySet protected KeySet([AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html),?> parent)

### Method Detail

#### size public int size()Specified by: [size](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true#size--) in interface [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Specified by: [size](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#size--) in interface [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Specified by: [size](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#size--) in class [AbstractCollection](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)>

#### clear public void clear()Specified by: [clear](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true#clear--) in interface [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Specified by: [clear](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#clear--) in interface [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Overrides: [clear](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#clear--) in class [AbstractCollection](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)>

#### contains public boolean contains([Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true) key)Specified by: [contains](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true#contains-java.lang.Object-) in interface [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Specified by: [contains](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#contains-java.lang.Object-) in interface [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Overrides: [contains](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#contains-java.lang.Object-) in class [AbstractCollection](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)>

#### remove public boolean remove([Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html?is-external=true) key)Specified by: [remove](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true#remove-java.lang.Object-) in interface [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Specified by: [remove](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#remove-java.lang.Object-) in interface [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Overrides: [remove](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#remove-java.lang.Object-) in class [AbstractCollection](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)>

#### iterator public [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> iterator()Specified by: [iterator](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true#iterator--) in interface [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Specified by: [iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true#iterator--) in interface [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Specified by: [iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#iterator--) in interface [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> Specified by: [iterator](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true#iterator--) in class [AbstractCollection](https://docs.oracle.com/javase/7/docs/api/java/util/AbstractCollection.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)>

[Skip navigation links](#4i7ojhp)

* [Overview](http://docs.google.com/overview-summary.html)
* [Package](http://docs.google.com/package-summary.html)
* Class
* [Use](http://docs.google.com/class-use/AbstractHashedMap.KeySet.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/AbstractHashedMap.HashMapIterator.html)
* [Next Class](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySetIterator.html)
* [Frames](http://docs.google.com/index.html?org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)
* [No Frames](http://docs.google.com/AbstractHashedMap.KeySet.html)
* [All Classes](http://docs.google.com/allclasses-noframe.html)
* Summary:
* Nested |
* Field |
* [Constr](#3znysh7) |
* [Method](#2et92p0)
* Detail:
* Field |
* [Constr](#3rdcrjn) |
* [Method](#lnxbz9)

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