| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/CompositeDataSupport.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/javax/management/openmbean/CompositeDataInvocationHandler.html)   [**NEXT CLASS**](http://docs.google.com/javax/management/openmbean/CompositeDataView.html) | [**FRAMES**](http://docs.google.com/index.html?javax/management/openmbean/CompositeDataSupport.html)    [**NO FRAMES**](http://docs.google.com/CompositeDataSupport.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#2s8eyo1) |

## **javax.management.openmbean**

Class CompositeDataSupport

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.management.openmbean.CompositeDataSupport**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html)

public class **CompositeDataSupport**extends [Object](http://docs.google.com/java/lang/Object.html)implements [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html), [Serializable](http://docs.google.com/java/io/Serializable.html)

The CompositeDataSupport class is the *open data* class which implements the CompositeData interface.

**Since:** 1.5 **See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#javax.management.openmbean.CompositeDataSupport)

| **Constructor Summary** | |
| --- | --- |
| [**CompositeDataSupport**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#CompositeDataSupport(javax.management.openmbean.CompositeType,%20java.util.Map))([CompositeType](http://docs.google.com/javax/management/openmbean/CompositeType.html) compositeType, [Map](http://docs.google.com/java/util/Map.html)<[String](http://docs.google.com/java/lang/String.html),?> items)             Constructs a CompositeDataSupport instance with the specified compositeType, whose item names and corresponding values are given by the mappings in the map items. |
| [**CompositeDataSupport**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#CompositeDataSupport(javax.management.openmbean.CompositeType,%20java.lang.String%5B%5D,%20java.lang.Object%5B%5D))([CompositeType](http://docs.google.com/javax/management/openmbean/CompositeType.html) compositeType, [String](http://docs.google.com/java/lang/String.html)[] itemNames, [Object](http://docs.google.com/java/lang/Object.html)[] itemValues)             Constructs a CompositeDataSupport instance with the specified compositeType, whose item values are specified by itemValues[], in the same order as in itemNames[]. |

| **Method Summary** | |
| --- | --- |
| boolean | [**containsKey**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#containsKey(java.lang.String))([String](http://docs.google.com/java/lang/String.html) key)            Returns true if and only if this CompositeData instance contains an item whose name is key. |
| boolean | [**containsValue**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#containsValue(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) value)            Returns true if and only if this CompositeData instance contains an item whose value is value. |
| boolean | [**equals**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#equals(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) obj)            Compares the specified obj parameter with this CompositeDataSupport instance for equality. |
| [Object](http://docs.google.com/java/lang/Object.html) | [**get**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#get(java.lang.String))([String](http://docs.google.com/java/lang/String.html) key)            Returns the value of the item whose name is key. |
| [Object](http://docs.google.com/java/lang/Object.html)[] | [**getAll**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#getAll(java.lang.String%5B%5D))([String](http://docs.google.com/java/lang/String.html)[] keys)            Returns an array of the values of the items whose names are specified by keys, in the same order as keys. |
| [CompositeType](http://docs.google.com/javax/management/openmbean/CompositeType.html) | [**getCompositeType**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#getCompositeType())()            Returns the *composite type*  of this *composite data* instance. |
| int | [**hashCode**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#hashCode())()            Returns the hash code value for this CompositeDataSupport instance. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#toString())()            Returns a string representation of this CompositeDataSupport instance. |
| [Collection](http://docs.google.com/java/util/Collection.html)<?> | [**values**](http://docs.google.com/javax/management/openmbean/CompositeDataSupport.html#values())()            Returns an unmodifiable Collection view of the item values contained in this CompositeData instance. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### CompositeDataSupport

public **CompositeDataSupport**([CompositeType](http://docs.google.com/javax/management/openmbean/CompositeType.html) compositeType,  
 [String](http://docs.google.com/java/lang/String.html)[] itemNames,  
 [Object](http://docs.google.com/java/lang/Object.html)[] itemValues)  
 throws [OpenDataException](http://docs.google.com/javax/management/openmbean/OpenDataException.html)

Constructs a CompositeDataSupport instance with the specified compositeType, whose item values are specified by itemValues[], in the same order as in itemNames[]. As a CompositeType does not specify any order on its items, the itemNames[] parameter is used to specify the order in which the values are given in itemValues[]. The items contained in this CompositeDataSupport instance are internally stored in a TreeMap, thus sorted in ascending lexicographic order of their names, for faster retrieval of individual item values.

The constructor checks that all the constraints listed below for each parameter are satisfied, and throws the appropriate exception if they are not.

**Parameters:**compositeType - the *composite type*  of this *composite data* instance; must not be null.

itemNames - itemNames must list, in any order, all the item names defined in compositeType; the order in which the names are listed, is used to match values in itemValues[]; must not be null or empty.

itemValues - the values of the items, listed in the same order as their respective names in itemNames; each item value can be null, but if it is non-null it must be a valid value for the open type defined in compositeType for the corresponding item; must be of the same size as itemNames; must not be null or empty.

**Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - compositeType is null, or itemNames[] or itemValues[] is null or empty, or one of the elements in itemNames[] is a null or empty string, or itemNames[] and itemValues[] are not of the same size.

[OpenDataException](http://docs.google.com/javax/management/openmbean/OpenDataException.html) - itemNames[] or itemValues[]'s size differs from the number of items defined in compositeType, or one of the elements in itemNames[] does not exist as an item name defined in compositeType, or one of the elements in itemValues[] is not a valid value for the corresponding item as defined in compositeType.

### CompositeDataSupport

public **CompositeDataSupport**([CompositeType](http://docs.google.com/javax/management/openmbean/CompositeType.html) compositeType,  
 [Map](http://docs.google.com/java/util/Map.html)<[String](http://docs.google.com/java/lang/String.html),?> items)  
 throws [OpenDataException](http://docs.google.com/javax/management/openmbean/OpenDataException.html)

Constructs a CompositeDataSupport instance with the specified compositeType, whose item names and corresponding values are given by the mappings in the map items. This constructor converts the keys to a string array and the values to an object array and calls CompositeDataSupport(javax.management.openmbean.CompositeType, java.lang.String[], java.lang.Object[]).

**Parameters:**compositeType - the *composite type*  of this *composite data* instance; must not be null.

items - the mappings of all the item names to their values; items must contain all the item names defined in compositeType; must not be null or empty.

**Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - compositeType is null, or items is null or empty, or one of the keys in items is a null or empty string, or one of the values in items is null.

[OpenDataException](http://docs.google.com/javax/management/openmbean/OpenDataException.html) - items' size differs from the number of items defined in compositeType, or one of the keys in items does not exist as an item name defined in compositeType, or one of the values in items is not a valid value for the corresponding item as defined in compositeType.

[ArrayStoreException](http://docs.google.com/java/lang/ArrayStoreException.html) - one or more keys in items is not of the class java.lang.String.

| **Method Detail** |
| --- |

### getCompositeType

public [CompositeType](http://docs.google.com/javax/management/openmbean/CompositeType.html) **getCompositeType**()

Returns the *composite type*  of this *composite data* instance.

**Specified by:**[getCompositeType](http://docs.google.com/javax/management/openmbean/CompositeData.html#getCompositeType()) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) **Returns:**the type of this CompositeData.

### get

public [Object](http://docs.google.com/java/lang/Object.html) **get**([String](http://docs.google.com/java/lang/String.html) key)

Returns the value of the item whose name is key.

**Specified by:**[get](http://docs.google.com/javax/management/openmbean/CompositeData.html#get(java.lang.String)) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) **Parameters:**key - the name of the item. **Returns:**the value associated with this key. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if key is a null or empty String. [InvalidKeyException](http://docs.google.com/javax/management/openmbean/InvalidKeyException.html) - if key is not an existing item name for this CompositeData instance.

### getAll

public [Object](http://docs.google.com/java/lang/Object.html)[] **getAll**([String](http://docs.google.com/java/lang/String.html)[] keys)

Returns an array of the values of the items whose names are specified by keys, in the same order as keys.

**Specified by:**[getAll](http://docs.google.com/javax/management/openmbean/CompositeData.html#getAll(java.lang.String%5B%5D)) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) **Parameters:**keys - the names of the items. **Returns:**the values corresponding to the keys. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if an element in keys is a null or empty String. [InvalidKeyException](http://docs.google.com/javax/management/openmbean/InvalidKeyException.html) - if an element in keys is not an existing item name for this CompositeData instance.

### containsKey

public boolean **containsKey**([String](http://docs.google.com/java/lang/String.html) key)

Returns true if and only if this CompositeData instance contains an item whose name is key. If key is a null or empty String, this method simply returns false.

**Specified by:**[containsKey](http://docs.google.com/javax/management/openmbean/CompositeData.html#containsKey(java.lang.String)) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) **Parameters:**key - the key to be tested. **Returns:**true if this CompositeData contains the key.

### containsValue

public boolean **containsValue**([Object](http://docs.google.com/java/lang/Object.html) value)

Returns true if and only if this CompositeData instance contains an item whose value is value.

**Specified by:**[containsValue](http://docs.google.com/javax/management/openmbean/CompositeData.html#containsValue(java.lang.Object)) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) **Parameters:**value - the value to be tested. **Returns:**true if this CompositeData contains the value.

### values

public [Collection](http://docs.google.com/java/util/Collection.html)<?> **values**()

Returns an unmodifiable Collection view of the item values contained in this CompositeData instance. The returned collection's iterator will return the values in the ascending lexicographic order of the corresponding item names.

**Specified by:**[values](http://docs.google.com/javax/management/openmbean/CompositeData.html#values()) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html) **Returns:**the values.

### equals

public boolean **equals**([Object](http://docs.google.com/java/lang/Object.html) obj)

Compares the specified obj parameter with this CompositeDataSupport instance for equality.

Returns true if and only if all of the following statements are true:

* obj is non null,
* obj also implements the CompositeData interface,
* their composite types are equal
* their contents, i.e. (name, value) pairs are equal. If a value contained in the content is an array, the value comparison is done as if by calling the [deepEquals](http://docs.google.com/java/util/Arrays.html#deepEquals(java.lang.Object%5B%5D,%20java.lang.Object%5B%5D)) method for arrays of object reference types or the appropriate overloading of Arrays.equals(e1,e2) for arrays of primitive types

This ensures that this equals method works properly for obj parameters which are different implementations of the CompositeData interface, with the restrictions mentioned in the [equals](http://docs.google.com/java/util/Collection.html#equals(java.lang.Object)) method of the java.util.Collection interface.

**Specified by:**[equals](http://docs.google.com/javax/management/openmbean/CompositeData.html#equals(java.lang.Object)) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html)**Overrides:**[equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)) in class [Object](http://docs.google.com/java/lang/Object.html) **Parameters:**obj - the object to be compared for equality with this CompositeDataSupport instance. **Returns:**true if the specified object is equal to this CompositeDataSupport instance.**See Also:**[Object.hashCode()](http://docs.google.com/java/lang/Object.html#hashCode()), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

### hashCode

public int **hashCode**()

Returns the hash code value for this CompositeDataSupport instance.

The hash code of a CompositeDataSupport instance is the sum of the hash codes of all elements of information used in equals comparisons (ie: its *composite type* and all the item values).

This ensures that t1.equals(t2) implies that t1.hashCode()==t2.hashCode() for any two CompositeDataSupport instances t1 and t2, as required by the general contract of the method [Object.hashCode()](http://docs.google.com/java/lang/Object.html#hashCode()).

Each item value's hash code is added to the returned hash code. If an item value is an array, its hash code is obtained as if by calling the [deepHashCode](http://docs.google.com/java/util/Arrays.html#deepHashCode(java.lang.Object%5B%5D)) method for arrays of object reference types or the appropriate overloading of Arrays.hashCode(e) for arrays of primitive types.

**Specified by:**[hashCode](http://docs.google.com/javax/management/openmbean/CompositeData.html#hashCode()) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html)**Overrides:**[hashCode](http://docs.google.com/java/lang/Object.html#hashCode()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**the hash code value for this CompositeDataSupport instance**See Also:**[Object.equals(java.lang.Object)](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

### toString

public [String](http://docs.google.com/java/lang/String.html) **toString**()

Returns a string representation of this CompositeDataSupport instance.

The string representation consists of the name of this class (ie javax.management.openmbean.CompositeDataSupport), the string representation of the composite type of this instance, and the string representation of the contents (ie list the itemName=itemValue mappings).

**Specified by:**[toString](http://docs.google.com/javax/management/openmbean/CompositeData.html#toString()) in interface [CompositeData](http://docs.google.com/javax/management/openmbean/CompositeData.html)**Overrides:**[toString](http://docs.google.com/java/lang/Object.html#toString()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a string representation of this CompositeDataSupport instance

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/CompositeDataSupport.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#2s8eyo1) |

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For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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