| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/JobStateReasons.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/print/attribute/standard/JobStateReason.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/attribute/standard/Media.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/attribute/standard/JobStateReasons.html)    [**NO FRAMES**](http://docs.google.com/JobStateReasons.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#17dp8vu) | [METHOD](#1ksv4uv) |

## **javax.print.attribute.standard**

Class JobStateReasons

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.util.AbstractCollection](http://docs.google.com/java/util/AbstractCollection.html)<E>  
 [java.util.AbstractSet](http://docs.google.com/java/util/AbstractSet.html)<E>  
 [java.util.HashSet](http://docs.google.com/java/util/HashSet.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)>  
 **javax.print.attribute.standard.JobStateReasons**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [Iterable](http://docs.google.com/java/lang/Iterable.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)>, [Collection](http://docs.google.com/java/util/Collection.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)>, [Set](http://docs.google.com/java/util/Set.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)>, [Attribute](http://docs.google.com/javax/print/attribute/Attribute.html), [PrintJobAttribute](http://docs.google.com/javax/print/attribute/PrintJobAttribute.html)

public final class **JobStateReasons**extends [HashSet](http://docs.google.com/java/util/HashSet.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)>implements [PrintJobAttribute](http://docs.google.com/javax/print/attribute/PrintJobAttribute.html)

Class JobStateReasons is a printing attribute class, a set of enumeration values, that provides additional information about the job's current state, i.e., information that augments the value of the job's [JobState](http://docs.google.com/javax/print/attribute/standard/JobState.html) attribute.

Instances of [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) do not appear in a Print Job's attribute set directly. Rather, a JobStateReasons attribute appears in the Print Job's attribute set. The JobStateReasons attribute contains zero, one, or more than one [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) objects which pertain to the Print Job's status. The printer adds a [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) object to the Print Job's JobStateReasons attribute when the corresponding condition becomes true of the Print Job, and the printer removes the [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) object again when the corresponding condition becomes false, regardless of whether the Print Job's overall [JobState](http://docs.google.com/javax/print/attribute/standard/JobState.html) also changed.

Class JobStateReasons inherits its implementation from class [java.util.HashSet](http://docs.google.com/java/util/HashSet.html). Unlike most printing attributes which are immutable once constructed, class JobStateReasons is designed to be mutable; you can add [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) objects to an existing JobStateReasons object and remove them again. However, like class [java.util.HashSet](http://docs.google.com/java/util/HashSet.html), class JobStateReasons is not multiple thread safe. If a JobStateReasons object will be used by multiple threads, be sure to synchronize its operations (e.g., using a synchronized set view obtained from class [java.util.Collections](http://docs.google.com/java/util/Collections.html)).

**IPP Compatibility:** The string value returned by each individual [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) object's toString() method gives the IPP keyword value. The category name returned by getName() gives the IPP attribute name.

**See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#javax.print.attribute.standard.JobStateReasons)

| **Constructor Summary** | |
| --- | --- |
| [**JobStateReasons**](http://docs.google.com/javax/print/attribute/standard/JobStateReasons.html#JobStateReasons())()            Construct a new, empty job state reasons attribute; the underlying hash set has the default initial capacity and load factor. |
| [**JobStateReasons**](http://docs.google.com/javax/print/attribute/standard/JobStateReasons.html#JobStateReasons(java.util.Collection))([Collection](http://docs.google.com/java/util/Collection.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)> collection)            Construct a new job state reasons attribute that contains the same [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) objects as the given collection. |
| [**JobStateReasons**](http://docs.google.com/javax/print/attribute/standard/JobStateReasons.html#JobStateReasons(int))(int initialCapacity)            Construct a new, empty job state reasons attribute; the underlying hash set has the given initial capacity and the default load factor. |
| [**JobStateReasons**](http://docs.google.com/javax/print/attribute/standard/JobStateReasons.html#JobStateReasons(int,%20float))(int initialCapacity, float loadFactor)            Construct a new, empty job state reasons attribute; the underlying hash set has the given initial capacity and load factor. |

| **Method Summary** | |
| --- | --- |
| boolean | [**add**](http://docs.google.com/javax/print/attribute/standard/JobStateReasons.html#add(javax.print.attribute.standard.JobStateReason))([JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) o)            Adds the specified element to this job state reasons attribute if it is not already present. |
| [Class](http://docs.google.com/java/lang/Class.html)<? extends [Attribute](http://docs.google.com/javax/print/attribute/Attribute.html)> | [**getCategory**](http://docs.google.com/javax/print/attribute/standard/JobStateReasons.html#getCategory())()            Get the printing attribute class which is to be used as the "category" for this printing attribute value. |
| [String](http://docs.google.com/java/lang/String.html) | [**getName**](http://docs.google.com/javax/print/attribute/standard/JobStateReasons.html#getName())()            Get the name of the category of which this attribute value is an instance. |

| **Methods inherited from class java.util.**[**HashSet**](http://docs.google.com/java/util/HashSet.html) |
| --- |
| [clear](http://docs.google.com/java/util/HashSet.html#clear()), [clone](http://docs.google.com/java/util/HashSet.html#clone()), [contains](http://docs.google.com/java/util/HashSet.html#contains(java.lang.Object)), [isEmpty](http://docs.google.com/java/util/HashSet.html#isEmpty()), [iterator](http://docs.google.com/java/util/HashSet.html#iterator()), [remove](http://docs.google.com/java/util/HashSet.html#remove(java.lang.Object)), [size](http://docs.google.com/java/util/HashSet.html#size()) |

| **Methods inherited from class java.util.**[**AbstractSet**](http://docs.google.com/java/util/AbstractSet.html) |
| --- |
| [equals](http://docs.google.com/java/util/AbstractSet.html#equals(java.lang.Object)), [hashCode](http://docs.google.com/java/util/AbstractSet.html#hashCode()), [removeAll](http://docs.google.com/java/util/AbstractSet.html#removeAll(java.util.Collection)) |

| **Methods inherited from class java.util.**[**AbstractCollection**](http://docs.google.com/java/util/AbstractCollection.html) |
| --- |
| [addAll](http://docs.google.com/java/util/AbstractCollection.html#addAll(java.util.Collection)), [containsAll](http://docs.google.com/java/util/AbstractCollection.html#containsAll(java.util.Collection)), [retainAll](http://docs.google.com/java/util/AbstractCollection.html#retainAll(java.util.Collection)), [toArray](http://docs.google.com/java/util/AbstractCollection.html#toArray()), [toArray](http://docs.google.com/java/util/AbstractCollection.html#toArray(T%5B%5D)), [toString](http://docs.google.com/java/util/AbstractCollection.html#toString()) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [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)) |

| **Methods inherited from interface java.util.**[**Set**](http://docs.google.com/java/util/Set.html) |
| --- |
| [addAll](http://docs.google.com/java/util/Set.html#addAll(java.util.Collection)), [containsAll](http://docs.google.com/java/util/Set.html#containsAll(java.util.Collection)), [equals](http://docs.google.com/java/util/Set.html#equals(java.lang.Object)), [hashCode](http://docs.google.com/java/util/Set.html#hashCode()), [removeAll](http://docs.google.com/java/util/Set.html#removeAll(java.util.Collection)), [retainAll](http://docs.google.com/java/util/Set.html#retainAll(java.util.Collection)), [toArray](http://docs.google.com/java/util/Set.html#toArray()), [toArray](http://docs.google.com/java/util/Set.html#toArray(T%5B%5D)) |

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

### JobStateReasons

public **JobStateReasons**()

Construct a new, empty job state reasons attribute; the underlying hash set has the default initial capacity and load factor.

### JobStateReasons

public **JobStateReasons**(int initialCapacity)

Construct a new, empty job state reasons attribute; the underlying hash set has the given initial capacity and the default load factor.

**Parameters:**initialCapacity - Initial capacity. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if the initial capacity is less than zero.

### JobStateReasons

public **JobStateReasons**(int initialCapacity,  
 float loadFactor)

Construct a new, empty job state reasons attribute; the underlying hash set has the given initial capacity and load factor.

**Parameters:**initialCapacity - Initial capacity.loadFactor - Load factor. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if the initial capacity is less than zero.

### JobStateReasons

public **JobStateReasons**([Collection](http://docs.google.com/java/util/Collection.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)> collection)

Construct a new job state reasons attribute that contains the same [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) objects as the given collection. The underlying hash set's initial capacity and load factor are as specified in the superclass constructor [HashSet(Collection)](http://docs.google.com/java/util/HashSet.html#HashSet(java.util.Collection)).

**Parameters:**collection - Collection to copy. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - (unchecked exception) Thrown if collection is null or if any element in collection is null. [ClassCastException](http://docs.google.com/java/lang/ClassCastException.html) - (unchecked exception) Thrown if any element in collection is not an instance of class [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html).

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

### add

public boolean **add**([JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html) o)

Adds the specified element to this job state reasons attribute if it is not already present. The element to be added must be an instance of class [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html). If this job state reasons attribute already contains the specified element, the call leaves this job state reasons attribute unchanged and returns false.

**Specified by:**[add](http://docs.google.com/java/util/Collection.html#add(E)) in interface [Collection](http://docs.google.com/java/util/Collection.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)>**Specified by:**[add](http://docs.google.com/java/util/Set.html#add(E)) in interface [Set](http://docs.google.com/java/util/Set.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)>**Overrides:**[add](http://docs.google.com/java/util/HashSet.html#add(E)) in class [HashSet](http://docs.google.com/java/util/HashSet.html)<[JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html)> **Parameters:**o - Element to be added to this job state reasons attribute. **Returns:**true if this job state reasons attribute did not already contain the specified element. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - (unchecked exception) Thrown if the specified element is null. [ClassCastException](http://docs.google.com/java/lang/ClassCastException.html) - (unchecked exception) Thrown if the specified element is not an instance of class [JobStateReason](http://docs.google.com/javax/print/attribute/standard/JobStateReason.html).**Since:** 1.5

### getCategory

public final [Class](http://docs.google.com/java/lang/Class.html)<? extends [Attribute](http://docs.google.com/javax/print/attribute/Attribute.html)> **getCategory**()

Get the printing attribute class which is to be used as the "category" for this printing attribute value.

For class JobStateReasons, the category is class JobStateReasons itself.

**Specified by:**[getCategory](http://docs.google.com/javax/print/attribute/Attribute.html#getCategory()) in interface [Attribute](http://docs.google.com/javax/print/attribute/Attribute.html) **Returns:**Printing attribute class (category), an instance of class [java.lang.Class](http://docs.google.com/java/lang/Class.html).

### getName

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

Get the name of the category of which this attribute value is an instance.

For class JobStateReasons, the category name is "job-state-reasons".

**Specified by:**[getName](http://docs.google.com/javax/print/attribute/Attribute.html#getName()) in interface [Attribute](http://docs.google.com/javax/print/attribute/Attribute.html) **Returns:**Attribute category name.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/JobStateReasons.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/print/attribute/standard/JobStateReason.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/attribute/standard/Media.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/attribute/standard/JobStateReasons.html)    [**NO FRAMES**](http://docs.google.com/JobStateReasons.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#17dp8vu) | [METHOD](#1ksv4uv) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

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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