| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/PrinterStateReasons.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/PrinterStateReason.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/attribute/standard/PrinterURI.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/attribute/standard/PrinterStateReasons.html)    [**NO FRAMES**](http://docs.google.com/PrinterStateReasons.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#2et92p0) | FIELD | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#3rdcrjn) | [METHOD](#44sinio) |

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

Class PrinterStateReasons

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.util.AbstractMap](http://docs.google.com/java/util/AbstractMap.html)<K,V>  
 [java.util.HashMap](http://docs.google.com/java/util/HashMap.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html),[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html)>  
 **javax.print.attribute.standard.PrinterStateReasons**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [Map](http://docs.google.com/java/util/Map.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html),[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html)>, [Attribute](http://docs.google.com/javax/print/attribute/Attribute.html), [PrintServiceAttribute](http://docs.google.com/javax/print/attribute/PrintServiceAttribute.html)

public final class **PrinterStateReasons**extends [HashMap](http://docs.google.com/java/util/HashMap.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html),[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html)>implements [PrintServiceAttribute](http://docs.google.com/javax/print/attribute/PrintServiceAttribute.html)

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

Instances of [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) do not appear in a Print Service's attribute set directly. Rather, a PrinterStateReasons attribute appears in the Print Service's attribute set. The PrinterStateReasons attribute contains zero, one, or more than one [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) objects which pertain to the Print Service's status, and each [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) object is associated with a [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) level of REPORT (least severe), WARNING, or ERROR (most severe). The printer adds a [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) object to the Print Service's PrinterStateReasons attribute when the corresponding condition becomes true of the printer, and the printer removes the [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) object again when the corresponding condition becomes false, regardless of whether the Print Service's overall [PrinterState](http://docs.google.com/javax/print/attribute/standard/PrinterState.html) also changed.

Class PrinterStateReasons inherits its implementation from class [java.util.HashMap](http://docs.google.com/java/util/HashMap.html). Each entry in the map consists of a [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) object (key) mapping to a [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) object (value):

Unlike most printing attributes which are immutable once constructed, class PrinterStateReasons is designed to be mutable; you can add [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) objects to an existing PrinterStateReasons object and remove them again. However, like class [java.util.HashMap](http://docs.google.com/java/util/HashMap.html), class PrinterStateReasons is bot multiple thread safe. If a PrinterStateReasons object will be used by multiple threads, be sure to synchronize its operations (e.g., using a synchronized map view obtained from class [java.util.Collections](http://docs.google.com/java/util/Collections.html)).

**IPP Compatibility:** The string values returned by each individual [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) object's and the associated [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) object's toString() methods, concatenated together with a hyphen ("-") in between, 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.PrinterStateReasons)

| **Nested Class Summary** | |
| --- | --- |

| **Nested classes/interfaces inherited from class java.util.**[**AbstractMap**](http://docs.google.com/java/util/AbstractMap.html) |
| --- |
| [AbstractMap.SimpleEntry](http://docs.google.com/java/util/AbstractMap.SimpleEntry.html)<[K](http://docs.google.com/java/util/AbstractMap.SimpleEntry.html),[V](http://docs.google.com/java/util/AbstractMap.SimpleEntry.html)>, [AbstractMap.SimpleImmutableEntry](http://docs.google.com/java/util/AbstractMap.SimpleImmutableEntry.html)<[K](http://docs.google.com/java/util/AbstractMap.SimpleImmutableEntry.html),[V](http://docs.google.com/java/util/AbstractMap.SimpleImmutableEntry.html)> |

| **Constructor Summary** | |
| --- | --- |
| [**PrinterStateReasons**](http://docs.google.com/javax/print/attribute/standard/PrinterStateReasons.html#PrinterStateReasons())()            Construct a new, empty printer state reasons attribute; the underlying hash map has the default initial capacity and load factor. |
| [**PrinterStateReasons**](http://docs.google.com/javax/print/attribute/standard/PrinterStateReasons.html#PrinterStateReasons(int))(int initialCapacity)            super a new, empty printer state reasons attribute; the underlying hash map has the given initial capacity and the default load factor. |
| [**PrinterStateReasons**](http://docs.google.com/javax/print/attribute/standard/PrinterStateReasons.html#PrinterStateReasons(int,%20float))(int initialCapacity, float loadFactor)            Construct a new, empty printer state reasons attribute; the underlying hash map has the given initial capacity and load factor. |
| [**PrinterStateReasons**](http://docs.google.com/javax/print/attribute/standard/PrinterStateReasons.html#PrinterStateReasons(java.util.Map))([Map](http://docs.google.com/java/util/Map.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html),[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html)> map)            Construct a new printer state reasons attribute that contains the same [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html)-to-[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) mappings as the given map. |

| **Method Summary** | |
| --- | --- |
| [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/PrinterStateReasons.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/PrinterStateReasons.html#getName())()            Get the name of the category of which this attribute value is an instance. |
| [Set](http://docs.google.com/java/util/Set.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html)> | [**printerStateReasonSet**](http://docs.google.com/javax/print/attribute/standard/PrinterStateReasons.html#printerStateReasonSet(javax.print.attribute.standard.Severity))([Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) severity)            Obtain an unmodifiable set view of the individual printer state reason attributes at the given severity level in this PrinterStateReasons attribute. |
| [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) | [**put**](http://docs.google.com/javax/print/attribute/standard/PrinterStateReasons.html#put(javax.print.attribute.standard.PrinterStateReason,%20javax.print.attribute.standard.Severity))([PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) reason, [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) severity)            Adds the given printer state reason to this printer state reasons attribute, associating it with the given severity level. |

| **Methods inherited from class java.util.**[**HashMap**](http://docs.google.com/java/util/HashMap.html) |
| --- |
| [clear](http://docs.google.com/java/util/HashMap.html#clear()), [clone](http://docs.google.com/java/util/HashMap.html#clone()), [containsKey](http://docs.google.com/java/util/HashMap.html#containsKey(java.lang.Object)), [containsValue](http://docs.google.com/java/util/HashMap.html#containsValue(java.lang.Object)), [entrySet](http://docs.google.com/java/util/HashMap.html#entrySet()), [get](http://docs.google.com/java/util/HashMap.html#get(java.lang.Object)), [isEmpty](http://docs.google.com/java/util/HashMap.html#isEmpty()), [keySet](http://docs.google.com/java/util/HashMap.html#keySet()), [putAll](http://docs.google.com/java/util/HashMap.html#putAll(java.util.Map)), [remove](http://docs.google.com/java/util/HashMap.html#remove(java.lang.Object)), [size](http://docs.google.com/java/util/HashMap.html#size()), [values](http://docs.google.com/java/util/HashMap.html#values()) |

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

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

### PrinterStateReasons

public **PrinterStateReasons**()

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

### PrinterStateReasons

public **PrinterStateReasons**(int initialCapacity)

super a new, empty printer state reasons attribute; the underlying hash map 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.

### PrinterStateReasons

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

Construct a new, empty printer state reasons attribute; the underlying hash map 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.

### PrinterStateReasons

public **PrinterStateReasons**([Map](http://docs.google.com/java/util/Map.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html),[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html)> map)

Construct a new printer state reasons attribute that contains the same [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html)-to-[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) mappings as the given map. The underlying hash map's initial capacity and load factor are as specified in the superclass constructor [HashMap(Map)](http://docs.google.com/java/util/HashMap.html#HashMap(java.util.Map)).

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

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

### put

public [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) **put**([PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) reason,  
 [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) severity)

Adds the given printer state reason to this printer state reasons attribute, associating it with the given severity level. If this printer state reasons attribute previously contained a mapping for the given printer state reason, the old value is replaced.

**Specified by:**[put](http://docs.google.com/java/util/Map.html#put(K,%20V)) in interface [Map](http://docs.google.com/java/util/Map.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html),[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html)>**Overrides:**[put](http://docs.google.com/java/util/HashMap.html#put(K,%20V)) in class [HashMap](http://docs.google.com/java/util/HashMap.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html),[Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html)> **Parameters:**reason - Printer state reason. This must be an instance of class [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html).severity - Severity of the printer state reason. This must be an instance of class [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html). **Returns:**Previous severity associated with the given printer state reason, or null if the given printer state reason was not present. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - (unchecked exception) Thrown if reason is null or severity is null. [ClassCastException](http://docs.google.com/java/lang/ClassCastException.html) - (unchecked exception) Thrown if reason is not an instance of class [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) or if severity is not an instance of class [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.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 PrinterStateReasons, the category is class PrinterStateReasons 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 PrinterStateReasons, the category name is "printer-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.

### printerStateReasonSet

public [Set](http://docs.google.com/java/util/Set.html)<[PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html)> **printerStateReasonSet**([Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) severity)

Obtain an unmodifiable set view of the individual printer state reason attributes at the given severity level in this PrinterStateReasons attribute. Each element in the set view is a [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) object. The only elements in the set view are the [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) objects that map to the given severity value. The set view is backed by this PrinterStateReasons attribute, so changes to this PrinterStateReasons attribute are reflected in the set view. The set view does not support element insertion or removal. The set view's iterator does not support element removal.

**Parameters:**severity - Severity level. **Returns:**Set view of the individual [PrinterStateReason](http://docs.google.com/javax/print/attribute/standard/PrinterStateReason.html) attributes at the given [Severity](http://docs.google.com/javax/print/attribute/standard/Severity.html) level. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - (unchecked exception) Thrown if severity is null.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/PrinterStateReasons.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/PrinterStateReason.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/attribute/standard/PrinterURI.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/attribute/standard/PrinterStateReasons.html)    [**NO FRAMES**](http://docs.google.com/PrinterStateReasons.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#2et92p0) | FIELD | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#3rdcrjn) | [METHOD](#44sinio) |

[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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