| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/NumberUp.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/NumberOfInterveningJobs.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/attribute/standard/NumberUpSupported.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/attribute/standard/NumberUp.html)    [**NO FRAMES**](http://docs.google.com/NumberUp.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |

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

Class NumberUp

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [javax.print.attribute.IntegerSyntax](http://docs.google.com/javax/print/attribute/IntegerSyntax.html)  
 **javax.print.attribute.standard.NumberUp**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [Attribute](http://docs.google.com/javax/print/attribute/Attribute.html), [DocAttribute](http://docs.google.com/javax/print/attribute/DocAttribute.html), [PrintJobAttribute](http://docs.google.com/javax/print/attribute/PrintJobAttribute.html), [PrintRequestAttribute](http://docs.google.com/javax/print/attribute/PrintRequestAttribute.html)

public final class **NumberUp**extends [IntegerSyntax](http://docs.google.com/javax/print/attribute/IntegerSyntax.html)implements [DocAttribute](http://docs.google.com/javax/print/attribute/DocAttribute.html), [PrintRequestAttribute](http://docs.google.com/javax/print/attribute/PrintRequestAttribute.html), [PrintJobAttribute](http://docs.google.com/javax/print/attribute/PrintJobAttribute.html)

Class NumberUp is an integer valued printing attribute class that specifies the number of print-stream pages to impose upon a single side of an instance of a selected medium. That is, if the NumberUp value is *n,* the printer must place *n* print-stream pages on a single side of an instance of the selected medium. To accomplish this, the printer may add some sort of translation, scaling, or rotation. This attribute primarily controls the translation, scaling and rotation of print-stream pages.

The effect of a NumberUp attribute on a multidoc print job (a job with multiple documents) depends on whether all the docs have the same number up values specified or whether different docs have different number up values specified, and on the (perhaps defaulted) value of the [MultipleDocumentHandling](http://docs.google.com/javax/print/attribute/standard/MultipleDocumentHandling.html) attribute.

* If all the docs have the same number up value *n* specified, then any value of [MultipleDocumentHandling](http://docs.google.com/javax/print/attribute/standard/MultipleDocumentHandling.html) makes sense, and the printer's processing depends on the [MultipleDocumentHandling](http://docs.google.com/javax/print/attribute/standard/MultipleDocumentHandling.html) value:
  + SINGLE\_DOCUMENT -- All the input docs will be combined together into one output document. Each media impression will consist of *n*m print-stream pages from the output document.
  + SINGLE\_DOCUMENT\_NEW\_SHEET -- All the input docs will be combined together into one output document. Each media impression will consist of *n* print-stream pages from the output document. However, the first impression of each input doc will always start on a new media sheet; this means the last impression of an input doc may have fewer than *n* print-stream pages on it.
  + SEPARATE\_DOCUMENTS\_UNCOLLATED\_COPIES -- The input docs will remain separate. Each media impression will consist of *n* print-stream pages from the input doc. Since the input docs are separate, the first impression of each input doc will always start on a new media sheet; this means the last impression of an input doc may have fewer than *n* print-stream pages on it.
  + SEPARATE\_DOCUMENTS\_COLLATED\_COPIES -- The input docs will remain separate. Each media impression will consist of *n* print-stream pages from the input doc. Since the input docs are separate, the first impression of each input doc will always start on a new media sheet; this means the last impression of an input doc may have fewer than *n* print-stream pages on it.
  + SINGLE\_DOCUMENT -- All the input docs will be combined together into one output document. Each media impression will consist of *ni* print-stream pages from the output document, where *i* is the number of the input doc corresponding to that point in the output document. When the next input doc has a different number up value from the previous input doc, the first print-stream page of the next input doc goes at the start of the next media impression, possibly leaving fewer than the full number of print-stream pages on the previous media impression.
  + SINGLE\_DOCUMENT\_NEW\_SHEET -- All the input docs will be combined together into one output document. Each media impression will consist of *n* print-stream pages from the output document. However, the first impression of each input doc will always start on a new media sheet; this means the last impression of an input doc may have fewer than *n* print-stream pages on it.
  + SEPARATE\_DOCUMENTS\_UNCOLLATED\_COPIES -- The input docs will remain separate. For input doc *i,* each media impression will consist of *ni* print-stream pages from the input doc. Since the input docs are separate, the first impression of each input doc will always start on a new media sheet; this means the last impression of an input doc may have fewer than *ni* print-stream pages on it.
  + SEPARATE\_DOCUMENTS\_COLLATED\_COPIES -- The input docs will remain separate. For input doc *i,* each media impression will consist of *ni* print-stream pages from the input doc. Since the input docs are separate, the first impression of each input doc will always start on a new media sheet; this means the last impression of an input doc may have fewer than *ni* print-stream pages on it.

**IPP Compatibility:** The integer value gives the IPP integer 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.NumberUp)

| **Constructor Summary** | |
| --- | --- |
| [**NumberUp**](http://docs.google.com/javax/print/attribute/standard/NumberUp.html#NumberUp(int))(int value)            Construct a new number up attribute with the given integer value. |

| **Method Summary** | |
| --- | --- |
| boolean | [**equals**](http://docs.google.com/javax/print/attribute/standard/NumberUp.html#equals(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) object)            Returns whether this number up attribute is equivalent to the passed in object. |
| [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/NumberUp.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/NumberUp.html#getName())()            Get the name of the category of which this attribute value is an instance. |

| **Methods inherited from class javax.print.attribute.**[**IntegerSyntax**](http://docs.google.com/javax/print/attribute/IntegerSyntax.html) |
| --- |
| [getValue](http://docs.google.com/javax/print/attribute/IntegerSyntax.html#getValue()), [hashCode](http://docs.google.com/javax/print/attribute/IntegerSyntax.html#hashCode()), [toString](http://docs.google.com/javax/print/attribute/IntegerSyntax.html#toString()) |

| **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** |
| --- |

### NumberUp

public **NumberUp**(int value)

Construct a new number up attribute with the given integer value.

**Parameters:**value - Integer value. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - (Unchecked exception) Thrown if value is less than 1.

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

### equals

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

Returns whether this number up attribute is equivalent to the passed in object. To be equivalent, all of the following conditions must be true:

1. object is not null.
2. object is an instance of class NumberUp.
3. This number up attribute's value and object's value are equal.

**Overrides:**[equals](http://docs.google.com/javax/print/attribute/IntegerSyntax.html#equals(java.lang.Object)) in class [IntegerSyntax](http://docs.google.com/javax/print/attribute/IntegerSyntax.html) **Parameters:**object - Object to compare to. **Returns:**True if object is equivalent to this number up attribute, false otherwise.**See Also:**[Object.hashCode()](http://docs.google.com/java/lang/Object.html#hashCode()), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

### 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 NumberUp, the category is class NumberUp 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 NumberUp, the category name is "number-up".

**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/NumberUp.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/NumberOfInterveningJobs.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/attribute/standard/NumberUpSupported.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/attribute/standard/NumberUp.html)    [**NO FRAMES**](http://docs.google.com/NumberUp.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |

[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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).