| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/PresentationDirection.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/PDLOverrideSupported.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/attribute/standard/PrinterInfo.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/attribute/standard/PresentationDirection.html)    [**NO FRAMES**](http://docs.google.com/PresentationDirection.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | CONSTR | [METHOD](#2et92p0) | DETAIL: [FIELD](#1t3h5sf) | CONSTR | [METHOD](#44sinio) |

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

Class PresentationDirection

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

**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), [PrintJobAttribute](http://docs.google.com/javax/print/attribute/PrintJobAttribute.html), [PrintRequestAttribute](http://docs.google.com/javax/print/attribute/PrintRequestAttribute.html)

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

Class PresentationDirection is a printing attribute class, an enumeration, that is used in conjunction with the [NumberUp](http://docs.google.com/javax/print/attribute/standard/NumberUp.html) attribute to indicate the layout of multiple print-stream pages to impose upon a single side of an instance of a selected medium. This is useful to mirror the text layout conventions of different scripts. For example, English is "toright-tobottom", Hebrew is "toleft-tobottom" and Japanese is usually "tobottom-toleft".

**IPP Compatibility:** This attribute is not an IPP 1.1 attribute; it is an attribute in the Production Printing Extension ([PDF](ftp://ftp.pwg.org/pub/pwg/standards/pwg5100.3.pdf)) of IPP 1.1. The category name returned by getName() is the IPP attribute name. The enumeration's integer value is the IPP enum value. The toString() method returns the IPP string representation of the attribute value.

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

| **Field Summary** | |
| --- | --- |
| static [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) | [**TOBOTTOM\_TOLEFT**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#TOBOTTOM_TOLEFT)            Pages are laid out in columns starting at the top right, proceeeding towards the bottom & left. |
| static [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) | [**TOBOTTOM\_TORIGHT**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#TOBOTTOM_TORIGHT)            Pages are laid out in columns starting at the top left, proceeeding towards the bottom & right. |
| static [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) | [**TOLEFT\_TOBOTTOM**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#TOLEFT_TOBOTTOM)            Pages are laid out in rows starting at the top right, proceeeding towards the left & bottom. |
| static [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) | [**TOLEFT\_TOTOP**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#TOLEFT_TOTOP)            Pages are laid out in rows starting at the bottom right, proceeeding towards the left & top. |
| static [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) | [**TORIGHT\_TOBOTTOM**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#TORIGHT_TOBOTTOM)            Pages are laid out in rows starting at the top left, proceeeding towards the right & bottom. |
| static [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) | [**TORIGHT\_TOTOP**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#TORIGHT_TOTOP)            Pages are laid out in rows starting at the bottom left, proceeeding towards the right & top. |
| static [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) | [**TOTOP\_TOLEFT**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#TOTOP_TOLEFT)            Pages are laid out in columns starting at the bottom right, proceeeding towards the top & left. |
| static [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) | [**TOTOP\_TORIGHT**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#TOTOP_TORIGHT)            Pages are laid out in columns starting at the bottom left, proceeeding towards the top & right. |

| **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/PresentationDirection.html#getCategory())()            Get the printing attribute class which is to be used as the "category" for this printing attribute value. |
| protected  [EnumSyntax](http://docs.google.com/javax/print/attribute/EnumSyntax.html)[] | [**getEnumValueTable**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#getEnumValueTable())()            Returns the enumeration value table for class PresentationDirection. |
| [String](http://docs.google.com/java/lang/String.html) | [**getName**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#getName())()            Get the name of the category of which this attribute value is an instance. |
| protected  [String](http://docs.google.com/java/lang/String.html)[] | [**getStringTable**](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html#getStringTable())()            Returns the string table for class PresentationDirection. |

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

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

| **Field Detail** |
| --- |

### TOBOTTOM\_TORIGHT

public static final [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) **TOBOTTOM\_TORIGHT**

Pages are laid out in columns starting at the top left, proceeeding towards the bottom & right.

### TOBOTTOM\_TOLEFT

public static final [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) **TOBOTTOM\_TOLEFT**

Pages are laid out in columns starting at the top right, proceeeding towards the bottom & left.

### TOTOP\_TORIGHT

public static final [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) **TOTOP\_TORIGHT**

Pages are laid out in columns starting at the bottom left, proceeeding towards the top & right.

### TOTOP\_TOLEFT

public static final [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) **TOTOP\_TOLEFT**

Pages are laid out in columns starting at the bottom right, proceeeding towards the top & left.

### TORIGHT\_TOBOTTOM

public static final [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) **TORIGHT\_TOBOTTOM**

Pages are laid out in rows starting at the top left, proceeeding towards the right & bottom.

### TORIGHT\_TOTOP

public static final [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) **TORIGHT\_TOTOP**

Pages are laid out in rows starting at the bottom left, proceeeding towards the right & top.

### TOLEFT\_TOBOTTOM

public static final [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) **TOLEFT\_TOBOTTOM**

Pages are laid out in rows starting at the top right, proceeeding towards the left & bottom.

### TOLEFT\_TOTOP

public static final [PresentationDirection](http://docs.google.com/javax/print/attribute/standard/PresentationDirection.html) **TOLEFT\_TOTOP**

Pages are laid out in rows starting at the bottom right, proceeeding towards the left & top.

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

### getStringTable

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

Returns the string table for class PresentationDirection.

**Overrides:**[getStringTable](http://docs.google.com/javax/print/attribute/EnumSyntax.html#getStringTable()) in class [EnumSyntax](http://docs.google.com/javax/print/attribute/EnumSyntax.html) **Returns:**the string table

### getEnumValueTable

protected [EnumSyntax](http://docs.google.com/javax/print/attribute/EnumSyntax.html)[] **getEnumValueTable**()

Returns the enumeration value table for class PresentationDirection.

**Overrides:**[getEnumValueTable](http://docs.google.com/javax/print/attribute/EnumSyntax.html#getEnumValueTable()) in class [EnumSyntax](http://docs.google.com/javax/print/attribute/EnumSyntax.html) **Returns:**the value table

### 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 PresentationDirection the category is class PresentationDirection 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 PresentationDirection the category name is "presentation-direction".

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