| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/SimpleDoc.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/ServiceUIFactory.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/StreamPrintService.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/SimpleDoc.html)    [**NO FRAMES**](http://docs.google.com/SimpleDoc.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **javax.print**

Class SimpleDoc

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.print.SimpleDoc**

**All Implemented Interfaces:** [Doc](http://docs.google.com/javax/print/Doc.html)

public final class **SimpleDoc**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Doc](http://docs.google.com/javax/print/Doc.html)

This class is an implementation of interface Doc that can be used in many common printing requests. It can handle all of the presently defined "pre-defined" doc flavors defined as static variables in the DocFlavor class.

In particular this class implements certain required semantics of the Doc specification as follows:

* constructs a stream for the service if requested and appropriate.
* ensures the same object is returned for each call on a method.
* ensures multiple threads can access the Doc
* performs some validation of that the data matches the doc flavor.

Clients who want to re-use the doc object in other jobs, or need a MultiDoc will not want to use this class.

If the print data is a stream, or a print job requests data as a stream, then SimpleDoc does not monitor if the service properly closes the stream after data transfer completion or job termination. Clients may prefer to use provide their own implementation of doc that adds a listener to monitor job completion and to validate that resources such as streams are freed (ie closed).

| **Constructor Summary** | |
| --- | --- |
| [**SimpleDoc**](http://docs.google.com/javax/print/SimpleDoc.html#SimpleDoc(java.lang.Object,%20javax.print.DocFlavor,%20javax.print.attribute.DocAttributeSet))([Object](http://docs.google.com/java/lang/Object.html) printData, [DocFlavor](http://docs.google.com/javax/print/DocFlavor.html) flavor, [DocAttributeSet](http://docs.google.com/javax/print/attribute/DocAttributeSet.html) attributes)            Constructs a SimpleDoc with the specified print data, doc flavor and doc attribute set. |

| **Method Summary** | |
| --- | --- |
| [DocAttributeSet](http://docs.google.com/javax/print/attribute/DocAttributeSet.html) | [**getAttributes**](http://docs.google.com/javax/print/SimpleDoc.html#getAttributes())()            Obtains the set of printing attributes for this doc object. |
| [DocFlavor](http://docs.google.com/javax/print/DocFlavor.html) | [**getDocFlavor**](http://docs.google.com/javax/print/SimpleDoc.html#getDocFlavor())()            Determines the doc flavor in which this doc object will supply its piece of print data. |
| [Object](http://docs.google.com/java/lang/Object.html) | [**getPrintData**](http://docs.google.com/javax/print/SimpleDoc.html#getPrintData())()            Obtains the print data representation object that contains this doc object's piece of print data in the format corresponding to the supported doc flavor. |
| [Reader](http://docs.google.com/java/io/Reader.html) | [**getReaderForText**](http://docs.google.com/javax/print/SimpleDoc.html#getReaderForText())()            Obtains a reader for extracting character print data from this doc. |
| [InputStream](http://docs.google.com/java/io/InputStream.html) | [**getStreamForBytes**](http://docs.google.com/javax/print/SimpleDoc.html#getStreamForBytes())()            Obtains an input stream for extracting byte print data from this doc. |

| **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()), [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()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [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** |
| --- |

### SimpleDoc

public **SimpleDoc**([Object](http://docs.google.com/java/lang/Object.html) printData,  
 [DocFlavor](http://docs.google.com/javax/print/DocFlavor.html) flavor,  
 [DocAttributeSet](http://docs.google.com/javax/print/attribute/DocAttributeSet.html) attributes)

Constructs a SimpleDoc with the specified print data, doc flavor and doc attribute set.

**Parameters:**printData - the print data objectflavor - the DocFlavor objectattributes - a DocAttributeSet, which can be null **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if flavor or printData is null, or the printData does not correspond to the specified doc flavor--for example, the data is not of the type specified as the representation in the DocFlavor.

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

### getDocFlavor

public [DocFlavor](http://docs.google.com/javax/print/DocFlavor.html) **getDocFlavor**()

Determines the doc flavor in which this doc object will supply its piece of print data.

**Specified by:**[getDocFlavor](http://docs.google.com/javax/print/Doc.html#getDocFlavor()) in interface [Doc](http://docs.google.com/javax/print/Doc.html) **Returns:**Doc flavor.

### getAttributes

public [DocAttributeSet](http://docs.google.com/javax/print/attribute/DocAttributeSet.html) **getAttributes**()

Obtains the set of printing attributes for this doc object. If the returned attribute set includes an instance of a particular attribute *X,* the printer must use that attribute value for this doc, overriding any value of attribute *X* in the job's attribute set. If the returned attribute set does not include an instance of a particular attribute *X* or if null is returned, the printer must consult the job's attribute set to obtain the value for attribute *X,* and if not found there, the printer must use an implementation-dependent default value. The returned attribute set is unmodifiable.

**Specified by:**[getAttributes](http://docs.google.com/javax/print/Doc.html#getAttributes()) in interface [Doc](http://docs.google.com/javax/print/Doc.html) **Returns:**Unmodifiable set of printing attributes for this doc, or null to obtain all attribute values from the job's attribute set.

### getPrintData

public [Object](http://docs.google.com/java/lang/Object.html) **getPrintData**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

**Description copied from interface:** [**Doc**](http://docs.google.com/javax/print/Doc.html#getPrintData()) Obtains the print data representation object that contains this doc object's piece of print data in the format corresponding to the supported doc flavor. The getPrintData() method returns an instance of the representation class whose name is given by [getDocFlavor()](http://docs.google.com/javax/print/Doc.html#getDocFlavor()).[getRepresentationClassName()](http://docs.google.com/javax/print/DocFlavor.html#getRepresentationClassName()), and the return value can be cast from class Object to that representation class.

**Specified by:**[getPrintData](http://docs.google.com/javax/print/Doc.html#getPrintData()) in interface [Doc](http://docs.google.com/javax/print/Doc.html) **Returns:**Print data representation object. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - Thrown if the representation class is a stream and there was an I/O error while constructing the stream.

### getReaderForText

public [Reader](http://docs.google.com/java/io/Reader.html) **getReaderForText**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Obtains a reader for extracting character print data from this doc. The Doc implementation is required to support this method if the DocFlavor has one of the following print data representation classes, and return null otherwise:

* char[]
* java.lang.String
* java.io.Reader

The doc's print data representation object is used to construct and return a Reader for reading the print data as a stream of characters from the print data representation object. However, if the print data representation object is itself a Reader then the print data representation object is simply returned.

**Specified by:**[getReaderForText](http://docs.google.com/javax/print/Doc.html#getReaderForText()) in interface [Doc](http://docs.google.com/javax/print/Doc.html) **Returns:**a Reader for reading the print data characters from this doc. If a reader cannot be provided because this doc does not meet the criteria stated above, null is returned. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if there was an I/O error while creating the reader.

### getStreamForBytes

public [InputStream](http://docs.google.com/java/io/InputStream.html) **getStreamForBytes**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Obtains an input stream for extracting byte print data from this doc. The Doc implementation is required to support this method if the DocFlavor has one of the following print data representation classes; otherwise this method returns null:

* byte[]
* java.io.InputStream

The doc's print data representation object is obtained. Then, an input stream for reading the print data from the print data representation object as a stream of bytes is created and returned. However, if the print data representation object is itself an input stream then the print data representation object is simply returned.

**Specified by:**[getStreamForBytes](http://docs.google.com/javax/print/Doc.html#getStreamForBytes()) in interface [Doc](http://docs.google.com/javax/print/Doc.html) **Returns:**an InputStream for reading the print data bytes from this doc. If an input stream cannot be provided because this doc does not meet the criteria stated above, null is returned. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if there was an I/O error while creating the input stream.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/SimpleDoc.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/ServiceUIFactory.html)   [**NEXT CLASS**](http://docs.google.com/javax/print/StreamPrintService.html) | [**FRAMES**](http://docs.google.com/index.html?javax/print/SimpleDoc.html)    [**NO FRAMES**](http://docs.google.com/SimpleDoc.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

[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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