| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Segment.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/swing/text/Position.Bias.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/text/SimpleAttributeSet.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/text/Segment.html)    [**NO FRAMES**](http://docs.google.com/Segment.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#4d34og8) | [CONSTR](#26in1rg) | [METHOD](#1ksv4uv) |

## **javax.swing.text**

Class Segment

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.swing.text.Segment**

**All Implemented Interfaces:** [CharSequence](http://docs.google.com/java/lang/CharSequence.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html)

public class **Segment**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html), [CharSequence](http://docs.google.com/java/lang/CharSequence.html)

A segment of a character array representing a fragment of text. It should be treated as immutable even though the array is directly accessible. This gives fast access to fragments of text without the overhead of copying around characters. This is effectively an unprotected String.

The Segment implements the java.text.CharacterIterator interface to support use with the i18n support without copying text into a string.

| **Field Summary** | |
| --- | --- |
| char[] | [**array**](http://docs.google.com/javax/swing/text/Segment.html#array)            This is the array containing the text of interest. |
| int | [**count**](http://docs.google.com/javax/swing/text/Segment.html#count)            This is the number of array elements that make up the text of interest. |
| int | [**offset**](http://docs.google.com/javax/swing/text/Segment.html#offset)            This is the offset into the array that the desired text begins. |

| **Fields inherited from interface java.text.**[**CharacterIterator**](http://docs.google.com/java/text/CharacterIterator.html) |
| --- |
| [DONE](http://docs.google.com/java/text/CharacterIterator.html#DONE) |

| **Constructor Summary** | |
| --- | --- |
| [**Segment**](http://docs.google.com/javax/swing/text/Segment.html#Segment())()            Creates a new segment. |
| [**Segment**](http://docs.google.com/javax/swing/text/Segment.html#Segment(char%5B%5D,%20int,%20int))(char[] array, int offset, int count)            Creates a new segment referring to an existing array. |

| **Method Summary** | |
| --- | --- |
| char | [**charAt**](http://docs.google.com/javax/swing/text/Segment.html#charAt(int))(int index)            Returns the char value at the specified index. |
| [Object](http://docs.google.com/java/lang/Object.html) | [**clone**](http://docs.google.com/javax/swing/text/Segment.html#clone())()            Creates a shallow copy. |
| char | [**current**](http://docs.google.com/javax/swing/text/Segment.html#current())()            Gets the character at the current position (as returned by getIndex()). |
| char | [**first**](http://docs.google.com/javax/swing/text/Segment.html#first())()            Sets the position to getBeginIndex() and returns the character at that position. |
| int | [**getBeginIndex**](http://docs.google.com/javax/swing/text/Segment.html#getBeginIndex())()            Returns the start index of the text. |
| int | [**getEndIndex**](http://docs.google.com/javax/swing/text/Segment.html#getEndIndex())()            Returns the end index of the text. |
| int | [**getIndex**](http://docs.google.com/javax/swing/text/Segment.html#getIndex())()            Returns the current index. |
| boolean | [**isPartialReturn**](http://docs.google.com/javax/swing/text/Segment.html#isPartialReturn())()            Flag to indicate that partial returns are valid. |
| char | [**last**](http://docs.google.com/javax/swing/text/Segment.html#last())()            Sets the position to getEndIndex()-1 (getEndIndex() if the text is empty) and returns the character at that position. |
| int | [**length**](http://docs.google.com/javax/swing/text/Segment.html#length())()            Returns the length of this character sequence. |
| char | [**next**](http://docs.google.com/javax/swing/text/Segment.html#next())()            Increments the iterator's index by one and returns the character at the new index. |
| char | [**previous**](http://docs.google.com/javax/swing/text/Segment.html#previous())()            Decrements the iterator's index by one and returns the character at the new index. |
| char | [**setIndex**](http://docs.google.com/javax/swing/text/Segment.html#setIndex(int))(int position)            Sets the position to the specified position in the text and returns that character. |
| void | [**setPartialReturn**](http://docs.google.com/javax/swing/text/Segment.html#setPartialReturn(boolean))(boolean p)            Flag to indicate that partial returns are valid. |
| [CharSequence](http://docs.google.com/java/lang/CharSequence.html) | [**subSequence**](http://docs.google.com/javax/swing/text/Segment.html#subSequence(int,%20int))(int start, int end)            Returns a new CharSequence that is a subsequence of this sequence. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/javax/swing/text/Segment.html#toString())()            Converts a segment into a String. |

| **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()), [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()), [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** |
| --- |

### array

public char[] **array**

This is the array containing the text of interest. This array should never be modified; it is available only for efficiency.

### offset

public int **offset**

This is the offset into the array that the desired text begins.

### count

public int **count**

This is the number of array elements that make up the text of interest.

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

### Segment

public **Segment**()

Creates a new segment.

### Segment

public **Segment**(char[] array,  
 int offset,  
 int count)

Creates a new segment referring to an existing array.

**Parameters:**array - the array to refer tooffset - the offset into the arraycount - the number of characters

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

### setPartialReturn

public void **setPartialReturn**(boolean p)

Flag to indicate that partial returns are valid. If the flag is true, an implementation of the interface method Document.getText(position,length,Segment) should return as much text as possible without making a copy. The default state of the flag is false which will cause Document.getText(position,length,Segment) to provide the same return behavior it always had, which may or may not make a copy of the text depending upon the request.

**Parameters:**p - whether or not partial returns are valid.**Since:** 1.4

### isPartialReturn

public boolean **isPartialReturn**()

Flag to indicate that partial returns are valid.

**Returns:**whether or not partial returns are valid.**Since:** 1.4

### toString

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

Converts a segment into a String.

**Specified by:**[toString](http://docs.google.com/java/lang/CharSequence.html#toString()) in interface [CharSequence](http://docs.google.com/java/lang/CharSequence.html)**Overrides:**[toString](http://docs.google.com/java/lang/Object.html#toString()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**the string

### first

public char **first**()

Sets the position to getBeginIndex() and returns the character at that position.

**Specified by:**[first](http://docs.google.com/java/text/CharacterIterator.html#first()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Returns:**the first character in the text, or DONE if the text is empty**Since:** 1.3 **See Also:**[getBeginIndex()](http://docs.google.com/javax/swing/text/Segment.html#getBeginIndex())

### last

public char **last**()

Sets the position to getEndIndex()-1 (getEndIndex() if the text is empty) and returns the character at that position.

**Specified by:**[last](http://docs.google.com/java/text/CharacterIterator.html#last()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Returns:**the last character in the text, or DONE if the text is empty**Since:** 1.3 **See Also:**[getEndIndex()](http://docs.google.com/javax/swing/text/Segment.html#getEndIndex())

### current

public char **current**()

Gets the character at the current position (as returned by getIndex()).

**Specified by:**[current](http://docs.google.com/java/text/CharacterIterator.html#current()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Returns:**the character at the current position or DONE if the current position is off the end of the text.**Since:** 1.3 **See Also:**[getIndex()](http://docs.google.com/javax/swing/text/Segment.html#getIndex())

### next

public char **next**()

Increments the iterator's index by one and returns the character at the new index. If the resulting index is greater or equal to getEndIndex(), the current index is reset to getEndIndex() and a value of DONE is returned.

**Specified by:**[next](http://docs.google.com/java/text/CharacterIterator.html#next()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Returns:**the character at the new position or DONE if the new position is off the end of the text range.**Since:** 1.3

### previous

public char **previous**()

Decrements the iterator's index by one and returns the character at the new index. If the current index is getBeginIndex(), the index remains at getBeginIndex() and a value of DONE is returned.

**Specified by:**[previous](http://docs.google.com/java/text/CharacterIterator.html#previous()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Returns:**the character at the new position or DONE if the current position is equal to getBeginIndex().**Since:** 1.3

### setIndex

public char **setIndex**(int position)

Sets the position to the specified position in the text and returns that character.

**Specified by:**[setIndex](http://docs.google.com/java/text/CharacterIterator.html#setIndex(int)) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Parameters:**position - the position within the text. Valid values range from getBeginIndex() to getEndIndex(). An IllegalArgumentException is thrown if an invalid value is supplied. **Returns:**the character at the specified position or DONE if the specified position is equal to getEndIndex()**Since:** 1.3

### getBeginIndex

public int **getBeginIndex**()

Returns the start index of the text.

**Specified by:**[getBeginIndex](http://docs.google.com/java/text/CharacterIterator.html#getBeginIndex()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Returns:**the index at which the text begins.**Since:** 1.3

### getEndIndex

public int **getEndIndex**()

Returns the end index of the text. This index is the index of the first character following the end of the text.

**Specified by:**[getEndIndex](http://docs.google.com/java/text/CharacterIterator.html#getEndIndex()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Returns:**the index after the last character in the text**Since:** 1.3

### getIndex

public int **getIndex**()

Returns the current index.

**Specified by:**[getIndex](http://docs.google.com/java/text/CharacterIterator.html#getIndex()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html) **Returns:**the current index.**Since:** 1.3

### charAt

public char **charAt**(int index)

Returns the char value at the specified index. An index ranges from zero to length() - 1. The first char value of the sequence is at index zero, the next at index one, and so on, as for array indexing.

If the char value specified by the index is a [surrogate](http://docs.google.com/Character.html#unicode), the surrogate value is returned.

**Specified by:**[charAt](http://docs.google.com/java/lang/CharSequence.html#charAt(int)) in interface [CharSequence](http://docs.google.com/java/lang/CharSequence.html) **Parameters:**index - the index of the char value to be returned **Returns:**the specified char value**Since:** 1.6

### length

public int **length**()

Returns the length of this character sequence. The length is the number of 16-bit chars in the sequence.

**Specified by:**[length](http://docs.google.com/java/lang/CharSequence.html#length()) in interface [CharSequence](http://docs.google.com/java/lang/CharSequence.html) **Returns:**the number of chars in this sequence**Since:** 1.6

### subSequence

public [CharSequence](http://docs.google.com/java/lang/CharSequence.html) **subSequence**(int start,  
 int end)

Returns a new CharSequence that is a subsequence of this sequence. The subsequence starts with the char value at the specified index and ends with the char value at index end - 1. The length (in chars) of the returned sequence is end - start, so if start == end then an empty sequence is returned.

**Specified by:**[subSequence](http://docs.google.com/java/lang/CharSequence.html#subSequence(int,%20int)) in interface [CharSequence](http://docs.google.com/java/lang/CharSequence.html) **Parameters:**start - the start index, inclusiveend - the end index, exclusive **Returns:**the specified subsequence**Since:** 1.6

### clone

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

Creates a shallow copy.

**Specified by:**[clone](http://docs.google.com/java/text/CharacterIterator.html#clone()) in interface [CharacterIterator](http://docs.google.com/java/text/CharacterIterator.html)**Overrides:**[clone](http://docs.google.com/java/lang/Object.html#clone()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**the copy**See Also:**[Cloneable](http://docs.google.com/java/lang/Cloneable.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Segment.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*** |
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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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