| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DocumentEvent.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/event/ChangeListener.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/event/DocumentEvent.html)    [**NO FRAMES**](http://docs.google.com/DocumentEvent.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | FIELD | CONSTR | [METHOD](#2et92p0) | DETAIL: FIELD | CONSTR | [METHOD](#tyjcwt) |

## **javax.swing.event**

Interface DocumentEvent

**All Known Implementing Classes:** [AbstractDocument.DefaultDocumentEvent](http://docs.google.com/javax/swing/text/AbstractDocument.DefaultDocumentEvent.html)

public interface **DocumentEvent**

Interface for document change notifications. This provides detailed information to Document observers about how the Document changed. It provides high level information such as type of change and where it occurred, as well as the more detailed structural changes (What Elements were inserted and removed).

**See Also:**[Document](http://docs.google.com/javax/swing/text/Document.html), [DocumentListener](http://docs.google.com/javax/swing/event/DocumentListener.html)

| **Nested Class Summary** | |
| --- | --- |
| static interface | [**DocumentEvent.ElementChange**](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html)            Describes changes made to a specific element. |
| static class | [**DocumentEvent.EventType**](http://docs.google.com/javax/swing/event/DocumentEvent.EventType.html)            Enumeration for document event types |

| **Method Summary** | |
| --- | --- |
| [DocumentEvent.ElementChange](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) | [**getChange**](http://docs.google.com/javax/swing/event/DocumentEvent.html#getChange(javax.swing.text.Element))([Element](http://docs.google.com/javax/swing/text/Element.html) elem)            Gets the change information for the given element. |
| [Document](http://docs.google.com/javax/swing/text/Document.html) | [**getDocument**](http://docs.google.com/javax/swing/event/DocumentEvent.html#getDocument())()            Gets the document that sourced the change event. |
| int | [**getLength**](http://docs.google.com/javax/swing/event/DocumentEvent.html#getLength())()            Returns the length of the change. |
| int | [**getOffset**](http://docs.google.com/javax/swing/event/DocumentEvent.html#getOffset())()            Returns the offset within the document of the start of the change. |
| [DocumentEvent.EventType](http://docs.google.com/javax/swing/event/DocumentEvent.EventType.html) | [**getType**](http://docs.google.com/javax/swing/event/DocumentEvent.html#getType())()            Gets the type of event. |

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

### getOffset

int **getOffset**()

Returns the offset within the document of the start of the change.

**Returns:**the offset >= 0

### getLength

int **getLength**()

Returns the length of the change.

**Returns:**the length >= 0

### getDocument

[Document](http://docs.google.com/javax/swing/text/Document.html) **getDocument**()

Gets the document that sourced the change event.

**Returns:**the document

### getType

[DocumentEvent.EventType](http://docs.google.com/javax/swing/event/DocumentEvent.EventType.html) **getType**()

Gets the type of event.

**Returns:**the type

### getChange

[DocumentEvent.ElementChange](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) **getChange**([Element](http://docs.google.com/javax/swing/text/Element.html) elem)

Gets the change information for the given element. The change information describes what elements were added and removed and the location. If there were no changes, null is returned.

This method is for observers to discover the structural changes that were made. This means that only elements that existed prior to the mutation (and still exist after the mutatino) need to have ElementChange records. The changes made available need not be recursive.

For example, if the an element is removed from it's parent, this method should report that the parent changed and provide an ElementChange implementation that describes the change to the parent. If the child element removed had children, these elements do not need to be reported as removed.

If an child element is insert into a parent element, the parent element should report a change. If the child element also had elements inserted into it (grandchildren to the parent) these elements need not report change.

**Parameters:**elem - the element **Returns:**the change information, or null if the element was not modified

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DocumentEvent.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/event/ChangeListener.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/event/DocumentEvent.html)    [**NO FRAMES**](http://docs.google.com/DocumentEvent.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
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[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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