| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AWTEvent.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/java/awt/AWTError.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/AWTEventMulticaster.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/AWTEvent.html)    [**NO FRAMES**](http://docs.google.com/AWTEvent.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#2s8eyo1) | [CONSTR](#3o7alnk) | [METHOD](#32hioqz) |

## **java.awt**

Class AWTEvent

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.util.EventObject](http://docs.google.com/java/util/EventObject.html)  
 **java.awt.AWTEvent**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html) **Direct Known Subclasses:** [ActionEvent](http://docs.google.com/java/awt/event/ActionEvent.html), [AdjustmentEvent](http://docs.google.com/java/awt/event/AdjustmentEvent.html), [AncestorEvent](http://docs.google.com/javax/swing/event/AncestorEvent.html), [ComponentEvent](http://docs.google.com/java/awt/event/ComponentEvent.html), [HierarchyEvent](http://docs.google.com/java/awt/event/HierarchyEvent.html), [InputMethodEvent](http://docs.google.com/java/awt/event/InputMethodEvent.html), [InternalFrameEvent](http://docs.google.com/javax/swing/event/InternalFrameEvent.html), [InvocationEvent](http://docs.google.com/java/awt/event/InvocationEvent.html), [ItemEvent](http://docs.google.com/java/awt/event/ItemEvent.html), [TextEvent](http://docs.google.com/java/awt/event/TextEvent.html)

public abstract class **AWTEvent**extends [EventObject](http://docs.google.com/java/util/EventObject.html)

The root event class for all AWT events. This class and its subclasses supercede the original java.awt.Event class. Subclasses of this root AWTEvent class defined outside of the java.awt.event package should define event ID values greater than the value defined by RESERVED\_ID\_MAX.

The event masks defined in this class are needed by Component subclasses which are using Component.enableEvents() to select for event types not selected by registered listeners. If a listener is registered on a component, the appropriate event mask is already set internally by the component.

The masks are also used to specify to which types of events an AWTEventListener should listen. The masks are bitwise-ORed together and passed to Toolkit.addAWTEventListener.

**Since:** 1.1 **See Also:**[Component.enableEvents(long)](http://docs.google.com/java/awt/Component.html#enableEvents(long)), [Toolkit.addAWTEventListener(java.awt.event.AWTEventListener, long)](http://docs.google.com/java/awt/Toolkit.html#addAWTEventListener(java.awt.event.AWTEventListener,%20long)), [ActionEvent](http://docs.google.com/java/awt/event/ActionEvent.html), [AdjustmentEvent](http://docs.google.com/java/awt/event/AdjustmentEvent.html), [ComponentEvent](http://docs.google.com/java/awt/event/ComponentEvent.html), [ContainerEvent](http://docs.google.com/java/awt/event/ContainerEvent.html), [FocusEvent](http://docs.google.com/java/awt/event/FocusEvent.html), [InputMethodEvent](http://docs.google.com/java/awt/event/InputMethodEvent.html), [InvocationEvent](http://docs.google.com/java/awt/event/InvocationEvent.html), [ItemEvent](http://docs.google.com/java/awt/event/ItemEvent.html), [HierarchyEvent](http://docs.google.com/java/awt/event/HierarchyEvent.html), [KeyEvent](http://docs.google.com/java/awt/event/KeyEvent.html), [MouseEvent](http://docs.google.com/java/awt/event/MouseEvent.html), [MouseWheelEvent](http://docs.google.com/java/awt/event/MouseWheelEvent.html), [PaintEvent](http://docs.google.com/java/awt/event/PaintEvent.html), [TextEvent](http://docs.google.com/java/awt/event/TextEvent.html), [WindowEvent](http://docs.google.com/java/awt/event/WindowEvent.html), [Serialized Form](http://docs.google.com/serialized-form.html#java.awt.AWTEvent)

| **Field Summary** | |
| --- | --- |
| static long | [**ACTION\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#ACTION_EVENT_MASK)            The event mask for selecting action events. |
| static long | [**ADJUSTMENT\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#ADJUSTMENT_EVENT_MASK)            The event mask for selecting adjustment events. |
| static long | [**COMPONENT\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#COMPONENT_EVENT_MASK)            The event mask for selecting component events. |
| protected  boolean | [**consumed**](http://docs.google.com/java/awt/AWTEvent.html#consumed)            Controls whether or not the event is sent back down to the peer once the source has processed it - false means it's sent to the peer; true means it's not. |
| static long | [**CONTAINER\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#CONTAINER_EVENT_MASK)            The event mask for selecting container events. |
| static long | [**FOCUS\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#FOCUS_EVENT_MASK)            The event mask for selecting focus events. |
| static long | [**HIERARCHY\_BOUNDS\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#HIERARCHY_BOUNDS_EVENT_MASK)            The event mask for selecting hierarchy bounds events. |
| static long | [**HIERARCHY\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#HIERARCHY_EVENT_MASK)            The event mask for selecting hierarchy events. |
| protected  int | [**id**](http://docs.google.com/java/awt/AWTEvent.html#id)            The event's id. |
| static long | [**INPUT\_METHOD\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#INPUT_METHOD_EVENT_MASK)            The event mask for selecting input method events. |
| static long | [**INVOCATION\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#INVOCATION_EVENT_MASK)            The event mask for selecting invocation events. |
| static long | [**ITEM\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#ITEM_EVENT_MASK)            The event mask for selecting item events. |
| static long | [**KEY\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#KEY_EVENT_MASK)            The event mask for selecting key events. |
| static long | [**MOUSE\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_EVENT_MASK)            The event mask for selecting mouse events. |
| static long | [**MOUSE\_MOTION\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_MOTION_EVENT_MASK)            The event mask for selecting mouse motion events. |
| static long | [**MOUSE\_WHEEL\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_WHEEL_EVENT_MASK)            The event mask for selecting mouse wheel events. |
| static long | [**PAINT\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#PAINT_EVENT_MASK)            The event mask for selecting paint events. |
| static int | [**RESERVED\_ID\_MAX**](http://docs.google.com/java/awt/AWTEvent.html#RESERVED_ID_MAX)            The maximum value for reserved AWT event IDs. |
| static long | [**TEXT\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#TEXT_EVENT_MASK)            The event mask for selecting text events. |
| static long | [**WINDOW\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_EVENT_MASK)            The event mask for selecting window events. |
| static long | [**WINDOW\_FOCUS\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_FOCUS_EVENT_MASK)            The event mask for selecting window focus events. |
| static long | [**WINDOW\_STATE\_EVENT\_MASK**](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_STATE_EVENT_MASK)            The event mask for selecting window state events. |

| **Fields inherited from class java.util.**[**EventObject**](http://docs.google.com/java/util/EventObject.html) |
| --- |
| [source](http://docs.google.com/java/util/EventObject.html#source) |

| **Constructor Summary** | |
| --- | --- |
| [**AWTEvent**](http://docs.google.com/java/awt/AWTEvent.html#AWTEvent(java.awt.Event))([Event](http://docs.google.com/java/awt/Event.html) event)            Constructs an AWTEvent object from the parameters of a 1.0-style event. |
| [**AWTEvent**](http://docs.google.com/java/awt/AWTEvent.html#AWTEvent(java.lang.Object,%20int))([Object](http://docs.google.com/java/lang/Object.html) source, int id)            Constructs an AWTEvent object with the specified source object and type. |

| **Method Summary** | |
| --- | --- |
| protected  void | [**consume**](http://docs.google.com/java/awt/AWTEvent.html#consume())()            Consumes this event, if this event can be consumed. |
| int | [**getID**](http://docs.google.com/java/awt/AWTEvent.html#getID())()            Returns the event type. |
| protected  boolean | [**isConsumed**](http://docs.google.com/java/awt/AWTEvent.html#isConsumed())()            Returns whether this event has been consumed. |
| [String](http://docs.google.com/java/lang/String.html) | [**paramString**](http://docs.google.com/java/awt/AWTEvent.html#paramString())()            Returns a string representing the state of this Event. |
| void | [**setSource**](http://docs.google.com/java/awt/AWTEvent.html#setSource(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) newSource)            Retargets an event to a new source. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/java/awt/AWTEvent.html#toString())()            Returns a String representation of this object. |

| **Methods inherited from class java.util.**[**EventObject**](http://docs.google.com/java/util/EventObject.html) |
| --- |
| [getSource](http://docs.google.com/java/util/EventObject.html#getSource()) |

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

### id

protected int **id**

The event's id.

**See Also:**[getID()](http://docs.google.com/java/awt/AWTEvent.html#getID()), [AWTEvent(java.lang.Object, int)](http://docs.google.com/java/awt/AWTEvent.html#AWTEvent(java.lang.Object,%20int))

### consumed

protected boolean **consumed**

Controls whether or not the event is sent back down to the peer once the source has processed it - false means it's sent to the peer; true means it's not. Semantic events always have a 'true' value since they were generated by the peer in response to a low-level event.

**See Also:**[consume()](http://docs.google.com/java/awt/AWTEvent.html#consume()), [isConsumed()](http://docs.google.com/java/awt/AWTEvent.html#isConsumed())

### COMPONENT\_EVENT\_MASK

public static final long **COMPONENT\_EVENT\_MASK**

The event mask for selecting component events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.COMPONENT_EVENT_MASK)

### CONTAINER\_EVENT\_MASK

public static final long **CONTAINER\_EVENT\_MASK**

The event mask for selecting container events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.CONTAINER_EVENT_MASK)

### FOCUS\_EVENT\_MASK

public static final long **FOCUS\_EVENT\_MASK**

The event mask for selecting focus events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.FOCUS_EVENT_MASK)

### KEY\_EVENT\_MASK

public static final long **KEY\_EVENT\_MASK**

The event mask for selecting key events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.KEY_EVENT_MASK)

### MOUSE\_EVENT\_MASK

public static final long **MOUSE\_EVENT\_MASK**

The event mask for selecting mouse events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.MOUSE_EVENT_MASK)

### MOUSE\_MOTION\_EVENT\_MASK

public static final long **MOUSE\_MOTION\_EVENT\_MASK**

The event mask for selecting mouse motion events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.MOUSE_MOTION_EVENT_MASK)

### WINDOW\_EVENT\_MASK

public static final long **WINDOW\_EVENT\_MASK**

The event mask for selecting window events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.WINDOW_EVENT_MASK)

### ACTION\_EVENT\_MASK

public static final long **ACTION\_EVENT\_MASK**

The event mask for selecting action events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.ACTION_EVENT_MASK)

### ADJUSTMENT\_EVENT\_MASK

public static final long **ADJUSTMENT\_EVENT\_MASK**

The event mask for selecting adjustment events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.ADJUSTMENT_EVENT_MASK)

### ITEM\_EVENT\_MASK

public static final long **ITEM\_EVENT\_MASK**

The event mask for selecting item events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.ITEM_EVENT_MASK)

### TEXT\_EVENT\_MASK

public static final long **TEXT\_EVENT\_MASK**

The event mask for selecting text events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.TEXT_EVENT_MASK)

### INPUT\_METHOD\_EVENT\_MASK

public static final long **INPUT\_METHOD\_EVENT\_MASK**

The event mask for selecting input method events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.INPUT_METHOD_EVENT_MASK)

### PAINT\_EVENT\_MASK

public static final long **PAINT\_EVENT\_MASK**

The event mask for selecting paint events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.PAINT_EVENT_MASK)

### INVOCATION\_EVENT\_MASK

public static final long **INVOCATION\_EVENT\_MASK**

The event mask for selecting invocation events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.INVOCATION_EVENT_MASK)

### HIERARCHY\_EVENT\_MASK

public static final long **HIERARCHY\_EVENT\_MASK**

The event mask for selecting hierarchy events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.HIERARCHY_EVENT_MASK)

### HIERARCHY\_BOUNDS\_EVENT\_MASK

public static final long **HIERARCHY\_BOUNDS\_EVENT\_MASK**

The event mask for selecting hierarchy bounds events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.HIERARCHY_BOUNDS_EVENT_MASK)

### MOUSE\_WHEEL\_EVENT\_MASK

public static final long **MOUSE\_WHEEL\_EVENT\_MASK**

The event mask for selecting mouse wheel events.

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.MOUSE_WHEEL_EVENT_MASK)

### WINDOW\_STATE\_EVENT\_MASK

public static final long **WINDOW\_STATE\_EVENT\_MASK**

The event mask for selecting window state events.

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.WINDOW_STATE_EVENT_MASK)

### WINDOW\_FOCUS\_EVENT\_MASK

public static final long **WINDOW\_FOCUS\_EVENT\_MASK**

The event mask for selecting window focus events.

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.WINDOW_FOCUS_EVENT_MASK)

### RESERVED\_ID\_MAX

public static final int **RESERVED\_ID\_MAX**

The maximum value for reserved AWT event IDs. Programs defining their own event IDs should use IDs greater than this value.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.AWTEvent.RESERVED_ID_MAX)

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

### AWTEvent

public **AWTEvent**([Event](http://docs.google.com/java/awt/Event.html) event)

Constructs an AWTEvent object from the parameters of a 1.0-style event.

**Parameters:**event - the old-style event

### AWTEvent

public **AWTEvent**([Object](http://docs.google.com/java/lang/Object.html) source,  
 int id)

Constructs an AWTEvent object with the specified source object and type.

**Parameters:**source - the object where the event originatedid - the event type

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

### setSource

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

Retargets an event to a new source. This method is typically used to retarget an event to a lightweight child Component of the original heavyweight source.

This method is intended to be used only by event targeting subsystems, such as client-defined KeyboardFocusManagers. It is not for general client use.

**Parameters:**newSource - the new Object to which the event should be dispatched**Since:** 1.4

### getID

public int **getID**()

Returns the event type.

### toString

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

Returns a String representation of this object.

**Overrides:**[toString](http://docs.google.com/java/util/EventObject.html#toString()) in class [EventObject](http://docs.google.com/java/util/EventObject.html) **Returns:**A a String representation of this EventObject.

### paramString

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

Returns a string representing the state of this Event. This method is intended to be used only for debugging purposes, and the content and format of the returned string may vary between implementations. The returned string may be empty but may not be null.

**Returns:**a string representation of this event

### consume

protected void **consume**()

Consumes this event, if this event can be consumed. Only low-level, system events can be consumed

### isConsumed

protected boolean **isConsumed**()

Returns whether this event has been consumed.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AWTEvent.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/java/awt/AWTError.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/AWTEventMulticaster.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/AWTEvent.html)    [**NO FRAMES**](http://docs.google.com/AWTEvent.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#2s8eyo1) | [CONSTR](#3o7alnk) | [METHOD](#32hioqz) |

[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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