| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ContainerEvent.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/event/ContainerAdapter.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/event/ContainerListener.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/event/ContainerEvent.html)    [**NO FRAMES**](http://docs.google.com/ContainerEvent.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#1t3h5sf) | [METHOD](#4d34og8) | DETAIL: [FIELD](#lnxbz9) | [CONSTR](#z337ya) | [METHOD](#1y810tw) |

## **java.awt.event**

Class ContainerEvent

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

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html)

public class **ContainerEvent**extends [ComponentEvent](http://docs.google.com/java/awt/event/ComponentEvent.html)

A low-level event which indicates that a container's contents changed because a component was added or removed.

Container events are provided for notification purposes ONLY; The AWT will automatically handle changes to the containers contents internally so that the program works properly regardless of whether the program is receiving these events or not.

This low-level event is generated by a container object (such as a Panel) when a component is added to it or removed from it. The event is passed to every ContainerListener or ContainerAdapter object which registered to receive such events using the component's addContainerListener method. (ContainerAdapter objects implement the ContainerListener interface.) Each such listener object gets this ContainerEvent when the event occurs.

**Since:** 1.1 **See Also:**[ContainerAdapter](http://docs.google.com/java/awt/event/ContainerAdapter.html), [ContainerListener](http://docs.google.com/java/awt/event/ContainerListener.html), [Tutorial: Writing a Container Listener](http://java.sun.com/docs/books/tutorial/post1.0/ui/containerlistener.html), [Serialized Form](http://docs.google.com/serialized-form.html#java.awt.event.ContainerEvent)

| **Field Summary** | |
| --- | --- |
| static int | [**COMPONENT\_ADDED**](http://docs.google.com/java/awt/event/ContainerEvent.html#COMPONENT_ADDED)            This event indicates that a component was added to the container. |
| static int | [**COMPONENT\_REMOVED**](http://docs.google.com/java/awt/event/ContainerEvent.html#COMPONENT_REMOVED)            This event indicates that a component was removed from the container. |
| static int | [**CONTAINER\_FIRST**](http://docs.google.com/java/awt/event/ContainerEvent.html#CONTAINER_FIRST)            The first number in the range of ids used for container events. |
| static int | [**CONTAINER\_LAST**](http://docs.google.com/java/awt/event/ContainerEvent.html#CONTAINER_LAST)            The last number in the range of ids used for container events. |

| **Fields inherited from class java.awt.event.**[**ComponentEvent**](http://docs.google.com/java/awt/event/ComponentEvent.html) |
| --- |
| [COMPONENT\_FIRST](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_FIRST), [COMPONENT\_HIDDEN](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_HIDDEN), [COMPONENT\_LAST](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_LAST), [COMPONENT\_MOVED](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_MOVED), [COMPONENT\_RESIZED](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_RESIZED), [COMPONENT\_SHOWN](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_SHOWN) |

| **Fields inherited from class java.awt.**[**AWTEvent**](http://docs.google.com/java/awt/AWTEvent.html) |
| --- |
| [ACTION\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#ACTION_EVENT_MASK), [ADJUSTMENT\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#ADJUSTMENT_EVENT_MASK), [COMPONENT\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#COMPONENT_EVENT_MASK), [consumed](http://docs.google.com/java/awt/AWTEvent.html#consumed), [CONTAINER\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#CONTAINER_EVENT_MASK), [FOCUS\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#FOCUS_EVENT_MASK), [HIERARCHY\_BOUNDS\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#HIERARCHY_BOUNDS_EVENT_MASK), [HIERARCHY\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#HIERARCHY_EVENT_MASK), [id](http://docs.google.com/java/awt/AWTEvent.html#id), [INPUT\_METHOD\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#INPUT_METHOD_EVENT_MASK), [INVOCATION\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#INVOCATION_EVENT_MASK), [ITEM\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#ITEM_EVENT_MASK), [KEY\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#KEY_EVENT_MASK), [MOUSE\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_EVENT_MASK), [MOUSE\_MOTION\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_MOTION_EVENT_MASK), [MOUSE\_WHEEL\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_WHEEL_EVENT_MASK), [PAINT\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#PAINT_EVENT_MASK), [RESERVED\_ID\_MAX](http://docs.google.com/java/awt/AWTEvent.html#RESERVED_ID_MAX), [TEXT\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#TEXT_EVENT_MASK), [WINDOW\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_EVENT_MASK), [WINDOW\_FOCUS\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_FOCUS_EVENT_MASK), [WINDOW\_STATE\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_STATE_EVENT_MASK) |

| **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** | |
| --- | --- |
| [**ContainerEvent**](http://docs.google.com/java/awt/event/ContainerEvent.html#ContainerEvent(java.awt.Component,%20int,%20java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) source, int id, [Component](http://docs.google.com/java/awt/Component.html) child)            Constructs a ContainerEvent object. |

| **Method Summary** | |
| --- | --- |
| [Component](http://docs.google.com/java/awt/Component.html) | [**getChild**](http://docs.google.com/java/awt/event/ContainerEvent.html#getChild())()            Returns the component that was affected by the event. |
| [Container](http://docs.google.com/java/awt/Container.html) | [**getContainer**](http://docs.google.com/java/awt/event/ContainerEvent.html#getContainer())()            Returns the originator of the event. |
| [String](http://docs.google.com/java/lang/String.html) | [**paramString**](http://docs.google.com/java/awt/event/ContainerEvent.html#paramString())()            Returns a parameter string identifying this event. |

| **Methods inherited from class java.awt.event.**[**ComponentEvent**](http://docs.google.com/java/awt/event/ComponentEvent.html) |
| --- |
| [getComponent](http://docs.google.com/java/awt/event/ComponentEvent.html#getComponent()) |

| **Methods inherited from class java.awt.**[**AWTEvent**](http://docs.google.com/java/awt/AWTEvent.html) |
| --- |
| [consume](http://docs.google.com/java/awt/AWTEvent.html#consume()), [getID](http://docs.google.com/java/awt/AWTEvent.html#getID()), [isConsumed](http://docs.google.com/java/awt/AWTEvent.html#isConsumed()), [setSource](http://docs.google.com/java/awt/AWTEvent.html#setSource(java.lang.Object)), [toString](http://docs.google.com/java/awt/AWTEvent.html#toString()) |

| **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** |
| --- |

### CONTAINER\_FIRST

public static final int **CONTAINER\_FIRST**

The first number in the range of ids used for container events.

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

### CONTAINER\_LAST

public static final int **CONTAINER\_LAST**

The last number in the range of ids used for container events.

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

### COMPONENT\_ADDED

public static final int **COMPONENT\_ADDED**

This event indicates that a component was added to the container.

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

### COMPONENT\_REMOVED

public static final int **COMPONENT\_REMOVED**

This event indicates that a component was removed from the container.

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

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

### ContainerEvent

public **ContainerEvent**([Component](http://docs.google.com/java/awt/Component.html) source,  
 int id,  
 [Component](http://docs.google.com/java/awt/Component.html) child)

Constructs a ContainerEvent object.

Note that passing in an invalid id results in unspecified behavior. This method throws an IllegalArgumentException if source is null.

**Parameters:**source - the Component object (container) that originated the eventid - an integer indicating the type of eventchild - the component that was added or removed **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if source is null

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

### getContainer

public [Container](http://docs.google.com/java/awt/Container.html) **getContainer**()

Returns the originator of the event.

**Returns:**the Container object that originated the event, or null if the object is not a Container.

### getChild

public [Component](http://docs.google.com/java/awt/Component.html) **getChild**()

Returns the component that was affected by the event.

**Returns:**the Component object that was added or removed

### paramString

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

Returns a parameter string identifying this event. This method is useful for event-logging and for debugging.

**Overrides:**[paramString](http://docs.google.com/java/awt/event/ComponentEvent.html#paramString()) in class [ComponentEvent](http://docs.google.com/java/awt/event/ComponentEvent.html) **Returns:**a string identifying the event and its attributes

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ContainerEvent.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/event/ContainerAdapter.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/event/ContainerListener.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/event/ContainerEvent.html)    [**NO FRAMES**](http://docs.google.com/ContainerEvent.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#1t3h5sf) | [METHOD](#4d34og8) | DETAIL: [FIELD](#lnxbz9) | [CONSTR](#z337ya) | [METHOD](#1y810tw) |

[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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