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

## **java.awt.event**

Class ContainerAdapter

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **java.awt.event.ContainerAdapter**

**All Implemented Interfaces:** [ContainerListener](http://docs.google.com/java/awt/event/ContainerListener.html), [EventListener](http://docs.google.com/java/util/EventListener.html)

public abstract class **ContainerAdapter**extends [Object](http://docs.google.com/java/lang/Object.html)implements [ContainerListener](http://docs.google.com/java/awt/event/ContainerListener.html)

An abstract adapter class for receiving container events. The methods in this class are empty. This class exists as convenience for creating listener objects.

Extend this class to create a ContainerEvent listener and override the methods for the events of interest. (If you implement the ContainerListener interface, you have to define all of the methods in it. This abstract class defines null methods for them all, so you can only have to define methods for events you care about.)

Create a listener object using the extended class and then register it with a component using the component's addContainerListener method. When the container's contents change because a component has been added or removed, the relevant method in the listener object is invoked, and the ContainerEvent is passed to it.

**Since:** 1.1 **See Also:**[ContainerEvent](http://docs.google.com/java/awt/event/ContainerEvent.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)

| **Constructor Summary** | |
| --- | --- |
| [**ContainerAdapter**](http://docs.google.com/java/awt/event/ContainerAdapter.html#ContainerAdapter())() |

| **Method Summary** | |
| --- | --- |
| void | [**componentAdded**](http://docs.google.com/java/awt/event/ContainerAdapter.html#componentAdded(java.awt.event.ContainerEvent))([ContainerEvent](http://docs.google.com/java/awt/event/ContainerEvent.html) e)            Invoked when a component has been added to the container. |
| void | [**componentRemoved**](http://docs.google.com/java/awt/event/ContainerAdapter.html#componentRemoved(java.awt.event.ContainerEvent))([ContainerEvent](http://docs.google.com/java/awt/event/ContainerEvent.html) e)            Invoked when a component has been removed from the container. |

| **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** |
| --- |

### ContainerAdapter

public **ContainerAdapter**()

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

### componentAdded

public void **componentAdded**([ContainerEvent](http://docs.google.com/java/awt/event/ContainerEvent.html) e)

Invoked when a component has been added to the container.

**Specified by:**[componentAdded](http://docs.google.com/java/awt/event/ContainerListener.html#componentAdded(java.awt.event.ContainerEvent)) in interface [ContainerListener](http://docs.google.com/java/awt/event/ContainerListener.html)

### componentRemoved

public void **componentRemoved**([ContainerEvent](http://docs.google.com/java/awt/event/ContainerEvent.html) e)

Invoked when a component has been removed from the container.

**Specified by:**[componentRemoved](http://docs.google.com/java/awt/event/ContainerListener.html#componentRemoved(java.awt.event.ContainerEvent)) in interface [ContainerListener](http://docs.google.com/java/awt/event/ContainerListener.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/ContainerAdapter.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/ComponentListener.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/event/ContainerEvent.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/event/ContainerAdapter.html)    [**NO FRAMES**](http://docs.google.com/ContainerAdapter.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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