| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AbstractAction.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   [**NEXT CLASS**](http://docs.google.com/javax/swing/AbstractButton.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/AbstractAction.html)    [**NO FRAMES**](http://docs.google.com/AbstractAction.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#2s8eyo1) | [CONSTR](#26in1rg) | [METHOD](#44sinio) |

## **javax.swing**

Class AbstractAction

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

**All Implemented Interfaces:** [ActionListener](http://docs.google.com/java/awt/event/ActionListener.html), [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [EventListener](http://docs.google.com/java/util/EventListener.html), [Action](http://docs.google.com/javax/swing/Action.html) **Direct Known Subclasses:** [BasicDesktopPaneUI.CloseAction](http://docs.google.com/javax/swing/plaf/basic/BasicDesktopPaneUI.CloseAction.html), [BasicDesktopPaneUI.MaximizeAction](http://docs.google.com/javax/swing/plaf/basic/BasicDesktopPaneUI.MaximizeAction.html), [BasicDesktopPaneUI.MinimizeAction](http://docs.google.com/javax/swing/plaf/basic/BasicDesktopPaneUI.MinimizeAction.html), [BasicDesktopPaneUI.NavigateAction](http://docs.google.com/javax/swing/plaf/basic/BasicDesktopPaneUI.NavigateAction.html), [BasicDesktopPaneUI.OpenAction](http://docs.google.com/javax/swing/plaf/basic/BasicDesktopPaneUI.OpenAction.html), [BasicFileChooserUI.ApproveSelectionAction](http://docs.google.com/javax/swing/plaf/basic/BasicFileChooserUI.ApproveSelectionAction.html), [BasicFileChooserUI.CancelSelectionAction](http://docs.google.com/javax/swing/plaf/basic/BasicFileChooserUI.CancelSelectionAction.html), [BasicFileChooserUI.ChangeToParentDirectoryAction](http://docs.google.com/javax/swing/plaf/basic/BasicFileChooserUI.ChangeToParentDirectoryAction.html), [BasicFileChooserUI.GoHomeAction](http://docs.google.com/javax/swing/plaf/basic/BasicFileChooserUI.GoHomeAction.html), [BasicFileChooserUI.NewFolderAction](http://docs.google.com/javax/swing/plaf/basic/BasicFileChooserUI.NewFolderAction.html), [BasicFileChooserUI.UpdateAction](http://docs.google.com/javax/swing/plaf/basic/BasicFileChooserUI.UpdateAction.html), [BasicInternalFrameTitlePane.CloseAction](http://docs.google.com/javax/swing/plaf/basic/BasicInternalFrameTitlePane.CloseAction.html), [BasicInternalFrameTitlePane.IconifyAction](http://docs.google.com/javax/swing/plaf/basic/BasicInternalFrameTitlePane.IconifyAction.html), [BasicInternalFrameTitlePane.MaximizeAction](http://docs.google.com/javax/swing/plaf/basic/BasicInternalFrameTitlePane.MaximizeAction.html), [BasicInternalFrameTitlePane.MoveAction](http://docs.google.com/javax/swing/plaf/basic/BasicInternalFrameTitlePane.MoveAction.html), [BasicInternalFrameTitlePane.RestoreAction](http://docs.google.com/javax/swing/plaf/basic/BasicInternalFrameTitlePane.RestoreAction.html), [BasicInternalFrameTitlePane.SizeAction](http://docs.google.com/javax/swing/plaf/basic/BasicInternalFrameTitlePane.SizeAction.html), [BasicSliderUI.ActionScroller](http://docs.google.com/javax/swing/plaf/basic/BasicSliderUI.ActionScroller.html), [BasicTreeUI.TreeCancelEditingAction](http://docs.google.com/javax/swing/plaf/basic/BasicTreeUI.TreeCancelEditingAction.html), [BasicTreeUI.TreeHomeAction](http://docs.google.com/javax/swing/plaf/basic/BasicTreeUI.TreeHomeAction.html), [BasicTreeUI.TreeIncrementAction](http://docs.google.com/javax/swing/plaf/basic/BasicTreeUI.TreeIncrementAction.html), [BasicTreeUI.TreePageAction](http://docs.google.com/javax/swing/plaf/basic/BasicTreeUI.TreePageAction.html), [BasicTreeUI.TreeToggleAction](http://docs.google.com/javax/swing/plaf/basic/BasicTreeUI.TreeToggleAction.html), [BasicTreeUI.TreeTraverseAction](http://docs.google.com/javax/swing/plaf/basic/BasicTreeUI.TreeTraverseAction.html), [MetalFileChooserUI.DirectoryComboBoxAction](http://docs.google.com/javax/swing/plaf/metal/MetalFileChooserUI.DirectoryComboBoxAction.html), [TextAction](http://docs.google.com/javax/swing/text/TextAction.html)

public abstract class **AbstractAction**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Action](http://docs.google.com/javax/swing/Action.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html), [Serializable](http://docs.google.com/java/io/Serializable.html)

This class provides default implementations for the JFC Action interface. Standard behaviors like the get and set methods for Action object properties (icon, text, and enabled) are defined here. The developer need only subclass this abstract class and define the actionPerformed method.

**Warning:** Serialized objects of this class will not be compatible with future Swing releases. The current serialization support is appropriate for short term storage or RMI between applications running the same version of Swing. As of 1.4, support for long term storage of all JavaBeansTM has been added to the java.beans package. Please see [XMLEncoder](http://docs.google.com/java/beans/XMLEncoder.html).

**See Also:**[Action](http://docs.google.com/javax/swing/Action.html)

| **Field Summary** | |
| --- | --- |
| protected  [SwingPropertyChangeSupport](http://docs.google.com/javax/swing/event/SwingPropertyChangeSupport.html) | [**changeSupport**](http://docs.google.com/javax/swing/AbstractAction.html#changeSupport)            If any PropertyChangeListeners have been registered, the changeSupport field describes them. |
| protected  boolean | [**enabled**](http://docs.google.com/javax/swing/AbstractAction.html#enabled)            Specifies whether action is enabled; the default is true. |

| **Fields inherited from interface javax.swing.**[**Action**](http://docs.google.com/javax/swing/Action.html) |
| --- |
| [ACCELERATOR\_KEY](http://docs.google.com/javax/swing/Action.html#ACCELERATOR_KEY), [ACTION\_COMMAND\_KEY](http://docs.google.com/javax/swing/Action.html#ACTION_COMMAND_KEY), [DEFAULT](http://docs.google.com/javax/swing/Action.html#DEFAULT), [DISPLAYED\_MNEMONIC\_INDEX\_KEY](http://docs.google.com/javax/swing/Action.html#DISPLAYED_MNEMONIC_INDEX_KEY), [LARGE\_ICON\_KEY](http://docs.google.com/javax/swing/Action.html#LARGE_ICON_KEY), [LONG\_DESCRIPTION](http://docs.google.com/javax/swing/Action.html#LONG_DESCRIPTION), [MNEMONIC\_KEY](http://docs.google.com/javax/swing/Action.html#MNEMONIC_KEY), [NAME](http://docs.google.com/javax/swing/Action.html#NAME), [SELECTED\_KEY](http://docs.google.com/javax/swing/Action.html#SELECTED_KEY), [SHORT\_DESCRIPTION](http://docs.google.com/javax/swing/Action.html#SHORT_DESCRIPTION), [SMALL\_ICON](http://docs.google.com/javax/swing/Action.html#SMALL_ICON) |

| **Constructor Summary** | |
| --- | --- |
| [**AbstractAction**](http://docs.google.com/javax/swing/AbstractAction.html#AbstractAction())()            Defines an Action object with a default description string and default icon. |
| [**AbstractAction**](http://docs.google.com/javax/swing/AbstractAction.html#AbstractAction(java.lang.String))([String](http://docs.google.com/java/lang/String.html) name)            Defines an Action object with the specified description string and a default icon. |
| [**AbstractAction**](http://docs.google.com/javax/swing/AbstractAction.html#AbstractAction(java.lang.String,%20javax.swing.Icon))([String](http://docs.google.com/java/lang/String.html) name, [Icon](http://docs.google.com/javax/swing/Icon.html) icon)            Defines an Action object with the specified description string and a the specified icon. |

| **Method Summary** | |
| --- | --- |
| void | [**addPropertyChangeListener**](http://docs.google.com/javax/swing/AbstractAction.html#addPropertyChangeListener(java.beans.PropertyChangeListener))([PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html) listener)            Adds a PropertyChangeListener to the listener list. |
| protected  [Object](http://docs.google.com/java/lang/Object.html) | [**clone**](http://docs.google.com/javax/swing/AbstractAction.html#clone())()            Clones the abstract action. |
| protected  void | [**firePropertyChange**](http://docs.google.com/javax/swing/AbstractAction.html#firePropertyChange(java.lang.String,%20java.lang.Object,%20java.lang.Object))([String](http://docs.google.com/java/lang/String.html) propertyName, [Object](http://docs.google.com/java/lang/Object.html) oldValue, [Object](http://docs.google.com/java/lang/Object.html) newValue)            Supports reporting bound property changes. |
| [Object](http://docs.google.com/java/lang/Object.html)[] | [**getKeys**](http://docs.google.com/javax/swing/AbstractAction.html#getKeys())()            Returns an array of Objects which are keys for which values have been set for this AbstractAction, or null if no keys have values set. |
| [PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html)[] | [**getPropertyChangeListeners**](http://docs.google.com/javax/swing/AbstractAction.html#getPropertyChangeListeners())()            Returns an array of all the PropertyChangeListeners added to this AbstractAction with addPropertyChangeListener(). |
| [Object](http://docs.google.com/java/lang/Object.html) | [**getValue**](http://docs.google.com/javax/swing/AbstractAction.html#getValue(java.lang.String))([String](http://docs.google.com/java/lang/String.html) key)            Gets the Object associated with the specified key. |
| boolean | [**isEnabled**](http://docs.google.com/javax/swing/AbstractAction.html#isEnabled())()            Returns true if the action is enabled. |
| void | [**putValue**](http://docs.google.com/javax/swing/AbstractAction.html#putValue(java.lang.String,%20java.lang.Object))([String](http://docs.google.com/java/lang/String.html) key, [Object](http://docs.google.com/java/lang/Object.html) newValue)            Sets the Value associated with the specified key. |
| void | [**removePropertyChangeListener**](http://docs.google.com/javax/swing/AbstractAction.html#removePropertyChangeListener(java.beans.PropertyChangeListener))([PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html) listener)            Removes a PropertyChangeListener from the listener list. |
| void | [**setEnabled**](http://docs.google.com/javax/swing/AbstractAction.html#setEnabled(boolean))(boolean newValue)            Enables or disables the action. |

| **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()), [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)) |

| **Methods inherited from interface java.awt.event.**[**ActionListener**](http://docs.google.com/java/awt/event/ActionListener.html) |
| --- |
| [actionPerformed](http://docs.google.com/java/awt/event/ActionListener.html#actionPerformed(java.awt.event.ActionEvent)) |

| **Field Detail** |
| --- |

### enabled

protected boolean **enabled**

Specifies whether action is enabled; the default is true.

### changeSupport

protected [SwingPropertyChangeSupport](http://docs.google.com/javax/swing/event/SwingPropertyChangeSupport.html) **changeSupport**

If any PropertyChangeListeners have been registered, the changeSupport field describes them.

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

### AbstractAction

public **AbstractAction**()

Defines an Action object with a default description string and default icon.

### AbstractAction

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

Defines an Action object with the specified description string and a default icon.

### AbstractAction

public **AbstractAction**([String](http://docs.google.com/java/lang/String.html) name,  
 [Icon](http://docs.google.com/javax/swing/Icon.html) icon)

Defines an Action object with the specified description string and a the specified icon.

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

### getValue

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

Gets the Object associated with the specified key.

**Specified by:**[getValue](http://docs.google.com/javax/swing/Action.html#getValue(java.lang.String)) in interface [Action](http://docs.google.com/javax/swing/Action.html) **Parameters:**key - a string containing the specified key **Returns:**the binding Object stored with this key; if there are no keys, it will return null**See Also:**[Action.getValue(java.lang.String)](http://docs.google.com/javax/swing/Action.html#getValue(java.lang.String))

### putValue

public void **putValue**([String](http://docs.google.com/java/lang/String.html) key,  
 [Object](http://docs.google.com/java/lang/Object.html) newValue)

Sets the Value associated with the specified key.

**Specified by:**[putValue](http://docs.google.com/javax/swing/Action.html#putValue(java.lang.String,%20java.lang.Object)) in interface [Action](http://docs.google.com/javax/swing/Action.html) **Parameters:**key - the String that identifies the stored objectnewValue - the Object to store using this key**See Also:**[Action.putValue(java.lang.String, java.lang.Object)](http://docs.google.com/javax/swing/Action.html#putValue(java.lang.String,%20java.lang.Object))

### isEnabled

public boolean **isEnabled**()

Returns true if the action is enabled.

**Specified by:**[isEnabled](http://docs.google.com/javax/swing/Action.html#isEnabled()) in interface [Action](http://docs.google.com/javax/swing/Action.html) **Returns:**true if the action is enabled, false otherwise**See Also:**[Action.isEnabled()](http://docs.google.com/javax/swing/Action.html#isEnabled())

### setEnabled

public void **setEnabled**(boolean newValue)

Enables or disables the action.

**Specified by:**[setEnabled](http://docs.google.com/javax/swing/Action.html#setEnabled(boolean)) in interface [Action](http://docs.google.com/javax/swing/Action.html) **Parameters:**newValue - true to enable the action, false to disable it**See Also:**[Action.setEnabled(boolean)](http://docs.google.com/javax/swing/Action.html#setEnabled(boolean))

### getKeys

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

Returns an array of Objects which are keys for which values have been set for this AbstractAction, or null if no keys have values set.

**Returns:**an array of key objects, or null if no keys have values set**Since:** 1.3

### firePropertyChange

protected void **firePropertyChange**([String](http://docs.google.com/java/lang/String.html) propertyName,  
 [Object](http://docs.google.com/java/lang/Object.html) oldValue,  
 [Object](http://docs.google.com/java/lang/Object.html) newValue)

Supports reporting bound property changes. This method can be called when a bound property has changed and it will send the appropriate PropertyChangeEvent to any registered PropertyChangeListeners.

### addPropertyChangeListener

public void **addPropertyChangeListener**([PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html) listener)

Adds a PropertyChangeListener to the listener list. The listener is registered for all properties.

A PropertyChangeEvent will get fired in response to setting a bound property, e.g. setFont, setBackground, or setForeground. Note that if the current component is inheriting its foreground, background, or font from its container, then no event will be fired in response to a change in the inherited property.

**Specified by:**[addPropertyChangeListener](http://docs.google.com/javax/swing/Action.html#addPropertyChangeListener(java.beans.PropertyChangeListener)) in interface [Action](http://docs.google.com/javax/swing/Action.html) **Parameters:**listener - The PropertyChangeListener to be added**See Also:**[Action.addPropertyChangeListener(java.beans.PropertyChangeListener)](http://docs.google.com/javax/swing/Action.html#addPropertyChangeListener(java.beans.PropertyChangeListener))

### removePropertyChangeListener

public void **removePropertyChangeListener**([PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html) listener)

Removes a PropertyChangeListener from the listener list. This removes a PropertyChangeListener that was registered for all properties.

**Specified by:**[removePropertyChangeListener](http://docs.google.com/javax/swing/Action.html#removePropertyChangeListener(java.beans.PropertyChangeListener)) in interface [Action](http://docs.google.com/javax/swing/Action.html) **Parameters:**listener - the PropertyChangeListener to be removed**See Also:**[Action.removePropertyChangeListener(java.beans.PropertyChangeListener)](http://docs.google.com/javax/swing/Action.html#removePropertyChangeListener(java.beans.PropertyChangeListener))

### getPropertyChangeListeners

public [PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html)[] **getPropertyChangeListeners**()

Returns an array of all the PropertyChangeListeners added to this AbstractAction with addPropertyChangeListener().

**Returns:**all of the PropertyChangeListeners added or an empty array if no listeners have been added**Since:** 1.4

### clone

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

Clones the abstract action. This gives the clone its own copy of the key/value list, which is not handled for you by Object.clone().

**Overrides:**[clone](http://docs.google.com/java/lang/Object.html#clone()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a clone of this instance. **Throws:** [CloneNotSupportedException](http://docs.google.com/java/lang/CloneNotSupportedException.html) - if the object's class does not support the Cloneable interface. Subclasses that override the clone method can also throw this exception to indicate that an instance cannot be cloned.**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/AbstractAction.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   [**NEXT CLASS**](http://docs.google.com/javax/swing/AbstractButton.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/AbstractAction.html)    [**NO FRAMES**](http://docs.google.com/AbstractAction.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#2s8eyo1) | [CONSTR](#26in1rg) | [METHOD](#44sinio) |

[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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