| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | Class | **Use** | [**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*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/beans/package-use.html)    [**NO FRAMES**](http://docs.google.com/package-use.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Package**

**java.beans**

| Packages that use [java.beans](http://docs.google.com/java/beans/package-summary.html) | |
| --- | --- |
| [**java.awt**](#3znysh7) | Contains all of the classes for creating user interfaces and for painting graphics and images. |
| [**java.beans**](#2et92p0) | Contains classes related to developing *beans* -- components based on the JavaBeansTM architecture. |
| [**java.beans.beancontext**](#tyjcwt) | Provides classes and interfaces relating to bean context. |
| [**java.lang.management**](#3dy6vkm) | Provides the management interface for monitoring and management of the Java virtual machine as well as the operating system on which the Java virtual machine is running. |
| [**java.util.jar**](#1t3h5sf) | Provides classes for reading and writing the JAR (Java ARchive) file format, which is based on the standard ZIP file format with an optional manifest file. |
| [**java.util.logging**](#4d34og8) | Provides the classes and interfaces of the JavaTM 2 platform's core logging facilities. |
| [**javax.accessibility**](#2s8eyo1) | Defines a contract between user-interface components and an assistive technology that provides access to those components. |
| [**javax.swing**](#17dp8vu) | Provides a set of "lightweight" (all-Java language) components that, to the maximum degree possible, work the same on all platforms. |
| [**javax.swing.event**](#3rdcrjn) | Provides for events fired by Swing components. |
| [**javax.swing.plaf.basic**](#26in1rg) | Provides user interface objects built according to the Basic look and feel. |
| [**javax.swing.plaf.metal**](#lnxbz9) | Provides user interface objects built according to the Java look and feel (once codenamed *Metal*), which is the default look and feel. |
| [**javax.swing.table**](#35nkun2) | Provides classes and interfaces for dealing with javax.swing.JTable. |
| [**javax.swing.tree**](#1ksv4uv) | Provides classes and interfaces for dealing with javax.swing.JTree. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [java.awt](http://docs.google.com/java/awt/package-summary.html) | |
| --- | --- |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#java.awt)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |
| [**PropertyChangeSupport**](http://docs.google.com/java/beans/class-use/PropertyChangeSupport.html#java.awt)            This is a utility class that can be used by beans that support bound properties. |
| [**PropertyVetoException**](http://docs.google.com/java/beans/class-use/PropertyVetoException.html#java.awt)            A PropertyVetoException is thrown when a proposed change to a property represents an unacceptable value. |
| [**VetoableChangeListener**](http://docs.google.com/java/beans/class-use/VetoableChangeListener.html#java.awt)            A VetoableChange event gets fired whenever a bean changes a "constrained" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [java.beans](http://docs.google.com/java/beans/package-summary.html) | |
| --- | --- |
| [**AppletInitializer**](http://docs.google.com/java/beans/class-use/AppletInitializer.html#java.beans)             This interface is designed to work in collusion with java.beans.Beans.instantiate. |
| [**BeanDescriptor**](http://docs.google.com/java/beans/class-use/BeanDescriptor.html#java.beans)            A BeanDescriptor provides global information about a "bean", including its Java class, its displayName, etc. |
| [**BeanInfo**](http://docs.google.com/java/beans/class-use/BeanInfo.html#java.beans)            A bean implementor who wishes to provide explicit information about their bean may provide a BeanInfo class that implements this BeanInfo interface and provides explicit information about the methods, properties, events, etc, of their bean. |
| [**Encoder**](http://docs.google.com/java/beans/class-use/Encoder.html#java.beans)            An Encoder is a class which can be used to create files or streams that encode the state of a collection of JavaBeans in terms of their public APIs. |
| [**EventSetDescriptor**](http://docs.google.com/java/beans/class-use/EventSetDescriptor.html#java.beans)            An EventSetDescriptor describes a group of events that a given Java bean fires. |
| [**ExceptionListener**](http://docs.google.com/java/beans/class-use/ExceptionListener.html#java.beans)            An ExceptionListener is notified of internal exceptions. |
| [**Expression**](http://docs.google.com/java/beans/class-use/Expression.html#java.beans)            An Expression object represents a primitive expression in which a single method is applied to a target and a set of arguments to return a result - as in "a.getFoo()". |
| [**FeatureDescriptor**](http://docs.google.com/java/beans/class-use/FeatureDescriptor.html#java.beans)            The FeatureDescriptor class is the common baseclass for PropertyDescriptor, EventSetDescriptor, and MethodDescriptor, etc. |
| [**IntrospectionException**](http://docs.google.com/java/beans/class-use/IntrospectionException.html#java.beans)            Thrown when an exception happens during Introspection. |
| [**MethodDescriptor**](http://docs.google.com/java/beans/class-use/MethodDescriptor.html#java.beans)            A MethodDescriptor describes a particular method that a Java Bean supports for external access from other components. |
| [**ParameterDescriptor**](http://docs.google.com/java/beans/class-use/ParameterDescriptor.html#java.beans)            The ParameterDescriptor class allows bean implementors to provide additional information on each of their parameters, beyond the low level type information provided by the java.lang.reflect.Method class. |
| [**PersistenceDelegate**](http://docs.google.com/java/beans/class-use/PersistenceDelegate.html#java.beans)            The PersistenceDelegate class takes the responsibility for expressing the state of an instance of a given class in terms of the methods in the class's public API. |
| [**PropertyChangeEvent**](http://docs.google.com/java/beans/class-use/PropertyChangeEvent.html#java.beans)            A "PropertyChange" event gets delivered whenever a bean changes a "bound" or "constrained" property. |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#java.beans)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |
| [**PropertyDescriptor**](http://docs.google.com/java/beans/class-use/PropertyDescriptor.html#java.beans)            A PropertyDescriptor describes one property that a Java Bean exports via a pair of accessor methods. |
| [**PropertyEditor**](http://docs.google.com/java/beans/class-use/PropertyEditor.html#java.beans)            A PropertyEditor class provides support for GUIs that want to allow users to edit a property value of a given type. |
| [**PropertyVetoException**](http://docs.google.com/java/beans/class-use/PropertyVetoException.html#java.beans)            A PropertyVetoException is thrown when a proposed change to a property represents an unacceptable value. |
| [**Statement**](http://docs.google.com/java/beans/class-use/Statement.html#java.beans)            A Statement object represents a primitive statement in which a single method is applied to a target and a set of arguments - as in "a.setFoo(b)". |
| [**VetoableChangeListener**](http://docs.google.com/java/beans/class-use/VetoableChangeListener.html#java.beans)            A VetoableChange event gets fired whenever a bean changes a "constrained" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [java.beans.beancontext](http://docs.google.com/java/beans/beancontext/package-summary.html) | |
| --- | --- |
| [**BeanInfo**](http://docs.google.com/java/beans/class-use/BeanInfo.html#java.beans.beancontext)            A bean implementor who wishes to provide explicit information about their bean may provide a BeanInfo class that implements this BeanInfo interface and provides explicit information about the methods, properties, events, etc, of their bean. |
| [**DesignMode**](http://docs.google.com/java/beans/class-use/DesignMode.html#java.beans.beancontext)             This interface is intended to be implemented by, or delegated from, instances of java.beans.beancontext.BeanContext, in order to propagate to its nested hierarchy of java.beans.beancontext.BeanContextChild instances, the current "designTime" property. |
| [**PropertyChangeEvent**](http://docs.google.com/java/beans/class-use/PropertyChangeEvent.html#java.beans.beancontext)            A "PropertyChange" event gets delivered whenever a bean changes a "bound" or "constrained" property. |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#java.beans.beancontext)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |
| [**PropertyChangeSupport**](http://docs.google.com/java/beans/class-use/PropertyChangeSupport.html#java.beans.beancontext)            This is a utility class that can be used by beans that support bound properties. |
| [**PropertyVetoException**](http://docs.google.com/java/beans/class-use/PropertyVetoException.html#java.beans.beancontext)            A PropertyVetoException is thrown when a proposed change to a property represents an unacceptable value. |
| [**VetoableChangeListener**](http://docs.google.com/java/beans/class-use/VetoableChangeListener.html#java.beans.beancontext)            A VetoableChange event gets fired whenever a bean changes a "constrained" property. |
| [**VetoableChangeSupport**](http://docs.google.com/java/beans/class-use/VetoableChangeSupport.html#java.beans.beancontext)            This is a utility class that can be used by beans that support constrained properties. |
| [**Visibility**](http://docs.google.com/java/beans/class-use/Visibility.html#java.beans.beancontext)            Under some circumstances a bean may be run on servers where a GUI is not available. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [java.lang.management](http://docs.google.com/java/lang/management/package-summary.html) | |
| --- | --- |
| [**ConstructorProperties**](http://docs.google.com/java/beans/class-use/ConstructorProperties.html#java.lang.management)            An annotation on a constructor that shows how the parameters of that constructor correspond to the constructed object's getter methods. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [java.util.jar](http://docs.google.com/java/util/jar/package-summary.html) | |
| --- | --- |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#java.util.jar)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [java.util.logging](http://docs.google.com/java/util/logging/package-summary.html) | |
| --- | --- |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#java.util.logging)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [javax.accessibility](http://docs.google.com/javax/accessibility/package-summary.html) | |
| --- | --- |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#javax.accessibility)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [javax.swing](http://docs.google.com/javax/swing/package-summary.html) | |
| --- | --- |
| [**PropertyChangeEvent**](http://docs.google.com/java/beans/class-use/PropertyChangeEvent.html#javax.swing)            A "PropertyChange" event gets delivered whenever a bean changes a "bound" or "constrained" property. |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#javax.swing)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |
| [**PropertyChangeSupport**](http://docs.google.com/java/beans/class-use/PropertyChangeSupport.html#javax.swing)            This is a utility class that can be used by beans that support bound properties. |
| [**PropertyVetoException**](http://docs.google.com/java/beans/class-use/PropertyVetoException.html#javax.swing)            A PropertyVetoException is thrown when a proposed change to a property represents an unacceptable value. |
| [**VetoableChangeListener**](http://docs.google.com/java/beans/class-use/VetoableChangeListener.html#javax.swing)            A VetoableChange event gets fired whenever a bean changes a "constrained" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [javax.swing.event](http://docs.google.com/javax/swing/event/package-summary.html) | |
| --- | --- |
| [**PropertyChangeEvent**](http://docs.google.com/java/beans/class-use/PropertyChangeEvent.html#javax.swing.event)            A "PropertyChange" event gets delivered whenever a bean changes a "bound" or "constrained" property. |
| [**PropertyChangeSupport**](http://docs.google.com/java/beans/class-use/PropertyChangeSupport.html#javax.swing.event)            This is a utility class that can be used by beans that support bound properties. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [javax.swing.plaf.basic](http://docs.google.com/javax/swing/plaf/basic/package-summary.html) | |
| --- | --- |
| [**PropertyChangeEvent**](http://docs.google.com/java/beans/class-use/PropertyChangeEvent.html#javax.swing.plaf.basic)            A "PropertyChange" event gets delivered whenever a bean changes a "bound" or "constrained" property. |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#javax.swing.plaf.basic)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [javax.swing.plaf.metal](http://docs.google.com/javax/swing/plaf/metal/package-summary.html) | |
| --- | --- |
| [**PropertyChangeEvent**](http://docs.google.com/java/beans/class-use/PropertyChangeEvent.html#javax.swing.plaf.metal)            A "PropertyChange" event gets delivered whenever a bean changes a "bound" or "constrained" property. |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#javax.swing.plaf.metal)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [javax.swing.table](http://docs.google.com/javax/swing/table/package-summary.html) | |
| --- | --- |
| [**PropertyChangeEvent**](http://docs.google.com/java/beans/class-use/PropertyChangeEvent.html#javax.swing.table)            A "PropertyChange" event gets delivered whenever a bean changes a "bound" or "constrained" property. |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#javax.swing.table)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |

| Classes in [java.beans](http://docs.google.com/java/beans/package-summary.html) used by [javax.swing.tree](http://docs.google.com/javax/swing/tree/package-summary.html) | |
| --- | --- |
| [**PropertyChangeListener**](http://docs.google.com/java/beans/class-use/PropertyChangeListener.html#javax.swing.tree)            A "PropertyChange" event gets fired whenever a bean changes a "bound" property. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | Class | **Use** | [**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*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/beans/package-use.html)    [**NO FRAMES**](http://docs.google.com/package-use.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[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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