| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/javax/swing/Spring.html) | **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*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?javax/swing//class-useSpring.html)    [**NO FRAMES**](http://docs.google.com/Spring.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Class**

**javax.swing.Spring**

| Packages that use [Spring](http://docs.google.com/javax/swing/Spring.html) | |
| --- | --- |
| [**javax.swing**](#3znysh7) | Provides a set of "lightweight" (all-Java language) components that, to the maximum degree possible, work the same on all platforms. |

| Uses of [Spring](http://docs.google.com/javax/swing/Spring.html) in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) | |
| --- | --- |

| Methods in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) that return [Spring](http://docs.google.com/javax/swing/Spring.html) | |
| --- | --- |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**constant**](http://docs.google.com/javax/swing/Spring.html#constant(int))(int pref)            Returns a strut -- a spring whose *minimum*, *preferred*, and *maximum* values each have the value pref. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**constant**](http://docs.google.com/javax/swing/Spring.html#constant(int,%20int,%20int))(int min, int pref, int max)            Returns a spring whose *minimum*, *preferred*, and *maximum* values have the values: min, pref, and max respectively. |
| [Spring](http://docs.google.com/javax/swing/Spring.html) | **SpringLayout.Constraints.**[**getConstraint**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#getConstraint(java.lang.String))([String](http://docs.google.com/java/lang/String.html) edgeName)            Returns the value of the specified edge, which may be a derived value, or even null. |
| [Spring](http://docs.google.com/javax/swing/Spring.html) | **SpringLayout.**[**getConstraint**](http://docs.google.com/javax/swing/SpringLayout.html#getConstraint(java.lang.String,%20java.awt.Component))([String](http://docs.google.com/java/lang/String.html) edgeName, [Component](http://docs.google.com/java/awt/Component.html) c)            Returns the spring controlling the distance between the specified edge of the component and the top or left edge of its parent. |
| [Spring](http://docs.google.com/javax/swing/Spring.html) | **SpringLayout.Constraints.**[**getHeight**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#getHeight())()            Returns the value of the height property. |
| [Spring](http://docs.google.com/javax/swing/Spring.html) | **SpringLayout.Constraints.**[**getWidth**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#getWidth())()            Returns the value of the width property. |
| [Spring](http://docs.google.com/javax/swing/Spring.html) | **SpringLayout.Constraints.**[**getX**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#getX())()            Returns the value of the x property. |
| [Spring](http://docs.google.com/javax/swing/Spring.html) | **SpringLayout.Constraints.**[**getY**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#getY())()            Returns the value of the y property. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**height**](http://docs.google.com/javax/swing/Spring.html#height(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            Returns a spring whose *minimum*, *preferred*, *maximum* and *value* properties are defined by the heights of the *minimumSize*, *preferredSize*, *maximumSize* and *size* properties of the supplied component. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**max**](http://docs.google.com/javax/swing/Spring.html#max(javax.swing.Spring,%20javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) s1, [Spring](http://docs.google.com/javax/swing/Spring.html) s2)            Returns max(s1, s2): a spring whose value is always greater than (or equal to) the values of both s1 and s2. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**minus**](http://docs.google.com/javax/swing/Spring.html#minus(javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) s)            Returns -s: a spring running in the opposite direction to s. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**scale**](http://docs.google.com/javax/swing/Spring.html#scale(javax.swing.Spring,%20float))([Spring](http://docs.google.com/javax/swing/Spring.html) s, float factor)            Returns a spring whose *minimum*, *preferred*, *maximum* and *value* properties are each multiples of the properties of the argument spring, s. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**sum**](http://docs.google.com/javax/swing/Spring.html#sum(javax.swing.Spring,%20javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) s1, [Spring](http://docs.google.com/javax/swing/Spring.html) s2)            Returns s1+s2: a spring representing s1 and s2 in series. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**width**](http://docs.google.com/javax/swing/Spring.html#width(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            Returns a spring whose *minimum*, *preferred*, *maximum* and *value* properties are defined by the widths of the *minimumSize*, *preferredSize*, *maximumSize* and *size* properties of the supplied component. |

| Methods in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) with parameters of type [Spring](http://docs.google.com/javax/swing/Spring.html) | |
| --- | --- |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**max**](http://docs.google.com/javax/swing/Spring.html#max(javax.swing.Spring,%20javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) s1, [Spring](http://docs.google.com/javax/swing/Spring.html) s2)            Returns max(s1, s2): a spring whose value is always greater than (or equal to) the values of both s1 and s2. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**minus**](http://docs.google.com/javax/swing/Spring.html#minus(javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) s)            Returns -s: a spring running in the opposite direction to s. |
| void | **SpringLayout.**[**putConstraint**](http://docs.google.com/javax/swing/SpringLayout.html#putConstraint(java.lang.String,%20java.awt.Component,%20javax.swing.Spring,%20java.lang.String,%20java.awt.Component))([String](http://docs.google.com/java/lang/String.html) e1, [Component](http://docs.google.com/java/awt/Component.html) c1, [Spring](http://docs.google.com/javax/swing/Spring.html) s, [String](http://docs.google.com/java/lang/String.html) e2, [Component](http://docs.google.com/java/awt/Component.html) c2)            Links edge e1 of component c1 to edge e2 of component c2. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**scale**](http://docs.google.com/javax/swing/Spring.html#scale(javax.swing.Spring,%20float))([Spring](http://docs.google.com/javax/swing/Spring.html) s, float factor)            Returns a spring whose *minimum*, *preferred*, *maximum* and *value* properties are each multiples of the properties of the argument spring, s. |
| void | **SpringLayout.Constraints.**[**setConstraint**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#setConstraint(java.lang.String,%20javax.swing.Spring))([String](http://docs.google.com/java/lang/String.html) edgeName, [Spring](http://docs.google.com/javax/swing/Spring.html) s)            Sets the spring controlling the specified edge. |
| void | **SpringLayout.Constraints.**[**setHeight**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#setHeight(javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) height)            Sets the height property, which controls the height of a component. |
| void | **SpringLayout.Constraints.**[**setWidth**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#setWidth(javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) width)            Sets the width property, which controls the width of a component. |
| void | **SpringLayout.Constraints.**[**setX**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#setX(javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) x)            Sets the x property, which controls the x value of a component's location. |
| void | **SpringLayout.Constraints.**[**setY**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#setY(javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) y)            Sets the y property, which controls the y value of a component's location. |
| static [Spring](http://docs.google.com/javax/swing/Spring.html) | **Spring.**[**sum**](http://docs.google.com/javax/swing/Spring.html#sum(javax.swing.Spring,%20javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) s1, [Spring](http://docs.google.com/javax/swing/Spring.html) s2)            Returns s1+s2: a spring representing s1 and s2 in series. |

| Constructors in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) with parameters of type [Spring](http://docs.google.com/javax/swing/Spring.html) | |
| --- | --- |
| [**SpringLayout.Constraints**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#SpringLayout.Constraints(javax.swing.Spring,%20javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) x, [Spring](http://docs.google.com/javax/swing/Spring.html) y)            Creates a Constraints object with the specified values for its x and y properties. |
| [**SpringLayout.Constraints**](http://docs.google.com/javax/swing/SpringLayout.Constraints.html#SpringLayout.Constraints(javax.swing.Spring,%20javax.swing.Spring,%20javax.swing.Spring,%20javax.swing.Spring))([Spring](http://docs.google.com/javax/swing/Spring.html) x, [Spring](http://docs.google.com/javax/swing/Spring.html) y, [Spring](http://docs.google.com/javax/swing/Spring.html) width, [Spring](http://docs.google.com/javax/swing/Spring.html) height)            Creates a Constraints object with the specified values for its x, y, width, and height properties. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/javax/swing/Spring.html) | **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*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?javax/swing//class-useSpring.html)    [**NO FRAMES**](http://docs.google.com/Spring.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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).