| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/LayoutManager.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/Label.AccessibleAWTLabel.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/LayoutManager2.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/LayoutManager.html)    [**NO FRAMES**](http://docs.google.com/LayoutManager.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

## **java.awt**

Interface LayoutManager

**All Known Subinterfaces:** [LayoutManager2](http://docs.google.com/java/awt/LayoutManager2.html) **All Known Implementing Classes:** [BasicComboBoxUI.ComboBoxLayoutManager](http://docs.google.com/javax/swing/plaf/basic/BasicComboBoxUI.ComboBoxLayoutManager.html), [BasicInternalFrameTitlePane.TitlePaneLayout](http://docs.google.com/javax/swing/plaf/basic/BasicInternalFrameTitlePane.TitlePaneLayout.html), [BasicInternalFrameUI.InternalFrameLayout](http://docs.google.com/javax/swing/plaf/basic/BasicInternalFrameUI.InternalFrameLayout.html), [BasicOptionPaneUI.ButtonAreaLayout](http://docs.google.com/javax/swing/plaf/basic/BasicOptionPaneUI.ButtonAreaLayout.html), [BasicScrollBarUI](http://docs.google.com/javax/swing/plaf/basic/BasicScrollBarUI.html), [BasicSplitPaneDivider.DividerLayout](http://docs.google.com/javax/swing/plaf/basic/BasicSplitPaneDivider.DividerLayout.html), [BasicSplitPaneUI.BasicHorizontalLayoutManager](http://docs.google.com/javax/swing/plaf/basic/BasicSplitPaneUI.BasicHorizontalLayoutManager.html), [BasicSplitPaneUI.BasicVerticalLayoutManager](http://docs.google.com/javax/swing/plaf/basic/BasicSplitPaneUI.BasicVerticalLayoutManager.html), [BasicTabbedPaneUI.TabbedPaneLayout](http://docs.google.com/javax/swing/plaf/basic/BasicTabbedPaneUI.TabbedPaneLayout.html), [BorderLayout](http://docs.google.com/java/awt/BorderLayout.html), [BoxLayout](http://docs.google.com/javax/swing/BoxLayout.html), [CardLayout](http://docs.google.com/java/awt/CardLayout.html), [DefaultMenuLayout](http://docs.google.com/javax/swing/plaf/basic/DefaultMenuLayout.html), [FlowLayout](http://docs.google.com/java/awt/FlowLayout.html), [GridBagLayout](http://docs.google.com/java/awt/GridBagLayout.html), [GridLayout](http://docs.google.com/java/awt/GridLayout.html), [GroupLayout](http://docs.google.com/javax/swing/GroupLayout.html), [JRootPane.RootLayout](http://docs.google.com/javax/swing/JRootPane.RootLayout.html), [JSpinner.DateEditor](http://docs.google.com/javax/swing/JSpinner.DateEditor.html), [JSpinner.DefaultEditor](http://docs.google.com/javax/swing/JSpinner.DefaultEditor.html), [JSpinner.ListEditor](http://docs.google.com/javax/swing/JSpinner.ListEditor.html), [JSpinner.NumberEditor](http://docs.google.com/javax/swing/JSpinner.NumberEditor.html), [MetalComboBoxUI.MetalComboBoxLayoutManager](http://docs.google.com/javax/swing/plaf/metal/MetalComboBoxUI.MetalComboBoxLayoutManager.html), [MetalScrollBarUI](http://docs.google.com/javax/swing/plaf/metal/MetalScrollBarUI.html), [MetalTabbedPaneUI.TabbedPaneLayout](http://docs.google.com/javax/swing/plaf/metal/MetalTabbedPaneUI.TabbedPaneLayout.html), [OverlayLayout](http://docs.google.com/javax/swing/OverlayLayout.html), [ScrollPaneLayout](http://docs.google.com/javax/swing/ScrollPaneLayout.html), [ScrollPaneLayout.UIResource](http://docs.google.com/javax/swing/ScrollPaneLayout.UIResource.html), [SpringLayout](http://docs.google.com/javax/swing/SpringLayout.html), [ViewportLayout](http://docs.google.com/javax/swing/ViewportLayout.html)

public interface **LayoutManager**

Defines the interface for classes that know how to lay out Containers.

Swing's painting architecture assumes the children of a JComponent do not overlap. If a JComponent's LayoutManager allows children to overlap, the JComponent must override isOptimizedDrawingEnabled to return false.

**See Also:**[Container](http://docs.google.com/java/awt/Container.html), [JComponent.isOptimizedDrawingEnabled()](http://docs.google.com/javax/swing/JComponent.html#isOptimizedDrawingEnabled())

| **Method Summary** | |
| --- | --- |
| void | [**addLayoutComponent**](http://docs.google.com/java/awt/LayoutManager.html#addLayoutComponent(java.lang.String,%20java.awt.Component))([String](http://docs.google.com/java/lang/String.html) name, [Component](http://docs.google.com/java/awt/Component.html) comp)            If the layout manager uses a per-component string, adds the component comp to the layout, associating it with the string specified by name. |
| void | [**layoutContainer**](http://docs.google.com/java/awt/LayoutManager.html#layoutContainer(java.awt.Container))([Container](http://docs.google.com/java/awt/Container.html) parent)            Lays out the specified container. |
| [Dimension](http://docs.google.com/java/awt/Dimension.html) | [**minimumLayoutSize**](http://docs.google.com/java/awt/LayoutManager.html#minimumLayoutSize(java.awt.Container))([Container](http://docs.google.com/java/awt/Container.html) parent)            Calculates the minimum size dimensions for the specified container, given the components it contains. |
| [Dimension](http://docs.google.com/java/awt/Dimension.html) | [**preferredLayoutSize**](http://docs.google.com/java/awt/LayoutManager.html#preferredLayoutSize(java.awt.Container))([Container](http://docs.google.com/java/awt/Container.html) parent)            Calculates the preferred size dimensions for the specified container, given the components it contains. |
| void | [**removeLayoutComponent**](http://docs.google.com/java/awt/LayoutManager.html#removeLayoutComponent(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) comp)            Removes the specified component from the layout. |

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

### addLayoutComponent

void **addLayoutComponent**([String](http://docs.google.com/java/lang/String.html) name,  
 [Component](http://docs.google.com/java/awt/Component.html) comp)

If the layout manager uses a per-component string, adds the component comp to the layout, associating it with the string specified by name.

**Parameters:**name - the string to be associated with the componentcomp - the component to be added

### removeLayoutComponent

void **removeLayoutComponent**([Component](http://docs.google.com/java/awt/Component.html) comp)

Removes the specified component from the layout.

**Parameters:**comp - the component to be removed

### preferredLayoutSize

[Dimension](http://docs.google.com/java/awt/Dimension.html) **preferredLayoutSize**([Container](http://docs.google.com/java/awt/Container.html) parent)

Calculates the preferred size dimensions for the specified container, given the components it contains.

**Parameters:**parent - the container to be laid out**See Also:**[minimumLayoutSize(java.awt.Container)](http://docs.google.com/java/awt/LayoutManager.html#minimumLayoutSize(java.awt.Container))

### minimumLayoutSize

[Dimension](http://docs.google.com/java/awt/Dimension.html) **minimumLayoutSize**([Container](http://docs.google.com/java/awt/Container.html) parent)

Calculates the minimum size dimensions for the specified container, given the components it contains.

**Parameters:**parent - the component to be laid out**See Also:**[preferredLayoutSize(java.awt.Container)](http://docs.google.com/java/awt/LayoutManager.html#preferredLayoutSize(java.awt.Container))

### layoutContainer

void **layoutContainer**([Container](http://docs.google.com/java/awt/Container.html) parent)

Lays out the specified container.

**Parameters:**parent - the container to be laid out

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/LayoutManager.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/Label.AccessibleAWTLabel.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/LayoutManager2.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/LayoutManager.html)    [**NO FRAMES**](http://docs.google.com/LayoutManager.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

[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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