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

## **javax.swing**

Class ViewportLayout

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

**All Implemented Interfaces:** [LayoutManager](http://docs.google.com/java/awt/LayoutManager.html), [Serializable](http://docs.google.com/java/io/Serializable.html)

public class **ViewportLayout**extends [Object](http://docs.google.com/java/lang/Object.html)implements [LayoutManager](http://docs.google.com/java/awt/LayoutManager.html), [Serializable](http://docs.google.com/java/io/Serializable.html)

The default layout manager for JViewport. ViewportLayout defines a policy for layout that should be useful for most applications. The viewport makes its view the same size as the viewport, however it will not make the view smaller than its minimum size. As the viewport grows the view is kept bottom justified until the entire view is visible, subsequently the view is kept top justified.

**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).

| **Constructor Summary** | |
| --- | --- |
| [**ViewportLayout**](http://docs.google.com/javax/swing/ViewportLayout.html#ViewportLayout())() |

| **Method Summary** | |
| --- | --- |
| void | [**addLayoutComponent**](http://docs.google.com/javax/swing/ViewportLayout.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) c)            Adds the specified component to the layout. |
| void | [**layoutContainer**](http://docs.google.com/javax/swing/ViewportLayout.html#layoutContainer(java.awt.Container))([Container](http://docs.google.com/java/awt/Container.html) parent)            Called by the AWT when the specified container needs to be laid out. |
| [Dimension](http://docs.google.com/java/awt/Dimension.html) | [**minimumLayoutSize**](http://docs.google.com/javax/swing/ViewportLayout.html#minimumLayoutSize(java.awt.Container))([Container](http://docs.google.com/java/awt/Container.html) parent)            Returns the minimum dimensions needed to layout the components contained in the specified target container. |
| [Dimension](http://docs.google.com/java/awt/Dimension.html) | [**preferredLayoutSize**](http://docs.google.com/javax/swing/ViewportLayout.html#preferredLayoutSize(java.awt.Container))([Container](http://docs.google.com/java/awt/Container.html) parent)            Returns the preferred dimensions for this layout given the components in the specified target container. |
| void | [**removeLayoutComponent**](http://docs.google.com/javax/swing/ViewportLayout.html#removeLayoutComponent(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            Removes the specified component from the layout. |

| **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** |
| --- |

### ViewportLayout

public **ViewportLayout**()

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

### addLayoutComponent

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

Adds the specified component to the layout. Not used by this class.

**Specified by:**[addLayoutComponent](http://docs.google.com/java/awt/LayoutManager.html#addLayoutComponent(java.lang.String,%20java.awt.Component)) in interface [LayoutManager](http://docs.google.com/java/awt/LayoutManager.html) **Parameters:**name - the name of the componentc - the the component to be added

### removeLayoutComponent

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

Removes the specified component from the layout. Not used by this class.

**Specified by:**[removeLayoutComponent](http://docs.google.com/java/awt/LayoutManager.html#removeLayoutComponent(java.awt.Component)) in interface [LayoutManager](http://docs.google.com/java/awt/LayoutManager.html) **Parameters:**c - the component to remove

### preferredLayoutSize

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

Returns the preferred dimensions for this layout given the components in the specified target container.

**Specified by:**[preferredLayoutSize](http://docs.google.com/java/awt/LayoutManager.html#preferredLayoutSize(java.awt.Container)) in interface [LayoutManager](http://docs.google.com/java/awt/LayoutManager.html) **Parameters:**parent - the component which needs to be laid out **Returns:**a Dimension object containing the preferred dimensions**See Also:**[minimumLayoutSize(java.awt.Container)](http://docs.google.com/javax/swing/ViewportLayout.html#minimumLayoutSize(java.awt.Container))

### minimumLayoutSize

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

Returns the minimum dimensions needed to layout the components contained in the specified target container.

**Specified by:**[minimumLayoutSize](http://docs.google.com/java/awt/LayoutManager.html#minimumLayoutSize(java.awt.Container)) in interface [LayoutManager](http://docs.google.com/java/awt/LayoutManager.html) **Parameters:**parent - the component which needs to be laid out **Returns:**a Dimension object containing the minimum dimensions**See Also:**[preferredLayoutSize(java.awt.Container)](http://docs.google.com/javax/swing/ViewportLayout.html#preferredLayoutSize(java.awt.Container))

### layoutContainer

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

Called by the AWT when the specified container needs to be laid out.

**Specified by:**[layoutContainer](http://docs.google.com/java/awt/LayoutManager.html#layoutContainer(java.awt.Container)) in interface [LayoutManager](http://docs.google.com/java/awt/LayoutManager.html) **Parameters:**parent - the container to lay out **Throws:** AWTError - if the target isn't the container specified to the BoxLayout constructor

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ViewportLayout.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*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

[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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