| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DefaultTableColumnModel.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/table/DefaultTableCellRenderer.UIResource.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/table/DefaultTableModel.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/table/DefaultTableColumnModel.html)    [**NO FRAMES**](http://docs.google.com/DefaultTableColumnModel.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#1ksv4uv) | [METHOD](#2jxsxqh) |

## **javax.swing.table**

Class DefaultTableColumnModel

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

**All Implemented Interfaces:** [PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html), [Serializable](http://docs.google.com/java/io/Serializable.html), [EventListener](http://docs.google.com/java/util/EventListener.html), [ListSelectionListener](http://docs.google.com/javax/swing/event/ListSelectionListener.html), [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html)

public class **DefaultTableColumnModel**extends [Object](http://docs.google.com/java/lang/Object.html)implements [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html), [PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html), [ListSelectionListener](http://docs.google.com/javax/swing/event/ListSelectionListener.html), [Serializable](http://docs.google.com/java/io/Serializable.html)

The standard column-handler for a JTable.

**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:**[JTable](http://docs.google.com/javax/swing/JTable.html)

| **Field Summary** | |
| --- | --- |
| protected  [ChangeEvent](http://docs.google.com/javax/swing/event/ChangeEvent.html) | [**changeEvent**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#changeEvent)            Change event (only one needed) |
| protected  int | [**columnMargin**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#columnMargin)            Width margin between each column |
| protected  boolean | [**columnSelectionAllowed**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#columnSelectionAllowed)            Column selection allowed in this column model |
| protected  [EventListenerList](http://docs.google.com/javax/swing/event/EventListenerList.html) | [**listenerList**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#listenerList)            List of TableColumnModelListener |
| protected  [ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) | [**selectionModel**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#selectionModel)            Model for keeping track of column selections |
| protected  [Vector](http://docs.google.com/java/util/Vector.html)<[TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html)> | [**tableColumns**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#tableColumns)            Array of TableColumn objects in this model |
| protected  int | [**totalColumnWidth**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#totalColumnWidth)            A local cache of the combined width of all columns |

| **Constructor Summary** | |
| --- | --- |
| [**DefaultTableColumnModel**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#DefaultTableColumnModel())()            Creates a default table column model. |

| **Method Summary** | |
| --- | --- |
| void | [**addColumn**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#addColumn(javax.swing.table.TableColumn))([TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html) aColumn)            Appends aColumn to the end of the tableColumns array. |
| void | [**addColumnModelListener**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#addColumnModelListener(javax.swing.event.TableColumnModelListener))([TableColumnModelListener](http://docs.google.com/javax/swing/event/TableColumnModelListener.html) x)            Adds a listener for table column model events. |
| protected  [ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) | [**createSelectionModel**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#createSelectionModel())()            Creates a new default list selection model. |
| protected  void | [**fireColumnAdded**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#fireColumnAdded(javax.swing.event.TableColumnModelEvent))([TableColumnModelEvent](http://docs.google.com/javax/swing/event/TableColumnModelEvent.html) e)            Notifies all listeners that have registered interest for notification on this event type. |
| protected  void | [**fireColumnMarginChanged**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#fireColumnMarginChanged())()            Notifies all listeners that have registered interest for notification on this event type. |
| protected  void | [**fireColumnMoved**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#fireColumnMoved(javax.swing.event.TableColumnModelEvent))([TableColumnModelEvent](http://docs.google.com/javax/swing/event/TableColumnModelEvent.html) e)            Notifies all listeners that have registered interest for notification on this event type. |
| protected  void | [**fireColumnRemoved**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#fireColumnRemoved(javax.swing.event.TableColumnModelEvent))([TableColumnModelEvent](http://docs.google.com/javax/swing/event/TableColumnModelEvent.html) e)            Notifies all listeners that have registered interest for notification on this event type. |
| protected  void | [**fireColumnSelectionChanged**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#fireColumnSelectionChanged(javax.swing.event.ListSelectionEvent))([ListSelectionEvent](http://docs.google.com/javax/swing/event/ListSelectionEvent.html) e)            Notifies all listeners that have registered interest for notification on this event type. |
| [TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html) | [**getColumn**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumn(int))(int columnIndex)            Returns the TableColumn object for the column at columnIndex. |
| int | [**getColumnCount**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumnCount())()            Returns the number of columns in the tableColumns array. |
| int | [**getColumnIndex**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumnIndex(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) identifier)            Returns the index of the first column in the tableColumns array whose identifier is equal to identifier, when compared using equals. |
| int | [**getColumnIndexAtX**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumnIndexAtX(int))(int x)            Returns the index of the column that lies at position x, or -1 if no column covers this point. |
| int | [**getColumnMargin**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumnMargin())()            Returns the width margin for TableColumn. |
| [TableColumnModelListener](http://docs.google.com/javax/swing/event/TableColumnModelListener.html)[] | [**getColumnModelListeners**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumnModelListeners())()            Returns an array of all the column model listeners registered on this model. |
| [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html)> | [**getColumns**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumns())()            Returns an Enumeration of all the columns in the model. |
| boolean | [**getColumnSelectionAllowed**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumnSelectionAllowed())()            Returns true if column selection is allowed, otherwise false. |
| | <T extends [EventListener](http://docs.google.com/java/util/EventListener.html)>  T[] | | --- | | [**getListeners**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getListeners(java.lang.Class))([Class](http://docs.google.com/java/lang/Class.html)<T> listenerType)            Returns an array of all the objects currently registered as *Foo*Listeners upon this model. |
| int | [**getSelectedColumnCount**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getSelectedColumnCount())()            Returns the number of columns selected. |
| int[] | [**getSelectedColumns**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getSelectedColumns())()            Returns an array of selected columns. |
| [ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) | [**getSelectionModel**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getSelectionModel())()            Returns the ListSelectionModel that is used to maintain column selection state. |
| int | [**getTotalColumnWidth**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getTotalColumnWidth())()            Returns the total combined width of all columns. |
| void | [**moveColumn**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#moveColumn(int,%20int))(int columnIndex, int newIndex)            Moves the column and heading at columnIndex to newIndex. |
| void | [**propertyChange**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#propertyChange(java.beans.PropertyChangeEvent))([PropertyChangeEvent](http://docs.google.com/java/beans/PropertyChangeEvent.html) evt)            Property Change Listener change method. |
| protected  void | [**recalcWidthCache**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#recalcWidthCache())()            Recalculates the total combined width of all columns. |
| void | [**removeColumn**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#removeColumn(javax.swing.table.TableColumn))([TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html) column)            Deletes the column from the tableColumns array. |
| void | [**removeColumnModelListener**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#removeColumnModelListener(javax.swing.event.TableColumnModelListener))([TableColumnModelListener](http://docs.google.com/javax/swing/event/TableColumnModelListener.html) x)            Removes a listener for table column model events. |
| void | [**setColumnMargin**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#setColumnMargin(int))(int newMargin)            Sets the column margin to newMargin. |
| void | [**setColumnSelectionAllowed**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#setColumnSelectionAllowed(boolean))(boolean flag)            Sets whether column selection is allowed. |
| void | [**setSelectionModel**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#setSelectionModel(javax.swing.ListSelectionModel))([ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) newModel)            Sets the selection model for this TableColumnModel to newModel and registers for listener notifications from the new selection model. |
| void | [**valueChanged**](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#valueChanged(javax.swing.event.ListSelectionEvent))([ListSelectionEvent](http://docs.google.com/javax/swing/event/ListSelectionEvent.html) e)            A ListSelectionListener that forwards ListSelectionEvents when there is a column selection change. |

| **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)) |

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

### tableColumns

protected [Vector](http://docs.google.com/java/util/Vector.html)<[TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html)> **tableColumns**

Array of TableColumn objects in this model

### selectionModel

protected [ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) **selectionModel**

Model for keeping track of column selections

### columnMargin

protected int **columnMargin**

Width margin between each column

### listenerList

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

List of TableColumnModelListener

### changeEvent

protected transient [ChangeEvent](http://docs.google.com/javax/swing/event/ChangeEvent.html) **changeEvent**

Change event (only one needed)

### columnSelectionAllowed

protected boolean **columnSelectionAllowed**

Column selection allowed in this column model

### totalColumnWidth

protected int **totalColumnWidth**

A local cache of the combined width of all columns

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

### DefaultTableColumnModel

public **DefaultTableColumnModel**()

Creates a default table column model.

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

### addColumn

public void **addColumn**([TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html) aColumn)

Appends aColumn to the end of the tableColumns array. This method also posts the columnAdded event to its listeners.

**Specified by:**[addColumn](http://docs.google.com/javax/swing/table/TableColumnModel.html#addColumn(javax.swing.table.TableColumn)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**aColumn - the TableColumn to be added **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if aColumn is null**See Also:**[removeColumn(javax.swing.table.TableColumn)](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#removeColumn(javax.swing.table.TableColumn))

### removeColumn

public void **removeColumn**([TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html) column)

Deletes the column from the tableColumns array. This method will do nothing if column is not in the table's columns list. tile is called to resize both the header and table views. This method also posts a columnRemoved event to its listeners.

**Specified by:**[removeColumn](http://docs.google.com/javax/swing/table/TableColumnModel.html#removeColumn(javax.swing.table.TableColumn)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**column - the TableColumn to be removed**See Also:**[addColumn(javax.swing.table.TableColumn)](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#addColumn(javax.swing.table.TableColumn))

### moveColumn

public void **moveColumn**(int columnIndex,  
 int newIndex)

Moves the column and heading at columnIndex to newIndex. The old column at columnIndex will now be found at newIndex. The column that used to be at newIndex is shifted left or right to make room. This will not move any columns if columnIndex equals newIndex. This method also posts a columnMoved event to its listeners.

**Specified by:**[moveColumn](http://docs.google.com/javax/swing/table/TableColumnModel.html#moveColumn(int,%20int)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**columnIndex - the index of column to be movednewIndex - new index to move the column **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if column or newIndex are not in the valid range

### setColumnMargin

public void **setColumnMargin**(int newMargin)

Sets the column margin to newMargin. This method also posts a columnMarginChanged event to its listeners.

**Specified by:**[setColumnMargin](http://docs.google.com/javax/swing/table/TableColumnModel.html#setColumnMargin(int)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**newMargin - the new margin width, in pixels**See Also:**[getColumnMargin()](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumnMargin()), [getTotalColumnWidth()](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getTotalColumnWidth())

### getColumnCount

public int **getColumnCount**()

Returns the number of columns in the tableColumns array.

**Specified by:**[getColumnCount](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnCount()) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Returns:**the number of columns in the tableColumns array**See Also:**[getColumns()](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumns())

### getColumns

public [Enumeration](http://docs.google.com/java/util/Enumeration.html)<[TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html)> **getColumns**()

Returns an Enumeration of all the columns in the model.

**Specified by:**[getColumns](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumns()) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Returns:**an Enumeration of the columns in the model

### getColumnIndex

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

Returns the index of the first column in the tableColumns array whose identifier is equal to identifier, when compared using equals.

**Specified by:**[getColumnIndex](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnIndex(java.lang.Object)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**identifier - the identifier object **Returns:**the index of the first column in the tableColumns array whose identifier is equal to identifier **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if identifier is null, or if no TableColumn has this identifier**See Also:**[getColumn(int)](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumn(int))

### getColumn

public [TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html) **getColumn**(int columnIndex)

Returns the TableColumn object for the column at columnIndex.

**Specified by:**[getColumn](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumn(int)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**columnIndex - the index of the column desired **Returns:**the TableColumn object for the column at columnIndex

### getColumnMargin

public int **getColumnMargin**()

Returns the width margin for TableColumn. The default columnMargin is 1.

**Specified by:**[getColumnMargin](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnMargin()) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Returns:**the maximum width for the TableColumn**See Also:**[setColumnMargin(int)](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#setColumnMargin(int))

### getColumnIndexAtX

public int **getColumnIndexAtX**(int x)

Returns the index of the column that lies at position x, or -1 if no column covers this point. In keeping with Swing's separable model architecture, a TableColumnModel does not know how the table columns actually appear on screen. The visual presentation of the columns is the responsibility of the view/controller object using this model (typically JTable). The view/controller need not display the columns sequentially from left to right. For example, columns could be displayed from right to left to accomodate a locale preference or some columns might be hidden at the request of the user. Because the model does not know how the columns are laid out on screen, the given xPosition should not be considered to be a coordinate in 2D graphics space. Instead, it should be considered to be a width from the start of the first column in the model. If the column index for a given X coordinate in 2D space is required, JTable.columnAtPoint can be used instead.

**Specified by:**[getColumnIndexAtX](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnIndexAtX(int)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**x - the horizontal location of interest **Returns:**the index of the column or -1 if no column is found**See Also:**[JTable.columnAtPoint(java.awt.Point)](http://docs.google.com/javax/swing/JTable.html#columnAtPoint(java.awt.Point))

### getTotalColumnWidth

public int **getTotalColumnWidth**()

Returns the total combined width of all columns.

**Specified by:**[getTotalColumnWidth](http://docs.google.com/javax/swing/table/TableColumnModel.html#getTotalColumnWidth()) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Returns:**the totalColumnWidth property

### setSelectionModel

public void **setSelectionModel**([ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) newModel)

Sets the selection model for this TableColumnModel to newModel and registers for listener notifications from the new selection model. If newModel is null, an exception is thrown.

**Specified by:**[setSelectionModel](http://docs.google.com/javax/swing/table/TableColumnModel.html#setSelectionModel(javax.swing.ListSelectionModel)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**newModel - the new selection model **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if newModel is null**See Also:**[getSelectionModel()](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getSelectionModel())

### getSelectionModel

public [ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) **getSelectionModel**()

Returns the ListSelectionModel that is used to maintain column selection state.

**Specified by:**[getSelectionModel](http://docs.google.com/javax/swing/table/TableColumnModel.html#getSelectionModel()) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Returns:**the object that provides column selection state. Or null if row selection is not allowed.**See Also:**[setSelectionModel(javax.swing.ListSelectionModel)](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#setSelectionModel(javax.swing.ListSelectionModel))

### setColumnSelectionAllowed

public void **setColumnSelectionAllowed**(boolean flag)

Sets whether column selection is allowed. The default is false.

**Specified by:**[setColumnSelectionAllowed](http://docs.google.com/javax/swing/table/TableColumnModel.html#setColumnSelectionAllowed(boolean)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**flag - true if column selection will be allowed, false otherwise**See Also:**[TableColumnModel.getColumnSelectionAllowed()](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnSelectionAllowed())

### getColumnSelectionAllowed

public boolean **getColumnSelectionAllowed**()

Returns true if column selection is allowed, otherwise false. The default is false.

**Specified by:**[getColumnSelectionAllowed](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnSelectionAllowed()) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Returns:**the columnSelectionAllowed property**See Also:**[TableColumnModel.setColumnSelectionAllowed(boolean)](http://docs.google.com/javax/swing/table/TableColumnModel.html#setColumnSelectionAllowed(boolean))

### getSelectedColumns

public int[] **getSelectedColumns**()

Returns an array of selected columns. If selectionModel is null, returns an empty array.

**Specified by:**[getSelectedColumns](http://docs.google.com/javax/swing/table/TableColumnModel.html#getSelectedColumns()) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Returns:**an array of selected columns or an empty array if nothing is selected or the selectionModel is null

### getSelectedColumnCount

public int **getSelectedColumnCount**()

Returns the number of columns selected.

**Specified by:**[getSelectedColumnCount](http://docs.google.com/javax/swing/table/TableColumnModel.html#getSelectedColumnCount()) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Returns:**the number of columns selected

### addColumnModelListener

public void **addColumnModelListener**([TableColumnModelListener](http://docs.google.com/javax/swing/event/TableColumnModelListener.html) x)

Adds a listener for table column model events.

**Specified by:**[addColumnModelListener](http://docs.google.com/javax/swing/table/TableColumnModel.html#addColumnModelListener(javax.swing.event.TableColumnModelListener)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**x - a TableColumnModelListener object

### removeColumnModelListener

public void **removeColumnModelListener**([TableColumnModelListener](http://docs.google.com/javax/swing/event/TableColumnModelListener.html) x)

Removes a listener for table column model events.

**Specified by:**[removeColumnModelListener](http://docs.google.com/javax/swing/table/TableColumnModel.html#removeColumnModelListener(javax.swing.event.TableColumnModelListener)) in interface [TableColumnModel](http://docs.google.com/javax/swing/table/TableColumnModel.html) **Parameters:**x - a TableColumnModelListener object

### getColumnModelListeners

public [TableColumnModelListener](http://docs.google.com/javax/swing/event/TableColumnModelListener.html)[] **getColumnModelListeners**()

Returns an array of all the column model listeners registered on this model.

**Returns:**all of this default table column model's ColumnModelListeners or an empty array if no column model listeners are currently registered**Since:** 1.4 **See Also:**[addColumnModelListener(javax.swing.event.TableColumnModelListener)](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#addColumnModelListener(javax.swing.event.TableColumnModelListener)), [removeColumnModelListener(javax.swing.event.TableColumnModelListener)](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#removeColumnModelListener(javax.swing.event.TableColumnModelListener))

### fireColumnAdded

protected void **fireColumnAdded**([TableColumnModelEvent](http://docs.google.com/javax/swing/event/TableColumnModelEvent.html) e)

Notifies all listeners that have registered interest for notification on this event type. The event instance is lazily created using the parameters passed into the fire method.

**Parameters:**e - the event received**See Also:**[EventListenerList](http://docs.google.com/javax/swing/event/EventListenerList.html)

### fireColumnRemoved

protected void **fireColumnRemoved**([TableColumnModelEvent](http://docs.google.com/javax/swing/event/TableColumnModelEvent.html) e)

Notifies all listeners that have registered interest for notification on this event type. The event instance is lazily created using the parameters passed into the fire method.

**Parameters:**e - the event received**See Also:**[EventListenerList](http://docs.google.com/javax/swing/event/EventListenerList.html)

### fireColumnMoved

protected void **fireColumnMoved**([TableColumnModelEvent](http://docs.google.com/javax/swing/event/TableColumnModelEvent.html) e)

Notifies all listeners that have registered interest for notification on this event type. The event instance is lazily created using the parameters passed into the fire method.

**Parameters:**e - the event received**See Also:**[EventListenerList](http://docs.google.com/javax/swing/event/EventListenerList.html)

### fireColumnSelectionChanged

protected void **fireColumnSelectionChanged**([ListSelectionEvent](http://docs.google.com/javax/swing/event/ListSelectionEvent.html) e)

Notifies all listeners that have registered interest for notification on this event type. The event instance is lazily created using the parameters passed into the fire method.

**Parameters:**e - the event received**See Also:**[EventListenerList](http://docs.google.com/javax/swing/event/EventListenerList.html)

### fireColumnMarginChanged

protected void **fireColumnMarginChanged**()

Notifies all listeners that have registered interest for notification on this event type. The event instance is lazily created using the parameters passed into the fire method.

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

### getListeners

public <T extends [EventListener](http://docs.google.com/java/util/EventListener.html)> T[] **getListeners**([Class](http://docs.google.com/java/lang/Class.html)<T> listenerType)

Returns an array of all the objects currently registered as *Foo*Listeners upon this model. *Foo*Listeners are registered using the add*Foo*Listener method.

You can specify the listenerType argument with a class literal, such as *Foo*Listener.class. For example, you can query a DefaultTableColumnModel m for its column model listeners with the following code:

ColumnModelListener[] cmls = (ColumnModelListener[])(m.getListeners(ColumnModelListener.class));

If no such listeners exist, this method returns an empty array.

**Parameters:**listenerType - the type of listeners requested; this parameter should specify an interface that descends from java.util.EventListener **Returns:**an array of all objects registered as *Foo*Listeners on this model, or an empty array if no such listeners have been added **Throws:** [ClassCastException](http://docs.google.com/java/lang/ClassCastException.html) - if listenerType doesn't specify a class or interface that implements java.util.EventListener**Since:** 1.3 **See Also:**[getColumnModelListeners()](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html#getColumnModelListeners())

### propertyChange

public void **propertyChange**([PropertyChangeEvent](http://docs.google.com/java/beans/PropertyChangeEvent.html) evt)

Property Change Listener change method. Used to track changes to the column width or preferred column width.

**Specified by:**[propertyChange](http://docs.google.com/java/beans/PropertyChangeListener.html#propertyChange(java.beans.PropertyChangeEvent)) in interface [PropertyChangeListener](http://docs.google.com/java/beans/PropertyChangeListener.html) **Parameters:**evt - PropertyChangeEvent

### valueChanged

public void **valueChanged**([ListSelectionEvent](http://docs.google.com/javax/swing/event/ListSelectionEvent.html) e)

A ListSelectionListener that forwards ListSelectionEvents when there is a column selection change.

**Specified by:**[valueChanged](http://docs.google.com/javax/swing/event/ListSelectionListener.html#valueChanged(javax.swing.event.ListSelectionEvent)) in interface [ListSelectionListener](http://docs.google.com/javax/swing/event/ListSelectionListener.html) **Parameters:**e - the change event

### createSelectionModel

protected [ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) **createSelectionModel**()

Creates a new default list selection model.

### recalcWidthCache

protected void **recalcWidthCache**()

Recalculates the total combined width of all columns. Updates the totalColumnWidth property.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DefaultTableColumnModel.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/table/DefaultTableCellRenderer.UIResource.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/table/DefaultTableModel.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/table/DefaultTableColumnModel.html)    [**NO FRAMES**](http://docs.google.com/DefaultTableColumnModel.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#1ksv4uv) | [METHOD](#2jxsxqh) |

[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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