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

## **javax.swing.table**

Interface TableColumnModel

**All Known Implementing Classes:** [DefaultTableColumnModel](http://docs.google.com/javax/swing/table/DefaultTableColumnModel.html)

public interface **TableColumnModel**

Defines the requirements for a table column model object suitable for use with JTable.

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

| **Method Summary** | |
| --- | --- |
| void | [**addColumn**](http://docs.google.com/javax/swing/table/TableColumnModel.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/TableColumnModel.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. |
| [TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html) | [**getColumn**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumn(int))(int columnIndex)            Returns the TableColumn object for the column at columnIndex. |
| int | [**getColumnCount**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnCount())()            Returns the number of columns in the model. |
| int | [**getColumnIndex**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnIndex(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) columnIdentifier)            Returns the index of the first column in the table whose identifier is equal to identifier, when compared using equals. |
| int | [**getColumnIndexAtX**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnIndexAtX(int))(int xPosition)            Returns the index of the column that lies on the horizontal point, xPosition; or -1 if it lies outside the any of the column's bounds. |
| int | [**getColumnMargin**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnMargin())()            Returns the width between the cells in each column. |
| [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/TableColumnModel.html#getColumns())()            Returns an Enumeration of all the columns in the model. |
| boolean | [**getColumnSelectionAllowed**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnSelectionAllowed())()            Returns true if columns may be selected. |
| int | [**getSelectedColumnCount**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getSelectedColumnCount())()            Returns the number of selected columns. |
| int[] | [**getSelectedColumns**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getSelectedColumns())()            Returns an array of indicies of all selected columns. |
| [ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) | [**getSelectionModel**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getSelectionModel())()            Returns the current selection model. |
| int | [**getTotalColumnWidth**](http://docs.google.com/javax/swing/table/TableColumnModel.html#getTotalColumnWidth())()            Returns the total width of all the columns. |
| void | [**moveColumn**](http://docs.google.com/javax/swing/table/TableColumnModel.html#moveColumn(int,%20int))(int columnIndex, int newIndex)            Moves the column and its header at columnIndex to newIndex. |
| void | [**removeColumn**](http://docs.google.com/javax/swing/table/TableColumnModel.html#removeColumn(javax.swing.table.TableColumn))([TableColumn](http://docs.google.com/javax/swing/table/TableColumn.html) column)            Deletes the TableColumn column from the tableColumns array. |
| void | [**removeColumnModelListener**](http://docs.google.com/javax/swing/table/TableColumnModel.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/TableColumnModel.html#setColumnMargin(int))(int newMargin)            Sets the TableColumn's column margin to newMargin. |
| void | [**setColumnSelectionAllowed**](http://docs.google.com/javax/swing/table/TableColumnModel.html#setColumnSelectionAllowed(boolean))(boolean flag)            Sets whether the columns in this model may be selected. |
| void | [**setSelectionModel**](http://docs.google.com/javax/swing/table/TableColumnModel.html#setSelectionModel(javax.swing.ListSelectionModel))([ListSelectionModel](http://docs.google.com/javax/swing/ListSelectionModel.html) newModel)            Sets the selection model. |

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

### addColumn

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

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

**Parameters:**aColumn - the TableColumn to be added**See Also:**[removeColumn(javax.swing.table.TableColumn)](http://docs.google.com/javax/swing/table/TableColumnModel.html#removeColumn(javax.swing.table.TableColumn))

### removeColumn

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

Deletes the TableColumn column from the tableColumns array. This method will do nothing if column is not in the table's column list. This method posts a columnRemoved event to its listeners.

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

### moveColumn

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

Moves the column and its header 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 posts a columnMoved event to its listeners.

**Parameters:**columnIndex - the index of column to be movednewIndex - index of the column's new location **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if columnIndex or newIndex are not in the valid range

### setColumnMargin

void **setColumnMargin**(int newMargin)

Sets the TableColumn's column margin to newMargin. This method posts a columnMarginChanged event to its listeners.

**Parameters:**newMargin - the width, in pixels, of the new column margins**See Also:**[getColumnMargin()](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnMargin())

### getColumnCount

int **getColumnCount**()

Returns the number of columns in the model.

**Returns:**the number of columns in the model

### getColumns

[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.

**Returns:**an Enumeration of all the columns in the model

### getColumnIndex

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

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

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

### getColumn

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

Returns the TableColumn object for the column at columnIndex.

**Parameters:**columnIndex - the index of the desired column **Returns:**the TableColumn object for the column at columnIndex

### getColumnMargin

int **getColumnMargin**()

Returns the width between the cells in each column.

**Returns:**the margin, in pixels, between the cells

### getColumnIndexAtX

int **getColumnIndexAtX**(int xPosition)

Returns the index of the column that lies on the horizontal point, xPosition; or -1 if it lies outside the any of the column's bounds. 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.

**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

int **getTotalColumnWidth**()

Returns the total width of all the columns.

**Returns:**the total computed width of all columns

### setColumnSelectionAllowed

void **setColumnSelectionAllowed**(boolean flag)

Sets whether the columns in this model may be selected.

**Parameters:**flag - true if columns may be selected; otherwise false**See Also:**[getColumnSelectionAllowed()](http://docs.google.com/javax/swing/table/TableColumnModel.html#getColumnSelectionAllowed())

### getColumnSelectionAllowed

boolean **getColumnSelectionAllowed**()

Returns true if columns may be selected.

**Returns:**true if columns may be selected**See Also:**[setColumnSelectionAllowed(boolean)](http://docs.google.com/javax/swing/table/TableColumnModel.html#setColumnSelectionAllowed(boolean))

### getSelectedColumns

int[] **getSelectedColumns**()

Returns an array of indicies of all selected columns.

**Returns:**an array of integers containing the indicies of all selected columns; or an empty array if nothing is selected

### getSelectedColumnCount

int **getSelectedColumnCount**()

Returns the number of selected columns.

**Returns:**the number of selected columns; or 0 if no columns are selected

### setSelectionModel

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

Sets the selection model.

**Parameters:**newModel - a ListSelectionModel object**See Also:**[getSelectionModel()](http://docs.google.com/javax/swing/table/TableColumnModel.html#getSelectionModel())

### getSelectionModel

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

Returns the current selection model.

**Returns:**a ListSelectionModel object**See Also:**[setSelectionModel(javax.swing.ListSelectionModel)](http://docs.google.com/javax/swing/table/TableColumnModel.html#setSelectionModel(javax.swing.ListSelectionModel))

### addColumnModelListener

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

Adds a listener for table column model events.

**Parameters:**x - a TableColumnModelListener object

### removeColumnModelListener

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

Removes a listener for table column model events.

**Parameters:**x - a TableColumnModelListener object

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/TableColumnModel.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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[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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