

# MiscSliderField

**Inherits From:** TextField : Control : View : Responder : Object  
**Declared In:** MiscSliderField.h

## Class Description

A MiscSliderField is a simple subclass of TextField that uses a MiscSliderCell inside itself and implements methods to pass the new configuration information and requests through to the cell. This allows a matching API when communicating with both a MiscSliderField and a MiscSliderCell in a Matrix (for example). A **MiscStringArray** or a **StringList** (found as a MiniExample) can be attached to provide text strings that get shown instead of numbers.

A valid string list object responds to:

- (char \*) **stringAt**:(int)item;
- (unsigned int) **count**;

The value sent to **stringAt**: will be in the range 0 - **count**. When the **stringList** instance variable is set, the ranges as set in IB (or wherever) are ignored and the string list defines the range of its values. Of course, **stringAt**: can create its return value any way it likes.

## Instance Variables

id          stringList;

stringList

An object to provide strings in place of values.

## Method Types

Initializing

+ initWithFrame:

Manipulating a MiscSliderField

± setMinValue:

± setMaxValue:

± setMinBoundary:

± setMaxBoundary:

- ± setExpandMin:
- ± setExpandMax:
- ± setIntegerOnly:
- ± setPosition:
- ± setSplit:
- ± setStringList:

Querying values

- ± minValue
- ± maxValue
- ± minBoundary
- ± maxBoundary
- ± expandMin
- ± expandMax
- ± integerOnly
- ± position
- ± split
- ± stringList

## Instance Methods

### **expandMax**

±(BOOL) **expandMax**

Returns YES if **maxBoundary** is in effect stopping the arrow buttons from reaching **maxValue**.

See also:  $\pm$  **expandMin**,  $\pm$  **maxBoundary**,  $\pm$  **maxValue**,  $\pm$  **minBoundary**,  $\pm$  **minValue**,  $\pm$  **setExpandMax**,  $\pm$  **setExpandMin**,  $\pm$  **setMaxBoundary**,  $\pm$  **setMaxValue**,  $\pm$  **setMinBoundary**,  $\pm$  **setMinValue**

### **expandMin**

$\pm$ (BOOL) **expandMin**

Returns YES if **minBoundary** is in effect stopping the arrow buttons from reaching **minValue**.

See also:  $\pm$  **expandMax**,  $\pm$  **maxBoundary**,  $\pm$  **maxValue**,  $\pm$  **minBoundary**,  $\pm$  **minValue**,  $\pm$  **setExpandMax**,  $\pm$  **setExpandMin**,  $\pm$  **setMaxBoundary**,  $\pm$  **setMaxValue**,  $\pm$  **setMinBoundary**,  $\pm$  **setMinValue**

### **initWithFrame:**

$\pm$  **initWithFrame:**(const NXRect \*)*frame*

Initializes and returns the receiver with a MiscSliderCell inside it. Returns **self**.

### **integerOnly**

$\pm$ (BOOL) **integerOnly**

Returns YES if the MiscSliderCell is displaying only integral values.

See also:  $\pm$  **setIntegerOnly:**

## **maxBoundary**

$\pm$ (double) **maxBoundary**

Returns the current limit that the value will stop at when the up arrow button is being used to change the value. This limit can be changed by entering a larger value using the keyboard. This limit will be set the highest value entered that is still within the bounds of **maxValue**. It cannot be reduced except programmatically.

See also:  $\pm$  **expandMax**,  $\pm$  **expandMin**,  $\pm$  **maxValue**,  $\pm$  **minBoundary**,  $\pm$  **minValue**,  $\pm$  **setExpandMax**,  $\pm$  **setExpandMin**,  $\pm$  **setMaxBoundary**,  $\pm$  **setMaxValue**,  $\pm$  **setMinBoundary**,  $\pm$  **setMinValue**

## **maxValue**

$\pm$ (double) **maxValue**

Returns the highest value this field is allowed to reach. This limit cannot be exceeded in any way. **maxBoundary** can match this value and then have no effect.

See also:  $\pm$  **expandMax**,  $\pm$  **expandMin**,  $\pm$  **maxBoundary**,  $\pm$  **minBoundary**,  $\pm$  **minValue**,  $\pm$  **setExpandMax**,  $\pm$  **setExpandMin**,  $\pm$  **setMaxBoundary**,  $\pm$  **setMaxValue**,  $\pm$  **setMinBoundary**,  $\pm$  **setMinValue**

## **minBoundary**

$\pm$ (double) **minBoundary**

Returns the current limit that the value will stop at when the down arrow button is being used to change the value. This limit can be changed by entering a smaller value using the keyboard. This limit will be set the lowest value entered that is still within the bounds of **minValue**. It cannot be increased except

programmatically.

See also:  $\pm$  **expandMax**,  $\pm$  **expandMin**,  $\pm$  **maxBoundary**,  $\pm$  **maxValue**,  $\pm$  **minValue**,  $\pm$  **setExpandMax**,  $\pm$  **setExpandMin**,  $\pm$  **setMaxBoundary**,  $\pm$  **setMaxValue**,  $\pm$  **setMinBoundary**,  $\pm$  **setMinValue**

### **minValue**

$\pm$ (double) **minValue**

Returns the lowest value this field is allowed to reach. This value cannot be exceeded in any way. **minBoundary** can match this value and then have no effect.

See also:  $\pm$  **expandMax**,  $\pm$  **expandMin**,  $\pm$  **maxBoundary**,  $\pm$  **maxValue**,  $\pm$  **minBoundary**,  $\pm$  **setExpandMax**,  $\pm$  **setExpandMin**,  $\pm$  **setMaxBoundary**,  $\pm$  **setMaxValue**,  $\pm$  **setMinBoundary**,  $\pm$  **setMinValue**

### **position**

$\pm$ (int) **position**

Returns the position of the TextFieldCell relative to the SliderCell. See **setPosition:** for the values.

See also:  $\pm$  **setPosition:**,  $\pm$  **setSplit:**,  $\pm$  **split**

### **setExpandMax:**

$\pm$  **setExpandMax:**(BOOL)*flag*

If *flag* is YES then **maxBoundary** has an effect on the upper limit of the field value when it's adjusted with the arrow buttons. Returns **self**.

See also:  $\pm$  **expandMax**,  $\pm$  **expandMin**,  $\pm$  **maxBoundary**,  $\pm$  **maxValue**,  $\pm$  **minBoundary**,  $\pm$  **minValue**,  $\pm$  **setExpandMin**,  $\pm$  **setMaxBoundary**,  $\pm$  **setMaxValue**,  $\pm$  **setMinBoundary**,  $\pm$  **setMinValue**

### **setExpandMin:**

$\pm$  **setExpandMin**:(BOOL)*flag*

If *flag* is YES then **minBoundary** has an effect on the lower limit of the field value when it's adjusted with the arrow buttons. Returns **self**.

See also:  $\pm$  **expandMax**,  $\pm$  **expandMin**,  $\pm$  **maxBoundary**,  $\pm$  **maxValue**,  $\pm$  **minBoundary**,  $\pm$  **minValue**,  $\pm$  **setExpandMax**,  $\pm$  **setMaxBoundary**,  $\pm$  **setMaxValue**,  $\pm$  **setMinBoundary**,  $\pm$  **setMinValue**

### **setIntegerOnly**

$\pm$  **setIntegerOnly**:(BOOL)*flag*

If *flag* is YES only the integral part of the value will be used. The fractional part of the value is truncated when the value is set, **doubleValue** will return the same value as **intValue** when this flag is set to YES. Returns **self**.

See also:  $\pm$  **integerOnly**

### **setMaxBoundary**

**± setMaxBoundary:**(double)*value*

Sets the highest value the field will allow when using the arrow buttons to adjust the value. This value can be exceeded and altered by typing a value greater than this limit. This value will be adjusted to match the entered amount with an additional limitation that it will stop at **maxValue**. Returns **self**.

See also: **± expandMax, ± expandMin, ± maxBoundary, ± maxValue, ± minBoundary, ± minValue, ± €setExpandMax, ± setExpandMin, ± setMaxValue, ± setMinBoundary, ± setMinValue**

### **setMaxValue**

**± setMaxValue:**(double)*value*

Sets the highest value the field will allow. There is no way to exceed this limit from the interface. **maxBoundary** will stop expanding when it gets to this value. Returns **self**.

See also: **± expandMax, ± expandMin, ± maxBoundary, ± maxValue, ± minBoundary, ± minValue, ± €setExpandMax, ± setExpandMin, ± setMaxBoundary, ± setMinBoundary, ± setMinValue**

### **setMinBoundary**

**± setMinBoundary:**(double)*value*

Sets the lowest value the field will allow when using the arrow buttons to adjust the value. This value can be exceeded and altered by typing a value lower than this limit. This value will be adjusted to match the entered amount with an additional limitation that it will stop at **minValue**. Returns **self**.

See also: **± expandMax, ± expandMin, ± maxBoundary, ± maxValue, ± minBoundary, ± minValue, ±**

€setExpandMax, ± setExpandMin, ± setMaxBoundary, ± setMaxValue, ± setMinValue

### setMinValue

± **setMinValue:**(double)*value*

Sets the lowest value the field will allow. There is no way to exceed this limit from the interface. **minBoundary** will stop expanding when it gets to this value. Returns **self**.

See also: ± **expandMax**, ± **expandMin**, ± **maxBoundary**, ± **maxValue**, ± **minBoundary**, ± **minValue**, ±  
€**setExpandMax**, ± **setExpandMin**, ± **setMaxBoundary**, ± **setMaxValue**, ± **setMinBoundary**

### setPosition

± **setPosition:**(int)*where*

Sets the position of the TextFieldCell relative to the SliderCell. Constants are defined in MiscSliderCell.h and can be selected from MSC\_ABOVELEFT, MSC\_ABOVECENTER, MSC\_ABOVERIGHT, MSC\_LEFT, MSC\_RIGHT, MSC\_BELOWLEFT, MSC\_BELOWCENTER and MSC\_BELOWRIGHT. See **setSplit:** for further control of the display. Returns **self**.

See also: ± **position**, ± **setSplit:**, ± **split**

### setSplit

± **setSplit:**(int)*percent*

Sets the width of the TextFieldCell as a percentage of the width of the entire MiscSliderCell. When the position is set to MSC\_LEFT or MSC\_RIGHT the SliderCell is adjusted to take up the remaining horizontal space. In all the other position settings the SliderCell takes the full width of the MiscSliderCell and the TextFieldCell is still sized as a percentage of the total length and positioned appropriately. Valid values are 0-100 but the minimum size of both the TextFieldCell and the SliderCell are set. Returns **self**.

See also:  $\pm$  **position**,  $\pm$  **setPosition:**,  $\pm$  **split**

### **setStringList:**

$\pm$  **setStringList:***anObject*

Sets the object to be asked for display strings. *anObject* should respond to **stringAt:** and **count** messages. When a string list is set the range limits are all ignored and the cell is set to non-editable. The value of the cell will only fit within a range defined by *anObject*'s **count** method. Returns **self**.

*anObject*'s **stringAt:** method should take an **int** as its argument and return a **char \*** with the correct string to be displayed for the given value. The value of the argument will range from 0 to **count** - 1. This arrangement has been created to allow the MiscSliderField to be connected to a MiscStringArray or a StringList (found in the MiniExamples) object in Interface Builder so lists may be created, displayed and dealt with with no additional code.

See also:  $\pm$  **stringList**

### **split**

$\pm$ (int) **split**

Returns the relative width of the TextFieldCell in relation to the size of the MiscSliderCell.

See also:  $\pm$  **position**,  $\pm$  **setPosition:**,  $\pm$  **setSplit:**

**stringList**

$\pm$  **stringList**

Returns the object that is taking the task of providing the display strings.

See also:  $\pm$  **setStringList:**