
NSSegmentedControl Class Reference

[Cocoa](#) > [User Experience](#)



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NSSegmentedControl Class Reference

Inherits from	NSControl : NSView : NSResponder : NSObject
Conforms to	NSAnimatablePropertyContainer (NSView) NSCoding (NSResponder) NSObject (NSObject)
Framework	/System/Library/Frameworks/AppKit.framework
Availability	Available in Mac OS X v10.3 and later.
Companion guide	Segmented Controls Programming Guide for Cocoa
Declared in	NSSegmentedControl.h
Related sample code	ImageClient ImageMapExample PDF Annotation Editor PDFKitLinker2

Overview

An `NSSegmentedControl` object implements a horizontal button made of multiple segments.

The `NSSegmentedControl` class uses an `NSSegmentedCell` class to implement much of the control's functionality. Most methods in `NSSegmentedControl` are simply "cover methods" that call the corresponding method in `NSSegmentedCell`. The methods of `NSSegmentedCell` that do not have covers relate to accessing and setting values for tags and tool tips; programatically setting the key segment; and establishing the mode of the control.

The features of a segmented control include:

- Each segment can have an image, text (label), menu, tooltip, and tag
- Either the whole control or individual segments can be enabled or disabled
- There are three tracking modes for segments: select one mode (also known as radio button mode and illustrated by Finder's view mode selection control), momentary mode (as illustrated by Safari's toolbar buttons), or select any mode (where any combination of buttons may be on or off)
- Each segment can be either a fixed width or autosized to fit the contents
- If a segment has text and is marked as autosizing, then the text may be truncated so that the control completely fits
- If an image is too large to fit in a segment, it is clipped

- Full keyboard control of the user interface

Tasks

Specifying Number of Segments

- [setSegmentCount:](#) (page 15)
Sets the number of segments in the receiver.
- [segmentCount](#) (page 12)
Returns the number of segments in the receiver.

Specifying Selected Segment

- [setSelectedSegment:](#) (page 17)
Sets the selected segment of the receiver.
- [selectedSegment](#) (page 12)
Returns the index of the selected segment of the receiver.
- [selectSegmentWithTag:](#) (page 13)
Selects the segment with the specified tag.

Working with Individual Segments

- [setWidth:forSegment:](#) (page 18)
Sets the width of the specified segment.
- [widthForSegment:](#) (page 18)
Returns the width of the specified segment.
- [setImage:forSegment:](#) (page 14)
Sets the image for the specified segment.
- [imageForSegment:](#) (page 9)
Returns the image associated with the specified segment.
- [setLabel:forSegment:](#) (page 15)
Sets the label for the specified segment.
- [labelForSegment:](#) (page 11)
Returns the label of the specified segment
- [setMenu:forSegment:](#) (page 15)
Sets the menu for the specified segment.
- [menuForSegment:](#) (page 11)
Returns the menu for the specified segment
- [setSelected:forSegment:](#) (page 17)
Sets the selection state of the specified segment.

- [isSelectedForSegment:](#) (page 10)
Returns a Boolean value indicating whether the specified segment is selected.
- [setEnabled:forSegment:](#) (page 13)
Sets the enabled state of the specified segment
- [isEnabledForSegment:](#) (page 10)
Returns a Boolean value indicating whether the specified segment is enabled.

Specifying Segment Display

- [setSegmentStyle:](#) (page 16)
Sets the visual style used to display the receiver.
- [segmentStyle](#) (page 12)
Returns the visual style used to display the receiver.
- [setImageScaling:forSegment:](#) (page 14)
Sets the scaling mode used to display the specified segment's image.
- [imageScalingForSegment:](#) (page 9)
Returns the scaling mode used to display the specified segment's image.

Instance Methods

imageForSegment:

Returns the image associated with the specified segment.

```
(NSImage *)imageForSegment:(NSInteger)segment
```

Parameters

segment

The index of the segment whose image you want to get. This method raises an `NSRangeException` if the index is out of bounds.

Return Value

The image associated with the segment; otherwise, `nil`.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [setImage:forSegment:](#) (page 14)

Declared In

`NSSegmentedControl.h`

imageScalingForSegment:

Returns the scaling mode used to display the specified segment's image.

- (NSUInteger)imageScalingForSegment:(NSInteger)segment

Parameters

segment

The index of the segment whose enabled state you want to get. This method raises an `NSRangeException` if the index is out of bounds.

Return Value

One of the image scaling constants. For a list of possible values, see `UIImageScaling`. The default value is `UIImageScaleProportionallyDown`.

Availability

Available in Mac OS X v10.5 and later.

See Also

- [setImageScaling:forSegment:](#) (page 14)

Declared In

`NSSegmentedControl.h`

isEnabledForSegment:

Returns a Boolean value indicating whether the specified segment is enabled.

- (BOOL)isEnabledForSegment:(NSInteger)segment

Parameters

segment

The index of the segment whose enabled state you want to get. This method raises an `NSRangeException` if the index is out of bounds.

Return Value

YES if the segment is enabled; otherwise, NO.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [setEnabled:forSegment:](#) (page 13)

Declared In

`NSSegmentedControl.h`

isSelectedForSegment:

Returns a Boolean value indicating whether the specified segment is selected.

- (BOOL)isSelectedForSegment:(NSInteger)segment

Parameters

segment

The index of the segment whose selection state you want to get. This method raises an `NSRangeException` if the index is out of bounds.

Return Value

YES if the segment is selected; otherwise, NO.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [setSelected:forSegment:](#) (page 17)

Declared In

NSSegmentedControl.h

labelForSegment:

Returns the label of the specified segment

```
- (NSString *)labelForSegment:(NSInteger)segment
```

Parameters

segment

The index of the segment whose label you want to get. This method raises an `NSRangeException` if the index is out of bounds.

Return Value

The label of the segment. The returned string contains the entire text of the label, even if that text is normally truncated during drawing.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [setLabel:forSegment:](#) (page 15)

Declared In

NSSegmentedControl.h

menuForSegment:

Returns the menu for the specified segment

```
- (NSMenu *)menuForSegment:(NSInteger)segment
```

Parameters

segment

The index of the segment whose menu you want to get. This method raises an `NSRangeException` if the index is out of bounds.

Return Value

The menu associated with the segment; otherwise, `nil`.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [setMenu:forSegment:](#) (page 15)

Declared In

NSSegmentedControl.h

segmentCount

Returns the number of segments in the receiver.

- (NSInteger)segmentCount

Return Value

The number of segments.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [setSegmentCount:](#) (page 15)

Declared In

NSSegmentedControl.h

segmentStyle

Returns the visual style used to display the receiver.

- (NSSegmentStyle)segmentStyle

Return Value

An `NSSegmentStyle` value that specifies the visual display used by the receiver. For possible values see [“Segmented Control Visual Styles”](#) (page 19).

Availability

Available in Mac OS X v10.5 and later.

See Also

- [setSegmentStyle:](#) (page 16)

Declared In

NSSegmentedControl.h

selectedSegment

Returns the index of the selected segment of the receiver.

- (NSInteger)selectedSegment

Return Value

The index of the currently selected segment or -1 if no segment is selected. If the receiver allows multiple selections, this method returns the most recently selected segment.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [setSelectedSegment:](#) (page 17)

Related Sample Code

ImageClient

Declared In

NSSegmentedControl.h

selectSegmentWithTag:

Selects the segment with the specified tag.

```
- (BOOL)selectSegmentWithTag:(NSInteger)tag
```

Parameters

tag

The tag associated with the desired segment.

Return Value

YES if the segment was selected successfully; otherwise, NO.

Discussion

Typically, you use Interface Builder to specify the tag for each segment. You may also set this value programmatically using the `setTag:forSegment:` method of `NSSegmentedCell`.

Availability

Available in Mac OS X v10.4 and later.

See Also

- `setTag:forSegment:` (`NSSegmentedCell`)

Declared In

NSSegmentedControl.h

setEnabled:forSegment:

Sets the enabled state of the specified segment

```
- (void)setEnabled:(BOOL)flag forSegment:(NSInteger)segment
```

Parameters

flag

YES to enable the segment; otherwise, NO to disable it.

segment

The index of the segment you want to enable or disable. This method raises an `NSRangeException` if the index is out of bounds.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [isEnabledForSegment:](#) (page 10)

Declared In

NSSegmentedControl.h

setImage:forSegment:

Sets the image for the specified segment.

```
- (void)setImage:(NSImage *)image forSegment:(NSInteger)segment
```

Parameters

image

The image to apply to the segment or `nil` if you want to clear the existing image. Images are not scaled to fit inside a segment. If the image is larger than the available space, it is clipped.

segment

The index of the segment whose image you want to set. This method raises an `NSRangeException` if the index is out of bounds.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [imageForSegment:](#) (page 9)

Declared In

NSSegmentedControl.h

setImageScaling:forSegment:

Sets the scaling mode used to display the specified segment's image.

```
- (void)setImageScaling:(NSImageScaling)scaling forSegment:(NSInteger)segment
```

Parameters

scaling

One of the image scaling constants. For a list of possible values, see `NSImageScaling`.

segment

The index of the segment whose enabled state you want to get. This method raises an `NSRangeException` if the index is out of bounds.

Availability

Available in Mac OS X v10.5 and later.

See Also

- [imageForSegment:](#) (page 9)

Declared In

NSSegmentedControl.h

setLabel:forSegment:

Sets the label for the specified segment.

```
- (void)setLabel:(NSString *)label forSegment:(NSInteger)segment
```

Parameters

label

The label you want to display in the segment. If the width of the string is greater than the width of the segment, the string's text is truncated during drawing.

segment

The index of the segment whose label you want to set. This method raises an `NSRangeException` if the index is out of bounds.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [labelForSegment:](#) (page 11)

Declared In

`NSSegmentedControl.h`

setMenu:forSegment:

Sets the menu for the specified segment.

```
- (void)setMenu:(NSMenu *)menu forSegment:(NSInteger)segment
```

Parameters

menu

The menu you want to add to the segment or `nil` to clear the current menu. This menu is displayed when the user clicks and holds the mouse button while the mouse is over the segment.

segment

The index of the segment whose menu you want to set. This method raises an `NSRangeException` if the index is out of bounds.

Discussion

Adding a menu to a segment allows that segment to be used as a pop-up button.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [menuForSegment:](#) (page 11)

Declared In

`NSSegmentedControl.h`

setSegmentCount:

Sets the number of segments in the receiver.

- (void)setSegmentCount:(NSInteger)count

Parameters

count

The number of segments the receiver should have. If this value is less than the number of segments currently in the receiver, segments are removed from the right of the control. Similarly, if the number is greater than the current number of segments, the new segments are added on the right. This value must be between 0 and 2049.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [segmentCount](#) (page 12)

Declared In

NSSegmentedControl.h

setSegmentStyle:

Sets the visual style used to display the receiver.

- (void)setSegmentStyle:(NSSegmentStyle)segmentStyle

Parameters

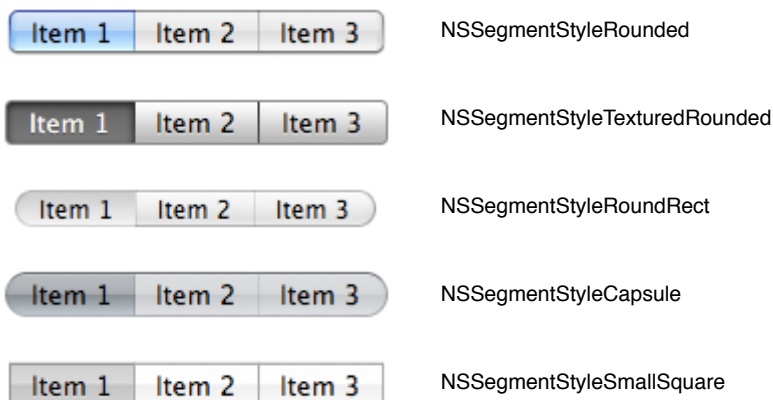
segmentStyle

An NSSegmentStyle value that specifies the visual display used by the receiver. For the possible values see [“Segmented Control Visual Styles”](#) (page 19).

Discussion

[Figure 1](#) (page 16) shows the visual styles and their corresponding NSSegmentStyle constant. The NSSegmentStyleAutomatic (page 19) constant will automatically determined based on the type of window in which the control is displayed and the position within the window., and is not shown in the figure.

Figure 1 NSSegmentStyle examples



Availability

Available in Mac OS X v10.5 and later.

See Also

- [segmentStyle](#) (page 12)

Declared In

NSSegmentedControl.h

setSelected:forSegment:

Sets the selection state of the specified segment.

```
- (void)setSelected:(BOOL)flag forSegment:(NSInteger)segment
```

Parameters

flag

YES if you want to select the segment; otherwise, NO.

segment

The index of the segment whose selection state you want to set. This method raises an `NSRangeException` if the index is out of bounds.

Discussion

If the receiver allows only a single selection, this method deselects any other selected segments.

Availability

Available in Mac OS X v10.3 and later.

See Also

- [isSelectedForSegment:](#) (page 10)

Declared In

NSSegmentedControl.h

setSelectedSegment:

Sets the selected segment of the receiver.

```
- (void)setSelectedSegment:(NSInteger)selectedSegment
```

Parameters

selectedSegment

The zero-based index of the desired segment. This method raises an `NSRangeException` if the index is out of bounds.

Discussion

If the receiver allows multiple selections, this method selects the specified segment using [setSelected:forSegment:](#) (page 17).

Availability

Available in Mac OS X v10.3 and later.

See Also

- [selectedSegment](#) (page 12)

Declared In

NSSegmentedControl.h

setWidth:forSegment:

Sets the width of the specified segment.

- (void)setWidth:(CGFloat)width forSegment:(NSInteger)segment

Parameters*width*

The width of the segment, measured in points. Specify the value 0 if you want the segment to be sized to fit the available space automatically.

*segment*The index of the segment whose width you want to set. This method raises an `NSRangeException` if the index is out of bounds.**Availability**

Available in Mac OS X v10.3 and later.

See Also- [widthForSegment:](#) (page 18)**Declared In**

NSSegmentedControl.h

widthForSegment:

Returns the width of the specified segment.

- (CGFloat)widthForSegment:(NSInteger)segment

Parameters*segment*The index of the segment whose width you want to get. This method raises an `NSRangeException` if the index is out of bounds.**Return Value**

The width of the segment, measured in points, or 0 if the segment is sized to fit the available space automatically.

Availability

Available in Mac OS X v10.3 and later.

See Also- [setWidth:forSegment:](#) (page 18)**Declared In**

NSSegmentedControl.h

Constants

Segmented Control Visual Styles

The following constants specify the visual style used to display the segmented control. They are used by [setSegmentStyle:](#) (page 16).

```
enum {
    NSSegmentStyleAutomatic = 0,
    NSSegmentStyleRounded = 1,
    NSSegmentStyleTexturedRounded = 2,
    NSSegmentStyleRoundRect = 3,
    NSSegmentStyleTexturedSquare = 4,
    NSSegmentStyleCapsule = 5,
    NSSegmentStyleSmallSquare = 6
};
typedef NSInteger NSSegmentStyle;
```

Constants

`NSSegmentStyleAutomatic`

The appearance of the segmented control is automatically determined based on the type of window in which the control is displayed and the position within the window.

Available in Mac OS X v10.5 and later.

Declared in `NSSegmentedControl.h`.

`NSSegmentStyleRounded`

The control is displayed using the rounded style. See [Figure 1](#) (page 16) for examples.

Available in Mac OS X v10.5 and later.

Declared in `NSSegmentedControl.h`.

`NSSegmentStyleTexturedRounded`

The control is displayed using the textured rounded style. See [Figure 1](#) (page 16) for examples.

Available in Mac OS X v10.5 and later.

Declared in `NSSegmentedControl.h`.

`NSSegmentStyleRoundRect`

The control is displayed using the round rect style. See [Figure 1](#) (page 16) for examples.

Available in Mac OS X v10.5 and later.

Declared in `NSSegmentedControl.h`.

`NSSegmentStyleTexturedSquare`

The control is displayed using the textured square style. See [Figure 1](#) (page 16) for examples.

Available in Mac OS X v10.5 and later.

Declared in `NSSegmentedControl.h`.

`NSSegmentStyleCapsule`

The control is displayed using the capsule style. See [Figure 1](#) (page 16) for examples.

Available in Mac OS X v10.5 and later.

Declared in `NSSegmentedControl.h`.

NSSegmentStyleSmallSquare

The control is displayed using the small square style. See [Figure 1](#) (page 16) for examples.

Available in Mac OS X v10.5 and later.

Declared in `NSSegmentedControl.h`.

Document Revision History

This table describes the changes to *NSSegmentedControl Class Reference*.

Date	Notes
2009-05-06	Added missing API.
2006-05-23	First publication of this content as a separate document.
	First publication of this content as a separate document.

REVISION HISTORY

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