
NSPathCell Class Reference

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



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|----------------------|--|
| Inherits from | NSActionCell : NSCell : NSObject |
| Conforms to | NSCoding (NSCell) NSCopying (NSCell) NSObject (NSObject) |
| Framework | /System/Library/Frameworks/AppKit.framework |
| Availability | Available in Mac OS X v10.5 and later. |
| Declared in | NSPathCell.h |

Overview

`NSPathCell` implements the user interface of an `NSPathComponentControl` object. It maintains a collection of `NSPathComponentCell` objects that represent a particular path to be displayed to the user.

Tasks

Displaying Hidden Components

- [mouseEntered:withFrame:inView:](#) (page 9)
Displays the cell component over which the mouse is hovering.
- [mouseExited:withFrame:inView:](#) (page 10)
Hides the cell component over which the mouse is hovering.

Setting the Allowed Types

- [allowedTypes](#) (page 8)
Returns the component types allowed in the path when the cell is editable.
- [setAllowedTypes:](#) (page 12)
Sets the component types allowed in the path when the cell is editable.

Setting the Control Style

- [pathStyle](#) (page 11)
Returns the receiver's path style.
- [setPathStyle:](#) (page 15)
Sets the receiver's path style.
- [setControlSize:](#) (page 13)
Sets the receiver's control size.

Setting the Object Value

- [setObjectValue:](#) (page 14)
Sets the receiver's object value.

Setting Cell Appearance

- [placeholderAttributedString](#) (page 11)
Returns the placeholder attributed string.
- [setPlaceholderAttributedString:](#) (page 16)
Sets the value of the placeholder attributed string.
- [setPlaceholderString:](#) (page 16)
Sets the value of the placeholder string.
- [placeholderString](#) (page 11)
Returns the placeholder string.
- [setBackgroundcolor:](#) (page 13)
Sets the receiver's background color.
- [backgroundcolor](#) (page 8)
Returns the current background color of the receiver.

Managing Path Components

- + [PathComponentCellClass](#) (page 7)
Returns the class used to create `PathComponentCell` objects when automatically filling up the control.
- [rectOfPathComponentCell:withFrame:inView:](#) (page 12)
Returns the current rectangle being displayed for a given path component cell, with respect to a given frame in a given view.
- [PathComponentCellAtPoint:withFrame:inView:](#) (page 10)
Returns the cell located at the given point within the given frame of the given view.
- [clickedPathComponentCell](#) (page 8)
Returns the clicked cell.
- [PathComponentCells](#) (page 10)
Returns an array of the `NSPathComponentCell` objects currently being displayed.

- [setPathComponentCells:](#) (page 15)
Sets the array of `NSPathComponentCell` objects currently being displayed.

Setting the Double-Click Action

- [doubleAction](#) (page 9)
Returns the receiver's double-click action method.
- [setDoubleClickAction:](#) (page 14)
Sets the receiver's double-click action.

Setting the Path

- [URL](#) (page 17)
Returns the path displayed by the receiver.
- [setURL:](#) (page 16)
Sets the value of the path displayed by the receiver.

Setting the Delegate

- [delegate](#) (page 9)
Returns the receiver's delegate.
- [setDelegate:](#) (page 14)
Sets the receiver's delegate.

Class Methods

`PathComponentCellClass`

Returns the class used to create `PathComponentCell` objects when automatically filling up the control.

```
+ (Class)PathComponentCellClass;
```

Return Value

The class used to create `NSPathComponentCell` objects.

Discussion

Subclasses can override this method to return a custom cell class that is automatically used. By default, the method returns `[NSPathComponentCell class]`, or a specialized subclass thereof.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponent.h`

Instance Methods

allowedTypes

Returns the component types allowed in the path when the cell is editable.

```
- (NSArray *)allowedTypes;
```

Return Value

An array of strings representing either file extensions or UTIs. Can be `nil`, the default value, allowing all types, or an empty array, allowing nothing.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

backgroundColor

Returns the current background color of the receiver.

```
- (NSColor *)backgroundColor
```

Return Value

The background color.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

clickedPathComponentCell

Returns the clicked cell.

```
- (NSPathComponentCell *)clickedPathComponentCell
```

Return Value

The component cell that was clicked, or `nil`, if no cell has been clicked.

Discussion

The value returned is generally valid only when the action or double-click action is being sent.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

delegate

Returns the receiver's delegate.

- (id)delegate

Return Value

The receiver's delegate.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

doubleAction

Returns the receiver's double-click action method.

- (SEL)doubleAction

Return Value

The action method invoked when the user double-clicks the receiver.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

mouseEntered:withFrame:inView:

Displays the cell component over which the mouse is hovering.

- (void)mouseEntered:(NSEvent *)event withFrame:(NSRect)frame inView:(NSView *)view;

Parameters

event

The mouse-entered event.

frame

The frame in which the cell is located.

view

The view in which the cell is located.

Discussion

The `NSPathCell` object dynamically animates to display the component that the mouse is hovering over using mouse-entered and mouse-exited events. The control should call these methods to correctly display the hovered component to the user. The control can acquire rectangles to track using [rectOfPathComponentCell:withFrame:inView:](#) (page 12).

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

mouseExited:withFrame:inView:

Hides the cell component over which the mouse is hovering.

```
- (void)mouseExited:(NSEvent *)event withFrame:(NSRect)frame inView:(NSView *)view;
```

Parameters*event*

The mouse-exited event.

frame

The frame in which the cell is located.

view

The view in which the cell is located.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

pathComponentCellAtPoint:withFrame:inView:

Returns the cell located at the given point within the given frame of the given view.

```
- (NSPathComponentCell *)pathComponentCellAtPoint:(NSPoint)point
withFrame:(NSRect)frame inView:(NSView *)view;
```

Parameters*point*

The point within the returned cell.

frame

The frame within which the point is located.

view

The view within which the frame is located.

Return Value

The component cell within which the given point is located, or `nil` if no cell exists at that location.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

pathComponentCells

Returns an array of the `NSPathComponentCell` objects currently being displayed.

- (NSArray *)pathComponentCells

Return Value

The array of `NSPathComponentCell` objects.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponentCell.h`

pathStyle

Returns the receiver's path style.

- (NSPathStyle)pathStyle

Return Value

The style of the path.

Availability

Available in Mac OS X v10.5 and later.

See Also

- `setPathStyle:`

Declared In

`NSPathComponentCell.h`

placeholderAttributedString

Returns the placeholder attributed string.

- (NSAttributedString *)placeholderAttributedString;

Return Value

The placeholder attributed string.

Discussion

If the `NSPathComponentCell` object contains no `NSPathComponentCell` objects, the placeholder attributed string is drawn in their place, if it is not `nil`. If the placeholder attributed string is `nil`, the (non-attributed) placeholder string is drawn with default attributes, if it is not `nil`.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponentCell.h`

placeholderString

Returns the placeholder string.

```
- (NSString *)placeholderString;
```

Return Value

The placeholder string.

Discussion

If the `NSPathCell` object contains no `NSPathComponentCell` objects, the placeholder attributed string is drawn in their place, if it is not `nil`. If the placeholder attributed string is `nil`, the (non-attributed) placeholder string is drawn with default attributes, if it is not `nil`.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathCell.h`

rectOfPathComponentCell:withFrame:inView:

Returns the current rectangle being displayed for a given path component cell, with respect to a given frame in a given view.

```
- (NSRect)rectOfPathComponentCell:(NSPathComponentCell *)cell withFrame:(NSRect)frame
    inView:(NSView *)view;
```

Parameters

cell

The path component cell.

frame

The frame of the view in which the cell appears.

view

The view in which the cell appears.

Return Value

The rectangle occupied by the path component cell. `NSZeroRect` is returned if *cell* is not found or is not currently visible.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathCell.h`

setAllowedTypes:

Sets the component types allowed in the path when the cell is editable.

```
- (void)setAllowedTypes:(NSArray *)allowedTypes;
```

Parameters

allowedTypes

An array of strings representing either file extensions or UTIs. Can be `nil`, the default value, allowing all types.

Discussion

The *allowedTypes* array can contain file extensions (without the period that begins the extension) or UTIs. To allow folders, include the `public.folder` identifier. To allow any type, use `nil`. If the value of *allowedTypes* is an empty array, nothing is allowed. The default value is `nil`, allowing all types.

If the cell is editable and its type is `NSPathStylePopUp`, a Choose item is included to enable selection of a different path by invoking an Open panel. The allowed types are passed to the Open panel to filter out other types. The allowed types are also used with drag and drop to indicate if a drop is allowed.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathCell.h`

setBackground-color:

Sets the receiver's background color.

```
- (void)setBackgroundColor:(NSColor *)color
```

Parameters

color

The color to be drawn.

Discussion

By default, the background is set to a light blue color for `NSPathStyleStandard`, and `nil` for the other styles. You can use `[NSColor clearColor]` to make the background transparent.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathCell.h`

setControlSize:

Sets the receiver's control size.

```
- (void)setControlSize:(NSControlSize)size
```

Parameters

size

The new control size.

Discussion

`NSPathCell` properly respects the control size for the [NSPathStyleStandard](#) (page 17) and [NSPathStylePopUp](#) (page 18) styles. When the control size is set, the new size is propagated to subcells. When the path style is set to [NSPathStyleNavigationBar](#) (page 18), you cannot change the control size, and it is always set to `NSSmallControlSize`. Attempting to change the control size when the path style is [NSPathStyleNavigationBar](#) (page 18) causes an assertion. Setting the path style to [NSPathStyleNavigationBar](#) (page 18) forces the control size to be `NSSmallControlSize`.

Availability

Available in Mac OS X v10.5 and later.

See Also

- [setPathStyle:](#) (page 15)
- [pathStyle](#) (page 11)

Declared In

NSPathCell.h

setDelegate:

Sets the receiver's delegate.

```
- (void)setDelegate:(id)delegate
```

Parameters

delegate

the object to set as the receiver's delegate.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

setDoubleAction:

Sets the receiver's double-click action.

```
- (void)setDoubleAction:(SEL)action
```

Parameters

action

The action method to invoke when the receiver is double-clicked.

Availability

Available in Mac OS X v10.5 and later.

Declared In

NSPathCell.h

setObjectValue:

Sets the receiver's object value.

```
- (void)setObjectValue:(id <NSCopying>)obj;
```

Parameters

obj

The new object value for the cell.

Discussion

If `setObjectValue:` is called with an `NSURL` object, `setURL:` (page 16) is automatically called. The `objectValue` method returns the most recently set URL value. The `setObjectValue:` method can also take a string value, with the items separated by the path separator (`/`). Any other value is a programming error and will cause an assertion.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponentCell.h`

setPathComponentCells:

Sets the array of `NSPathComponentCell` objects currently being displayed.

```
- (void)setPathComponentCells:(NSArray *)cells
```

Parameters

cells

An array of `NSPathComponentCell` objects.

Discussion

Each item in the array must be an instance of `NSPathComponentCell` or a subclass thereof. You cannot set this value to `nil`, but you can set it to an empty array using, for example, `[NSArray array]`.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponentCell.h`

setPathStyle:

Sets the receiver's path style.

```
- (void)setPathStyle:(NSPathStyle)style
```

Parameters

style

The new path style.

Discussion

See `setControlSize:` (page 13) for information about path style and control size dependencies.

Availability

Available in Mac OS X v10.5 and later.

See Also

- [pathStyle](#) (page 11)
- [setControlSize:](#) (page 13)

Declared In

`NSPathComponentCell.h`

setPlaceholderAttributedString:

Sets the value of the placeholder attributed string.

```
- (void)setPlaceholderAttributedString:(NSAttributedString *)string;
```

Parameters

string

The string to set for the placeholder attributed string.

Discussion

If the `NSPathComponent` object contains no `NSPathComponentCell` objects, the placeholder attributed string is drawn in their place, if it is not `nil`. If the placeholder attributed string is `nil`, the (non-attributed) placeholder string is drawn with default attributes, if it is not `nil`.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponent.h`

setPlaceholderString:

Sets the value of the placeholder string.

```
- (void)setPlaceholderString:(NSString *)string;
```

Parameters

string

The string to set for the placeholder.

Discussion

If the `NSPathComponent` object contains no `NSPathComponentCell` objects, the placeholder attributed string is drawn in their place, if it is not `nil`. If the placeholder attributed string is `nil`, the (non-attributed) placeholder string is drawn with default attributes, if it is not `nil`.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponent.h`

setURL:

Sets the value of the path displayed by the receiver.

```
- (void)setURL:(NSURL *)url
```

Parameters

url

The new path value to display.

Discussion

When setting, an array of `NSPathComponentCell` objects is automatically set, based on the path in `url`. The type of `NSPathComponentCell` objects created can be controlled by subclassing `NSPathComponentCell` and overriding `pathComponentCellClass` (page 7).

If `url` is a file URL (returns YES from `isFileURL`), the images are automatically filled with file icons, if the path exists. The URL value itself is stored in the `objectValue` property of the cell.

Para

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponentCell.h`

URL

Returns the path displayed by the receiver.

- (NSURL *)URL

Return Value

The path value.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSPathComponentCell.h`

Constants

NSPathStyle

`NSPathStyle` constants represent the different visual and behavioral styles an `NSPathComponentCell` or `NSPathComponentCell` object can have.

```
enum {
    NSPathStyleStandard,
    NSPathStyleNavigationBar,
    NSPathStylePopUp,
};
typedef NSInteger NSPathStyle;
```

Constants

`NSPathStyleStandard`

The standard display style and behavior. All path component cells are displayed with an icon image and component name. If the path can not fully be displayed, the middle parts are truncated as required.

Available in Mac OS X v10.5 and later.

Declared in `NSPathComponentCell.h`.

NSPathStyleNavigationBar

The navigation bar display style and behavior. Similar to the `NSPathStyleStandard` with the navigation bar drawing style. Also known as the breadcrumb style.

Available in Mac OS X v10.5 and later.

Declared in `NSPathCell.h`.

NSPathStylePopUp

The pop-up display style and behavior. Only the last path component is displayed with an icon image and component name. The full path is shown when the user clicks on the cell. If the cell is editable, a Choose item is included to enable selecting a different path.

Available in Mac OS X v10.5 and later.

Declared in `NSPathCell.h`.

Declared In

`NSPathCell.h`

Document Revision History

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

| Date | Notes |
|------------|---|
| 2007-04-11 | New document that describes the Objective-C API for the class implementing the user interface of an NSPathComponent object. |

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