# **PDFOutline Class Reference**

**Graphics & Imaging > Cocoa** 



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# **PDFOutline Class Reference**

Inherits from NSObject

Conforms to NSObject (NSObject)

Framework Library/Frameworks/Quartz.framework/Frameworks/PDFKit.framework

**Availability** Available in Mac OS X v10.4 and later.

**Declared in** PDFOutline.h

# Overview

A PDFOutline object is an element in a tree-structured hierarchy that can represent the structure of a PDF document.

An outline is an optional component of a PDF document, useful for viewing the structure of the document and for navigating within it.

Outlines are created by the document's author. If you represent a PDF document outline using outline objects, the root of the hierarchy is obtained from the PDF document itself. This root outline is not visible and serves merely as a container for the visible outlines.

# **Tasks**

# **Initializing an Outline**

- init (page 9)

Initializes a PDFOutline object.

- initWithDocument: (page 9)

Initializes an outline with the specified PDF document. (Deprecated. Use the PDFDocument outlineRoot method instead.)

# **Getting Information About an Outline**

document (page 8)

Returns the document with which the outline is associated.

- numberOfChildren (page 10)

Returns the number of child outline objects in the outline.

parent (page 11)

Returns the parent outline object of the outline (returns NULL if called on the root outline object).

- childAtIndex: (page 7)

Returns the child outline object at the specified index.

- index (page 8)

Returns the index of the outline.

# **Managing Outline Labels**

label (page 10)

Returns the label for the outline.

- setLabel: (page 12)

Sets the label for the outline (has no effect on the root outline object).

# **Managing Actions and Destinations**

- destination (page 8)

Returns the destination associated with the outline.

- action (page 7)

Returns the action performed when users click the outline.

- setAction: (page 11)

Sets the action associated with the outline.

- setDestination: (page 12)

Sets the destination associated with the outline.

# Changing an Outline Hierarchy

- insertChild:atIndex: (page 9)

Inserts the specified outline object at the specified index.

removeFromParent (page 11)

Removes the outline object from its parent (does nothing if outline object is the root outline object).

# Managing the Disclosure of an Outline Object

- isOpen (page 10)

Returns a Boolean value that indicates whether the outline object is initially disclosed.

- setIsOpen: (page 12)

Sets the initial disclosure state of the outline object.

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# **Instance Methods**

# action

Returns the action performed when users click the outline.

```
- (PDFAction *)action
```

#### Discussion

The root outline serves only as a container for the outlines it owns; it does not have an action. Note that a PDFOutline object can have either an action or a destination, not both.

If the PDFOutline object has a destination, instead of an action, action returns a PDFActionGoTo object (this is equivalent to calling destination (page 8) on the PDFOutline object). For other action types, action returns the appropriate PDF Kit action type object, such as PDFActionURL.

#### **Availability**

Available in Mac OS X v10.5 and later.

#### See Also

```
- setAction: (page 11)
```

#### Declared In

PDFOutline.h

# childAtIndex:

Returns the child outline object at the specified index.

```
- (PDFOutline *)childAtIndex:(NSUInteger)index
```

#### Discussion

The index is zero-based. This method throws an exception if *index* is out of range.

Important: In Mac OS X v10.5 and later, a PDFOutline object retains all its children, so <code>childAtIndex</code>: returns the same retained child outline object every time it's called. This means that you do not need to retain the object returned by <code>childAtIndex</code>:. This differs from the behavior of <code>PDFOutline</code> in Mac OS X v10.4. In Tiger, <code>childAtIndex</code>: returns an auto-released, one-off child outline object, when meant that you had to include code to retain the child.

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### **Availability**

Available in Mac OS X v10.4 and later.

### See Also

- index (page 8)

#### **Declared In**

PDFOutline.h

Instance Methods

# destination

Returns the destination associated with the outline.

- (PDFDestination \*)destination

#### Discussion

The root outline serves only as a container for the outlines it owns; it does not have a destination. Note that a PDFOutline object can have either a destination or an action, not both.

This method may return NULL if the outline has an associated action instead of a destination. Note that if the associated action is a PDFActionGoTo, this method returns the destination from the PDFActionGoTo object. However, it is better to use the action (page 7) method for this purpose.

# **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setDestination: (page 12)
```

#### **Declared In**

PDFOutline.h

# document

Returns the document with which the outline is associated.

```
- (PDFDocument *)document
```

# **Availability**

Available in Mac OS X v10.4 and later.

## **Declared In**

PDFOutline.h

### index

Returns the index of the outline.

- (NSUInteger)index

#### Discussion

The index of the outline object is relative to its siblings and from the perspective of the parent of the outline object. The root outline object, and any outline object without a parent, has an index value of 0.

#### **Availability**

Available in Mac OS X v10.5 and later.

#### **Declared In**

PDFOutline.h

#### init

**Initializes a PDFOutline object.** 

- (id)init

#### Discussion

If you want the PDFOutline object returned by this method to be the outline root, you must add additional PDFOutline objects to create the outline hierarchy you desire. Then, you must add the root outline object to your PDF document by passing it to the PDFDocument setOutlineRoot: method.

If you want the PDFOutline object returned by this method to be a child of an existing outline, you must use setLabel: (page 12) to give it a label and give it either a destination or action using setDestination: (page 12) or setAction: (page 11), respectively. In addition, you must add this outline object to the existing PDFOutline object as a new child, using insertChild:atIndex: (page 9)

### **Availability**

Available in Mac OS X v10.4 and later.

#### **Declared In**

PDFOutline.h

## initWithDocument:

Initializes an outline with the specified PDF document. (Deprecated. Use the PDFDocument outlineRoot method instead.)

- (id)initWithDocument:(PDFDocument \*) document

#### Discussion

Returns NULL if the document does not contain an outline. Invoking this method is equivalent to sending the outlineRoot message to a PDFDocument object.

### **Availability**

Available in Mac OS X v10.4 and later.

#### **Declared In**

PDFOutline.h

# insertChild:atIndex:

Inserts the specified outline object at the specified index.

- (void)insertChild:(PDFOutline \*)child atIndex:(NSUInteger)index

#### Discussion

To build a PDF outline hierarchy, use this method to add child outline objects. Before you call this method on a PDFOutline object that already has a parent, you should retain the object and call removeFromParent (page 11) on it first.

#### **Availability**

Available in Mac OS X v10.5 and later.

Instance Methods 9

#### See Also

```
- childAtIndex: (page 7)
```

#### **Declared In**

PDFOutline.h

# isOpen

Returns a Boolean value that indicates whether the outline object is initially disclosed.

- (BOOL)isOpen

#### Discussion

Calling is Open on an outline object that has no children always returns NO. Calling is Open on the root outline object always returns YES.

### **Availability**

Available in Mac OS X v10.5 and later.

#### See Also

```
- setIsOpen: (page 12)
```

#### **Declared In**

PDFOutline.h

# label

Returns the label for the outline.

```
- (NSString *)label
```

#### Discussion

The root outline serves only as a container for the outlines it owns; it does not have a label.

### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setLabel: (page 12)
```

#### **Declared In**

PDFOutline.h

# numberOfChildren

Returns the number of child outline objects in the outline.

- (NSUInteger)numberOfChildren

### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- childAtIndex: (page 7)
```

#### **Declared In**

PDFOutline.h

# parent

Returns the parent outline object of the outline (returns NULL if called on the root outline object).

```
- (PDFOutline *)parent
```

### **Availability**

Available in Mac OS X v10.5 and later

#### **Declared In**

PDFOutline.h

# removeFromParent

Removes the outline object from its parent (does nothing if outline object is the root outline object).

- (void)removeFromParent

### **Availability**

Available in Mac OS X v10.5 and later.

#### See Also

```
- parent (page 11)
```

#### **Declared In**

PDFOutline.h

# setAction:

Sets the action associated with the outline.

```
- (void)setAction:(PDFAction *)action
```

#### Discussion

Calling setAction on the root outline object has no effect, because the root outline does not have an action or a destination..

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### **Availability**

Available in Mac OS X v10.5 and later.

#### See Also

```
- action (page 7)
```

#### **Declared In**

PDFOutline.h

Instance Methods

# setDestination:

Sets the destination associated with the outline.

- (void)setDestination:(PDFDestination \*)destination

#### Discussion

Calling setDestination on the root outline object has no effect, because the root outline does not have an action or a destination.

#### **Availability**

Available in Mac OS X v10.5 and later.

#### See Also

- destination (page 8)

#### **Declared In**

PDFOutline.h

# setIsOpen:

Sets the initial disclosure state of the outline object.

```
- (void)setIsOpen:(BOOL)open
```

#### Discussion

Calling setIsOpen on an outline object with no children or on the root outline object has no effect.

### **Availability**

Available in Mac OS X v10.5 and later.

### See Also

- isOpen (page 10)

#### **Declared In**

PDFOutline.h

### setLabel:

Sets the label for the outline (has no effect on the root outline object).

```
- (void)setLabel:(NSString *)label
```

#### **Availability**

Available in Mac OS X v10.5 and later.

### See Also

```
- label (page 10)
```

#### **Declared In**

PDFOutline.h

# **Document Revision History**

This table describes the changes to PDFOutline Class Reference.

Date	Notes
2007-12-11	Added information about the retain status of PDFOutline child objects.
2007-10-31	Updated for Mac OS X v10.5.
2006-05-23	First publication of this content as a separate document.

# **REVISION HISTORY**

**Document Revision History** 

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