NSOpenPanel Class Reference

Data Management: File Management

2009-02-19

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Apple Inc.
1 Infinite Loop
Cupertino, CA 95014
408-996-1010

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NSOpenPanel Class Reference

Inherits from	NSSavePanel : NSPanel : NSWindow : NSResponder : NSObject
Conforms to	NSUserInterfaceValidations (NSWindow) NSAnimatablePropertyContainer (NSWindow) NSCoding (NSResponder) NSObject (NSObject)
Framework	/System/Library/Frameworks/AppKit.framework
Availability	Available in Mac OS X v10.0 and later.
Declared in	NSOpenPanel.h
Companion guides	Application File Management Sheet Programming Topics
Related sample code	ExtractMovieAudioToAIFF FunHouse ImageKitDemo LSMSmartCategorizer QTExtractAndConvertToAIFF

Overview

The `NSOpenPanel` class provides the Open panel for the Cocoa user interface. Applications use the Open panel as a convenient way to query the user for the name of a file to open.

Tasks

Creating Panels

`+ openPanel` (page 7)
Creates and returns a `NSOpenPanel` (page 5) object.

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Configuring Panels

- `canChooseFiles` (page 8)
  Returns whether the panel allows the user to choose files to open.
- `setCanChooseFiles:` (page 10)
  Sets whether the user can select files in the panel's browser.
- `canChooseDirectories` (page 8)
  Returns whether the panel allows the user to choose directories to open.
- `setCanChooseDirectories:` (page 9)
  Sets whether the user can select directories in the panel's browser.
- `resolvesAliases` (page 8)
  Returns whether the panel resolves aliases.
- `setResolvesAliases:` (page 10)
  Sets whether the panel resolves aliases.
- `allowsMultipleSelection` (page 7)
  Returns whether the panel's browser allows the user to open multiple files (and directories) at a time.
- `setAllowsMultipleSelection:` (page 9)
  Sets whether the user can select multiple files (and directories) at one time for opening.

Running Panels

- `beginForDirectory:file:types:modelessDelegate:didEndSelector:contextInfo:` (page 13) Deprecated in Mac OS X v10.6
  Presents a modeless Open panel. (Deprecated. Use `beginWithCompletionHandler:` instead. You can set *`absoluteDirectoryPath`* using `setDirectoryURL:`, and you can set *`fileTypes`* using `setAllowedFileTypes:`.)
- `beginSheetForDirectory:file:types:modalForWindow:modalDelegate:didEndSelector:contextInfo:` (page 14) Deprecated in Mac OS X v10.6
  Presents an Open panel as a sheet with the directory specified by *`absoluteDirectoryPath`* and optionally the file specified by *`filename`* selected. (Deprecated. Use `beginSheetModalForWindow:completionHandler:` instead. You can set *`absoluteDirectoryPath`* using `setDirectoryURL:`, and you can set *`fileTypes`* using `setAllowedFileTypes:`.)
- `runModalForDirectory:file:types:` (page 16) Deprecated in Mac OS X v10.6
  Displays the panel and begins a modal event loop that is terminated when the user clicks either OK or Cancel. (Deprecated. Use `runModal` instead. You can set *`path`* using `setDirectoryURL:`, and you can set *`fileTypes`* using `setAllowedFileTypes:`.)
- `runModalForTypes:` (page 17) Deprecated in Mac OS X v10.6
  Displays the panel and begins a modal event loop that is terminated when the user clicks either OK or Cancel. (Deprecated. Use `runModal` instead. You can set *`fileTypes`* using `setAllowedFileTypes:`.)

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Accessing User Selection

- `URLs` (page 11)
  Returns an array containing the absolute paths of the selected files and directories as URLs.
- `filenames` (page 15) Deprecated in Mac OS X v10.6
  Returns an array containing the absolute paths (as NSString objects) of the selected files and directories. (Deprecated. Use `URLs` (page 11) instead.)

Class Methods

openPanel

Creates and returns a `NSOpenPanel` (page 5) object.

```
+ (NSOpenPanel *)openPanel
```

Return Value
The initialized Open panel.

Availability
Available in Mac OS X v10.0 and later.

Related Sample Code
ContentBurn
FunHouse
ImageKitDemo
LSMSmartCategorizer
Quartz Composer WWDC 2005 TextEdit

Declared In
`NSOpenPanel.h`

Instance Methods

allowsMultipleSelection

Returns whether the panel's browser allows the user to open multiple files (and directories) at a time.

```
- (BOOL)allowsMultipleSelection
```

Return Value
`YES` if the panel's browser allows multiple selection; otherwise, `NO`.

Discussion
If multiple files or directories are allowed, then the `filename` method—inherited from NSSavePanel—returns a non-`nil` value only if one and only one file is selected. By contrast, NSOpenPanel's `URLs` (page 11) method always returns the URLs of the selected files, even if only one file is selected.

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Availability
Available in Mac OS X v10.0 and later.

See Also
- URL (NSSavePanel)
- URLs (page 11)
- setAllowsMultipleSelection: (page 9)

Declared In
NSOpenPanel.h

canChooseDirectories

Returns whether the panel allows the user to choose directories to open.

```
- (BOOL)canChooseDirectories
```

Return Value
YES if the panel allows the user to choose directories; otherwise, NO.

Availability
Available in Mac OS X v10.0 and later.

See Also
- setCanChooseDirectories: (page 9)

Declared In
NSOpenPanel.h

canChooseFiles

Returns whether the panel allows the user to choose files to open.

```
- (BOOL)canChooseFiles
```

Return Value
YES if the panel allows the user to choose files; otherwise, NO.

Availability
Available in Mac OS X v10.0 and later.

See Also
- setCanChooseFiles: (page 10)

Declared In
NSOpenPanel.h

resolvesAliases

Returns whether the panel resolves aliases.

```
- (BOOL)resolvesAliases
```


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Return Value
`YES` if the panel resolves aliases; otherwise, `NO`.

Discussion
If `YES`, the effect is that dropping an alias on the panel or asking for filenames or URLs returns the resolved aliases. The default is `YES`.

Availability
Available in Mac OS X v10.1 and later.

See Also
`- setResolvesAliases:` (page 10)

Declared In
`NSOpenPanel.h`

setAllowsMultipleSelection:

Sets whether the user can select multiple files (and directories) at one time for opening.

```
- (void)setAllowsMultipleSelection:(BOOL)flag
```

Parameters

flag

If `YES`, the panel's browser allows multiple selection; if `NO`, it does not.

Availability
Available in Mac OS X v10.0 and later.

See Also
`- allowsMultipleSelection` (page 7)

Related Sample Code
AudioBurn
ContentBurn
FunHouse
ObjectPath
Quartz Composer WWDC 2005 TextEdit

Declared In
`NSOpenPanel.h`

setCanChooseDirectories:

Sets whether the user can select directories in the panel's browser.

```
- (void)setCanChooseDirectories:(BOOL)flag
```

Parameters

flag

If `YES`, the panel allows the user to choose directories; if `NO`, it does not.

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Discussion
When a directory is selected, the OK button is enabled only if *flag* is YES.

Availability
Available in Mac OS X v10.0 and later.

See Also
- canChooseDirectories (page 8)

Related Sample Code
ContentBurn
ImageKitDemo
LSMSmartCategorizer
MovieAssembler
ObjectPath

Declared In
NSOpenPanel.h

setCanChooseFiles:

Sets whether the user can select files in the panel's browser.

```
- (void)setCanChooseFiles:(BOOL)flag
```

Parameters
flag
If YES, the panel allows the user to choose files; if NO, it does not.

Availability
Available in Mac OS X v10.0 and later.

See Also
- canChooseFiles (page 8)

Related Sample Code
ContentBurn
ImageKitDemo
LSMSmartCategorizer
MovieAssembler
ObjectPath

Declared In
NSOpenPanel.h

setResolvesAliases:

Sets whether the panel resolves aliases.

```
- (void)setResolvesAliases:(BOOL)resolvesAliases
```


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Parameters

resolvesAliases

If YES, the panel resolves aliases; if NO, it does not.

Discussion

If YES, the effect is that dropping an alias on the panel or asking for filenames or URLs returns the resolved aliases. Set this value to NO to allow selection of aliases without resolving.

Availability

Available in Mac OS X v10.1 and later.

See Also

- resolvesAliases (page 8)

Related Sample Code

CIFilterGeneratorTest

CIVideoDemoGL

DesktopImage

ObjectPath

Quartz 2D Transformer

Declared In

NSOpenPanel.h

URLs

Returns an array containing the absolute paths of the selected files and directories as URLs.

```
- (NSArray *)URLs
```

Return Value

The array of URLs.

Discussion

If multiple selections aren't allowed, the array contains a single name.

Availability

Available in Mac OS X v10.0 and later.

Related Sample Code

BackgroundExporter

CIAnnotation

CocoaSpeechSynthesisExample

QTMetadataEditor

SBSetFinderComment

Declared In

NSOpenPanel.h

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Deprecated NSOpenPanel Methods

A method identified as deprecated has been superseded and may become unsupported in the future.

Deprecated in Mac OS X v10.6

beginForDirectory:file:types:modelessDelegate:didEndSelector:contextInfo:

Presents a modeless Open panel. (Deprecated in Mac OS X v10.6. Use `beginWithCompletionHandler:` instead. You can set *`absoluteDirectoryPath`* using `setDirectoryURL:`, and you can set *`fileTypes`* using `setAllowedFileTypes:`.)

```
- (void)beginForDirectory:(NSString *)absoluteDirectoryPath file:(NSString *)filename
    types:(NSArray *)fileTypes modelessDelegate:(id)modelessDelegate
  didEndSelector:(SEL)didEndSelector contextInfo:(void *)contextInfo
```

Parameters

`absoluteDirectoryPath`

The directory whose files the panel displays. When `nil`, the directory is the same directory used in the previous invocation of the panel; this is probably the best choice for most situations.

`filename`

Specifies a particular file in *`absoluteDirectoryPath`* that is selected when the Open panel is presented to the user. When `nil`, no file is initially selected.

`fileTypes`

An array of file extensions and/or HFS file types. Specifies the files the panel allows the user to select. `nil` makes all files in *`absoluteDirectoryPath`* selectable by the user. An array of types passed in here will override one set using `setAllowedFileTypes:`.

`modelessDelegate`

This is not the same as a delegate assigned to the panel. This delegate is temporary and the relationship only lasts until the panel is dismissed.

`didEndSelector`

The message sent to *`modelessDelegate`* after the panel's session has ended, but before dismissing the Open panel. *`didEndSelector`* may dismiss the Open panel itself; otherwise, it will be dismissed on return from the method. The corresponding method should have the following signature:

```
- (void)openPanelDidEnd:(NSOpenPanel *)panel returnCode:(int)returnCode
contextInfo:(void  *)contextInfo
```

The value passed as *`returnCode`* will be either `NSCancelButton` or `NSOKButton`.

`contextInfo`

Any context information passed to *`modelessDelegate`* in the *`didEndSelector`* message.

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Discussion
Similar to `beginSheetForDirectory:file:types:modalForWindow:modalDelegate:didEndSelector:contextInfo:` (page 14), but allows for modeless operation of the panel.

Availability
Available in Mac OS X v10.3 and later.
Deprecated in Mac OS X v10.6.

See Also
`- beginWithCompletionHandler:`

Declared In
`NSOpenPanel.h`

beginSheetForDirectory:file:types:modalForWindow:modalDelegate:didEndSelector:contextInfo:

Presents an Open panel as a sheet with the directory specified by *absoluteDirectoryPath* and optionally the file specified by *filename* selected. (Deprecated in Mac OS X v10.6. Use `beginSheetModalForWindow:completionHandler:` instead. You can set *absoluteDirectoryPath* using `setDirectoryURL:`, and you can set *fileTypes* using `setAllowedFileTypes:`.)

```
- (void)beginSheetForDirectory:(NSString *)absoluteDirectoryPath file:(NSString
    *)filename types:(NSArray *)fileTypes modalForWindow:(NSWindow *)docWindow
    modalDelegate:(id)modalDelegate didEndSelector:(SEL)didEndSelector
    contextInfo:(void *)contextInfo
```

Parameters

absoluteDirectoryPath
The directory whose files the panel displays. When `nil`, the directory is the same directory used in the previous invocation of the panel; this is probably the best choice for most situations.

filename
Specifies a particular file in *absoluteDirectoryPath* that is selected when the Open panel is presented to the user. When `nil`, no file is initially selected.

fileTypes
An array of file extensions and/or HFS file types. Specifies the files the panel allows the user to select. nil makes all files in *absoluteDirectoryPath* selectable by the user. An array of types passed in here will override one set using `setAllowedFileTypes:`.

docWindow
The window to open the sheet on.

modalDelegate
This is not the same as a delegate assigned to the panel. This delegate is temporary and the relationship only lasts until the panel is dismissed..

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didEndSelector

The message sent to *modalDelegate* after the modal session has ended, but before dismissing the Open panel. *didEndSelector* may dismiss the Open panel itself; otherwise, it will be dismissed on return from the method. The corresponding method should have the following signature:

```
- (void)openPanelDidEnd:(NSOpenPanel *)panel returnCode:(int)returnCode
contextInfo:(void  *)contextInfo
```

The value passed as *returnCode* will be either `NSCancelButton` or `NSOKButton`.

contextInfo

Any context information passed to *modalDelegate* in the *didEndSelector* message.

Availability
Available in Mac OS X v10.0 and later.
Deprecated in Mac OS X v10.6.

See Also
`- beginSheetModalForWindow:completionHandler:`

Related Sample Code
DemoAssistant
GridCalendar
IKImageViewDemo
JSheets
SillyFrequencyLevels

Declared In
`NSOpenPanel.h`

filenames

Returns an array containing the absolute paths (as NSString objects) of the selected files and directories. (Deprecated in Mac OS X v10.6. Use `URLs` (page 11) instead.)

```
- (NSArray *)filenames
```

Return Value
The array of filenames.

Discussion
If multiple selections aren't allowed, the array contains a single name. The `filenames` method is preferable over NSSavePanel's `filename` to get the name or names of files and directories that the user has selected.

Availability
Available in Mac OS X v10.0 and later.
Deprecated in Mac OS X v10.6.

See Also
`- URLs` (page 11)

Related Sample Code
FunHouse
ImageKitDemo

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LSMSmartCategorizer
ThreadsImporter
ThreadsImportMovie

Declared In
`NSOpenPanel.h`

runModalForDirectory:file:types:

Displays the panel and begins a modal event loop that is terminated when the user clicks either OK or Cancel. (Deprecated in Mac OS X v10.6. Use `runModal` instead. You can set *`path`* using `setDirectoryURL:`, and you can set *`fileTypes`* using `setAllowedFileTypes:`.)

```
- (NSInteger)runModalForDirectory:(NSString *)absoluteDirectoryPath file:(NSString
    *)filename types:(NSArray *)fileTypes
```

Parameters

`absoluteDirectoryPath`

The directory whose files the panel displays. When `nil`, the directory is the same directory used in the previous invocation of the panel; this is probably the best choice for most situations.

`filename`

Specifies a particular file in *`absoluteDirectoryPath`* that is selected when the Open panel is presented to the user. When `nil`, no file is initially selected.

`fileTypes`

An array of file extensions and/or HFS file types. Specifies the files the panel allows the user to select. `nil` makes all files in *`absoluteDirectoryPath`* selectable by the user. An array of types passed in here will override one set using `setAllowedFileTypes:`.

Return Value
The button clicked to dismiss the dialog: `NSOKButton` for the OK button and `NSCancelButton` for the Cancel button.

Discussion
You can control whether directories and files appear in the browser with the `setCanChooseDirectories:` (page 9) and `setCanChooseFiles:` (page 10) methods.

Availability
Available in Mac OS X v10.0 and later.
Deprecated in Mac OS X v10.6.

See Also
`- runModal`

Related Sample Code
LiveVideoMixer
LiveVideoMixer2
MatrixMixerTest
QTGraphicsImport
SBSetFinderComment

Declared In
`NSOpenPanel.h`

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runModalForTypes:

Displays the panel and begins a modal event loop that is terminated when the user clicks either OK or Cancel. (Deprecated in Mac OS X v10.6. Use `runModal` instead. You can set *`fileTypes`* using `setAllowedFileTypes:`.)

```
- (NSInteger)runModalForTypes:(NSArray *)fileTypes
```

Parameters

`fileTypes`

An array of file extensions and/or HFS file types. Specifies the files the panel allows the user to select. `nil` makes all files selectable by the user. An array of types passed in here will override one set using `setAllowedFileTypes:`.

Return Value

The button used to dismiss the dialog: `NSOKButton` for the OK button and `NSCancelButton` for the Cancel button.

Discussion

This convenience method sends `runModalForDirectory:nil file:nil types:`*`fileTypes`* to the panel. See `runModalForDirectory:file:types:` (page 16) for additional details.

Availability

Available in Mac OS X v10.0 and later.

Deprecated in Mac OS X v10.6.

See Also

`- runModal`

Related Sample Code

CIFilterGeneratorTest

CIVideoDemoGL

FunHouse

ImageKitDemo

ThreadsImportMovie

Declared In

`NSOpenPanel.h`

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Document Revision History

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

Date	Notes
2009-02-19	Updated for Mac OS X v10.6.
2009-02-04	Added more specific information regarding didEndSelector behavior in panel-running methods.
2007-04-03	Removed documentation for methods not present in the corresponding header file.
	Removed `allowedFileTypes` and `setAllowedFileTypes:`.
	Made editorial improvements.
2006-05-23	First publication of this content as a separate document.

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Document Revision History

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