NSOpenPanel Class Reference

Cocoa > User Experience

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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 for Cocoa
Related sample code	ExtractMovieAudioToAIFF LSMSmartCategorizer QTExtractAndConvertToAIFF QTExtractAndConvertToMovieFile QTKitMovieShuffler

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 10)
  Returns whether the receiver allows the user to choose files to open.
- `setCanChooseFiles:` (page 13)
  Sets whether the user can select files in the receiver's browser.
- `canChooseDirectories` (page 10)
  Returns whether the receiver allows the user to choose directories to open.
- `setCanChooseDirectories:` (page 13)
  Sets whether the user can select directories in the receiver's browser.
- `resolvesAliases` (page 11)
  Returns whether the receiver resolves aliases.
- `setResolvesAliases:` (page 14)
  Sets whether the receiver resolves aliases to *`resolvesAliases`*.
- `allowsMultipleSelection` (page 7)
  Returns whether the receiver's browser allows the user to open multiple files (and directories) at a time.
- `setAllowsMultipleSelection:` (page 12)
  Sets whether the user can select multiple files (and directories) at one time for opening to *`flag`*.

Running Panels

- `beginForDirectory:file:types:modelessDelegate:didEndSelector:contextInfo:` (page 8)
  Presents a modeless Open panel.
- `beginSheetForDirectory:file:types:modalForWindow:modalDelegate:didEndSelector:contextInfo:` (page 9)
  Presents an Open panel as a sheet with the directory specified by *`absoluteDirectoryPath`* and optionally the file specified by *`filename`* selected.
- `runModalForDirectory:file:types:` (page 11)
  Displays the receiver and begins a modal event loop that is terminated when the user clicks either OK or Cancel.
- `runModalForTypes:` (page 12)
  Displays the receiver and begins a modal event loop that is terminated when the user clicks either OK or Cancel.

Accessing User Selection

- `filenames` (page 10)
  Returns an array containing the absolute paths (as NSString objects) of the selected files and directories.
- `URLs` (page 14)
  Returns an array containing the absolute paths of the selected files and directories as URLs.

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Class Methods

openPanel

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

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

Return Value
Initialized Open panel.

Discussion
The open panel has been initialized with default values.

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

Related Sample Code
ContentBurn
LSMSmartCategorizer
QTKitPlayer
Quartz Composer WWDC 2005 TextEdit
TextEditPlus

Declared In
`NSOpenPanel.h`

Instance Methods

allowsMultipleSelection

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

```
- (BOOL)allowsMultipleSelection
```

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 `filenames` (page 10) method always returns the selected files, even if only one file is selected.

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

See Also
- `filename` (NSSavePanel)
- `filenames` (page 10)
- `setAllowsMultipleSelection:` (page 12)

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Declared In
NSOpenPanel.h

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

Presents a modeless Open panel.

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

Parameters

absoluteDirectoryPath

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

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

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

Context information passed to *modelessDelegate* in the *didEndSelector* message.

Discussion
Similar to `beginSheetForDirectory:file:types:modalForWindow:modalDelegate:didEndSelector:contextInfo:` (page 9), but allows for modeless operation of the panel.

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

Declared In
NSOpenPanel.h

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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.

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

Parameters

absoluteDirectoryPath

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

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

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..

didEndSelector

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

Context information passed to *modalDelegate* in the *didEndSelector* message.

Availability

Available in Mac OS X v10.0 and later.

Related Sample Code

JSheets

NSOperationSample

QTQuartzPlayer

Quartz 2D Transformer

SillyFrequencyLevels

Declared In

`NSOpenPanel.h`

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canChooseDirectories

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

```
- (BOOL)canChooseDirectories
```

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

See Also
- `setCanChooseDirectories:` (page 13)

Declared In
`NSOpenPanel.h`

canChooseFiles

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

```
- (BOOL)canChooseFiles
```

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

See Also
- `setCanChooseFiles:` (page 13)

Declared In
`NSOpenPanel.h`

filenames

Returns an array containing the absolute paths (as NSString objects) of the selected files and directories.

```
- (NSArray *)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.

See Also
- `URLs` (page 14)

Related Sample Code
LSMSmartCategorizer
TextEditPlus
ThreadsExporter
ThreadsImporter
ThreadsImportMovie

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Declared In
NSOpenPanel.h

resolvesAliases

Returns whether the receiver resolves aliases.

```
- (BOOL)resolvesAliases
```

Discussion
If YES, the effect is that dropping an alias on the receiver 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 14)

Declared In
NSOpenPanel.h

runModalForDirectory:file:types:

Displays the receiver and begins a modal event loop that is terminated when the user clicks either OK or Cancel.

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

Parameters

absoluteDirectoryPath
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
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
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 13) and setCanChooseFiles: (page 13) methods.

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

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See Also
- `runModalForTypes:` (page 12)

Related Sample Code
CocoaVideoFrameToGWorld
LiveVideoMixer2
LiveVideoMixer3
QTGraphicsImport

Declared In
`NSOpenPanel.h`

runModalForTypes:

Displays the receiver and begins a modal event loop that is terminated when the user clicks either OK or Cancel.

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

Parameters

`fileTypes`
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
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 receiver. See `runModalForDirectory:file:types:` (page 11) for additional details.

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

See Also
- `runModalForDirectory:file:types:` (page 11)

Related Sample Code
BackgroundExporter
CIVideoDemoGL
OpenGLCompositorLab
ThreadsExportMovie
ThreadsImportMovie

Declared In
`NSOpenPanel.h`

setAllowsMultipleSelection:

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

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

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

See Also
- allowsMultipleSelection (page 7)

Related Sample Code
ContentBurn
ObjectPath
OpenGLCompositorLab
Quartz Composer WWDC 2005 TextEdit
TextEditPlus

Declared In
NSOpenPanel.h

setCanChooseDirectories:

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

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

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 10)

Related Sample Code
ContentBurn
LSMSmartCategorizer
NSOperationSample
ObjectPath
ThreadsImportMovie

Declared In
NSOpenPanel.h

setCanChooseFiles:

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

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

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

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See Also
- `canChooseFiles` (page 10)

Related Sample Code
ContentBurn
LSMSmartCategorizer
NSOperationSample
ObjectPath
ThreadsImportMovie

Declared In
`NSOpenPanel.h`

setResolvesAliases:

Sets whether the receiver resolves aliases to *resolvesAliases*.

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

Discussion
If `YES`, the effect is that dropping an alias on the receiver 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 11)

Related Sample Code
CIVideoDemoGL
Core Animation QuickTime Layer
NSOperationSample
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
```

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

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

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See Also
- `filenames` (page 10)

Related Sample Code
BackgroundExporter
CIAnnotation
CocoaSpeechSynthesisExample
QTKitCreateMovie
QTKitFrameStepper

Declared In
`NSOpenPanel.h`

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Document Revision History

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

Date	Notes
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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