
NSColorList Class Reference

Graphics & Animation



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NSColorList Class Reference

Inherits from	NSObject
Conforms to	NSCoding NSObject (NSObject)
Framework	/System/Library/Frameworks/AppKit.framework
Availability	Available in Mac OS X v10.0 and later.
Companion guide	Color Programming Topics
Declared in	NSColorList.h
Related sample code	AnimatedTableView

Overview

An `NSColorList` object is an ordered list of `NSColor` objects, identified by keys. Instances of `NSColorList`, or more simply color lists, are used to manage named lists of `NSColor` instances. The `NSColorPanel` list mode color picker uses instances of `NSColorList` to represent any lists of colors that come with the system, as well as any lists created by the user. An application can use `NSColorList` to manage document-specific color lists.

Adopted Protocols

`NSCoding`

- `encodeWithCoder:`
- `initWithCoder:`

Tasks

Initializing an `NSColorList` Object

- `initWithName:` (page 8)
Initializes and returns the receiver, registering it under the given name if it isn't in use already.

- [initWithName:fromFile:](#) (page 9)
Initializes and returns the receiver, registering it under the given name if it isn't in use already.

Getting Color Lists

- + [availableColorLists](#) (page 7)
Returns an array of all color lists found in the standard color list directories.
- + [colorListNamed:](#) (page 7)
Searches the array that's returned by [availableColorLists](#) (page 7) and returns the color list with the given name.

Getting Color List Properties

- [name](#) (page 10)
Returns the name of the receiver.
- [isEditable](#) (page 10)
Returns a Boolean value indicating whether the receiver can be modified.

Managing Colors By Key

- [allKeys](#) (page 8)
Returns an array of the keys by which the `NSColor` objects are stored in the receiver.
- [colorWithKey:](#) (page 8)
Returns the `NSColor` object associated with the given key.
- [insertColor:key:atIndex:](#) (page 9)
Inserts the specified color at the specified location in the receiver.
- [removeColorWithKey:](#) (page 11)
Removes the color associated with the specified key from the receiver.
- [setColor:forKey:](#) (page 11)
Associates the specified `NSColor` object with the specified key.

Writing and Removing Color-List Files

- [removeFile](#) (page 11)
Removes the file from which the list was created, if the file is in a standard search path and owned by the user.
- [writeToFile:](#) (page 12)
Saves the receiver to a file at the specified path.

Class Methods

availableColorLists

Returns an array of all color lists found in the standard color list directories.

```
+ (NSArray *)availableColorLists
```

Return Value

An array of `NSColorList` objects representing all of the color lists found in the standard color list directories, including color catalogs (lists of colors identified only by name). Color lists created at runtime aren't included in this list unless they're saved into one of the standard color list directories.

Availability

Available in Mac OS X v10.0 and later.

See Also

+ [colorListNamed:](#) (page 7)

Declared In

`NSColorList.h`

colorListNamed:

Searches the array that's returned by [availableColorLists](#) (page 7) and returns the color list with the given name.

```
+ (NSColorList *)colorListNamed:(NSString *)name
```

Parameters

name

The name of the color list to retrieve. This name must not include the “.clr” suffix.

Return Value

The color list with the specified name or `nil` if no such color list exists.

Availability

Available in Mac OS X v10.0 and later.

See Also

- [name](#) (page 10)

Related Sample Code

[AnimatedTableView](#)

Declared In

`NSColorList.h`

Instance Methods

allKeys

Returns an array of the keys by which the `NSColor` objects are stored in the receiver.

```
- (NSArray *)allKeys
```

Return Value

An array of `NSString` objects containing all the keys by which the `NSColor` objects are stored in the receiver.

The length of this array equals the number of colors, and its contents are arranged according to the ordering specified when the colors were inserted.

Availability

Available in Mac OS X v10.0 and later.

Related Sample Code

`AnimatedTableView`

Declared In

`NSColorList.h`

colorWithKey:

Returns the `NSColor` object associated with the given key.

```
- (NSColor *)colorWithKey:(NSString *)key
```

Parameters

key

The key for which to retrieve the color.

Return Value

The color associated with the given key or `nil` if there is none.

Availability

Available in Mac OS X v10.0 and later.

Related Sample Code

`AnimatedTableView`

Declared In

`NSColorList.h`

initWithName:

Initializes and returns the receiver, registering it under the given name if it isn't in use already.

```
- (id)initWithName:(NSString *)name
```


Parameters*name*

The name under which to register the color list. Specify @"" if you don't want a name.

Return Value

The initialized color list.

Discussion

This method invokes `initWithName:fromFile:` (page 9) with a `fromFile:` argument of `nil`, indicating that the color list doesn't need to be initialized from a file. Note that this method does not add the color list to `availableColorLists` (page 7) until the color list is saved into the user's path with `writeToFile:` (page 12) with a value of `nil`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSColorList.h`

initWithName:fromFile:

Initializes and returns the receiver, registering it under the given name if it isn't in use already.

```
- (id)initWithName:(NSString *)name fromFile:(NSString *)path
```

Parameters*name*

The name of the file for the color list (minus the ".clr" extension). Specify @"" if you don't want a name.

path

The full path to the file for the color list. A `nil` path indicates the color list should be initialized with no colors.

Discussion

Note that this method does not add the color list to `availableColorLists` (page 7) until the color list is saved into the user's path with `writeToFile:` (page 12) with a value of `nil`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSColorList.h`

insertColor:key:atIndex:

Inserts the specified color at the specified location in the receiver.

```
- (void)insertColor:(NSColor *)color key:(NSString *)key atIndex:(NSUInteger)location
```

Parameters*color*

The color to add to the color list.

key

The key with which to associate the color.

location

The location in the color list at which to place the specified color. Locations are numbered starting with 0.

Discussion

If the list already contains a color with the same key at a different location, it's removed from the old location. This method posts [NSColorListDidChangeNotification](#) (page 12) to the default notification center. It raises `NSColorListNotEditableException` if the color list isn't editable.

Availability

Available in Mac OS X v10.0 and later.

See Also

- [colorWithKey:](#) (page 8)
- [removeColorWithKey:](#) (page 11)
- [setColor:forKey:](#) (page 11)

Declared In

`NSColorList.h`

isEditable

Returns a Boolean value indicating whether the receiver can be modified.

- (BOOL)isEditable

Return Value

YES if the color list can be modified; otherwise NO. This result depends on the source of the list: If it came from a write-protected file, this method returns NO.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSColorList.h`

name

Returns the name of the receiver.

- (NSString *)name

Return Value

The name of the receiver.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSColorList.h`

removeColorWithKey:

Removes the color associated with the specified key from the receiver.

```
- (void)removeColorWithKey:(NSString *)key
```

Parameters

key

The key for which to remove the color.

Discussion

This method does nothing if the receiver doesn't contain the key. This method posts [NSColorListDidChangeNotification](#) (page 12) to the default notification center. It raises [NSColorListNotEditableException](#) if the receiver is not editable.

Availability

Available in Mac OS X v10.0 and later.

See Also

- [insertColor:key:atIndex:](#) (page 9)
- [setColor:forKey:](#) (page 11)

Declared In

NSColorList.h

removeFile

Removes the file from which the list was created, if the file is in a standard search path and owned by the user.

```
- (void)removeFile
```

Discussion

The receiver is removed from the list of available color lists returned by [availableColorLists](#) (page 7). If there are no outstanding references to the color list, this method might deallocate the object as well.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSColorList.h

setColor:forKey:

Associates the specified `NSColor` object with the specified key.

```
- (void)setColor:(NSColor *)color forKey:(NSString *)key
```

Parameters

color

The color to associate with the given key.

key

The key.

Discussion

If the list already contains *key*, this method sets the corresponding color to *color*; otherwise, it inserts *color* at the end of the list by invoking [insertColor:key:atIndex:](#) (page 9).

Availability

Available in Mac OS X v10.0 and later.

See Also

- [colorWithKey:](#) (page 8)
- [insertColor:key:atIndex:](#) (page 9)
- [removeColorWithKey:](#) (page 11)

Declared In

NSColorList.h

writeToFile:

Saves the receiver to a file at the specified path.

- (BOOL)writeToFile:(NSString *)*path*

Parameters

path

The path at which to save the color list. If *path* is a directory, the receiver is saved in a file named *listname.clr* in that directory (where *listname* is the name with which the receiver was initialized).

If *path* includes a filename, this method saves the file under that name. If *path* is `nil`, the file is saved as *listname.clr* in the user's private colorlists directory.

Return Value

YES upon success and NO if the method fails to write the file.

Availability

Available in Mac OS X v10.0 and later.

See Also

- [removeFile](#) (page 11)

Declared In

NSColorList.h

Notifications

NSColorListDidChangeNotification

Posted whenever a color list changes. The notification object is the `NSColorList` object that changed. This notification does not contain a *userInfo* dictionary.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSColorList.h

Document Revision History

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

Date	Notes
2007-02-28	Revised task headings.
2006-05-23	First publication of this content as a separate document.

REVISION HISTORY

Document Revision History