# Font Panel

Cocoa > User Experience



2004-08-31

#### Ś

Apple Inc. © 1997, 2004 Apple Computer, Inc. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

The Apple logo is a trademark of Apple Inc.

Use of the "keyboard" Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Every effort has been made to ensure that the information in this document is accurate. Apple is not responsible for typographical errors.

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

Apple, the Apple logo, Cocoa, and Objective-C are trademarks of Apple Inc., registered in the United States and other countries.

Simultaneously published in the United States and Canada.

Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED "AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.

IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## Contents

 Introduction to Font Panel 5
Who Should Read This Document 5
Organization of This Document 5
See Also 5
 The Font Panel 7
 Creating a Font Panel 9
 Using the Font Panel 11
 Document Revision History 13
 Index 15

# Introduction to Font Panel

Font Panel explains how to use the Font panel, which is defined by the NSFontPanel class.

## Who Should Read This Document

You should read this document if you need to understand how the Font panel interacts with the Font manager and other components of the text system, particularly if you need to modify that behavior.

To understand the information in this document, you should understand generally the text system's capabilities and architecture, and you should understand basic Cocoa programming conventions.

## **Organization of This Document**

This document contains the following articles:

- "The Font Panel" (page 7) describes the interaction of the Font panel and Cocoa text objects and explains how to use the delegate of NSFontPanel to control the display of fonts in the Font panel.
- "Creating a Font Panel" (page 9) explains how to add the Font panel to your application using Interface Builder and, alternatively, how to create and modify the Font panel programmatically.
- "Using the Font Panel" (page 11) describes the messages sent in the interaction among the Font panel, Font manager, and text objects.

## See Also

For more information, refer to the following documents:

- Font Handling discusses fonts, the font management system, and the user interface to allow the user to interact with available fonts.
- Text System Overview provides an overview of the text system.

For related reference information, see the following documents:

- NSFont
- NSFontManager
- NSFontPanel

Introduction to Font Panel

# The Font Panel

The Font panel, also called the Fonts window, is a user interface object that displays a list of available font families and styles, letting the user preview them and change the font used to display text. Text objects, such as NSTextView, work with NSFontPanel and NSFontManager objects to implement the Application Kit's font conversion system. By default, a text object keeps the Font panel updated with the first font in its selection, or with its typing attributes. It also changes the font in which it displays text in response to messages from the Font panel and Font menu. Such changes apply to the selected text or typing attributes for a rich text object.

NSFontManager is the hub for font conversion. It receives the messages from the Font panel and sends messages up the responder chain for action on the text objects.

Normally, an application's Font panel displays all the standard fonts available on the system. If this isn't appropriate for your application—for example, if only fixed-pitch fonts should be used—you can assign a delegate to the NSFontPanel object to filter the available fonts. Before the NSFontPanel object adds a particular font family or face to its list, the NSFontPanel asks its delegate to confirm the addition by sending the delegate a fontManager:willIncludeFont: message. If the delegate returns true (or doesn't implement this method), the font is added. If the delegate returns false, the font isn't added. This method must be invoked before the loading of the main nib file.

The Font Panel

# **Creating a Font Panel**

In general, you add the facilities of the Font panel to your application, along with the NSFontManager and the Font menu, through which the user opens the Font panel, using Interface Builder. You do this by dragging a Font or Format menu (which contains a Font submenu) into one of your application's menus. At runtime, the Font panel object is created and hooked into the font conversion system. You can also create (or access) the Font panel using the sharedFontPanel class method.

You can add a custom view object to an NSFontPanel using setAccessoryView, allowing you to add custom controls to the Font panel. You can also limit the fonts displayed (by default, all fonts) by assigning a delegate to the application's font manager object (see "The Font Panel" (page 7)).

In Objective-C, if you want the NSFontManager to instantiate the Font panel from some class other than NSFontPanel, use the NSFontManager class method setFontPanelFactory:. See "Converting Fonts Manually" for more information on using the font conversion system.

Creating a Font Panel

## Using the Font Panel

You can enable the interaction between a text object and the Font panel using the setUsesFontPanel: method. Doing so is recommended for a text view that serves as a field editor, for example.

You can use the Font panel on objects other than standard text fields. The NSFontManager method setAction: sets the action (specified by a selector) that is sent up the first responder chain when a new font is selected. The default selector is changeFont:. Any object that receives this message from the responder chain should send a convertFont: message back to the NSFontManager to convert the font in a manner the user has specified.

This example assumes there is only one font selected:

```
- (void)changeFont:(id)sender
{
    NSFont *oldFont = [self font];
    NSFont *newFont = [sender convertFont:oldFont];
    [self setFont:newFont];
    return;
}
```

If multiple fonts are selected, changeFont: must send conversion messages for each selected font. This is useful for objects such as table views, which do not inherently respond to messages from the Font panel.

Using the Font Panel

# **Document Revision History**

#### This table describes the changes to Font Panel.

Date	Notes
2004-08-31	Made editorial revisions throughout. Removed "Using an NSFontPanel Delegate" and folded content into "The Font Panel" (page 7).
2004-02-09	Rewrote introduction and added an index.
2003-07-02	Expanded the section on using NSFontManager's responder chain for custom font management.
2002-11-12	Revision history was added to existing document.

Document Revision History

# Index

### С

changeFont: method 11
convertFont: method 11

### D

delegates of NSFontPanel 7

### F

field editors
 Font panel and 11
font conversion 11
Font menu
 Font panel and 9
Font panel
 defined 7
fontManager:willIncludeFont: method 7
fonts
 changing 11
 managed by NSFontPanel 7

### I

Interface Builder Font panel and 9

### Ν

NSFontManager class 7,9 NSFontPanel class 7

### S

setAccessoryView method 9
setAction: method 11
setFontPanelFactory: method 9
setUsesFontPanel: method 11
sharedFontPanel method 9

### Т

text objects updating the Font panel 7