Text Attachment Programming Topics for Cocoa

Cocoa > Text & Fonts

2006-12-05

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

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Introduction to Text Attachments

Text Attachments explains how to add graphics and other attachments to text.

Who Should Read This Document

You should read this document if you need to understand how text attachments work in the Cocoa text system.

Organization of This Document

This document contains the following articles:

- "Text Attachments" (page 7) explains what text attachments are.
- "Adding Attachments to Text" (page 9) describes how to add text attachments to text.

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Text Attachments

A text view object that allows rich text can accommodate graphics or other file attachments embedded in the text. The layout manager treats each graphic as a single (possibly large) “character” and adjusts the text’s line height and glyph placement to accommodate the graphic.

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Adding Attachments to Text

You can embed graphics or other attachments in text in either of two ways: programmatically or directly through user actions. In the programmatic approach, you can add graphic objects using the `NSText` method `replaceCharactersInRange:withRTFD:` or through a more specific method defined by a subclass.

An alternate means of adding an image or other attachment to the text is for the user to drag an image or other file directly into the text object. The text object automatically creates an `NSTextAttachment` object to manage the display of the image. This feature requires a rich text object that has been configured to receive dragged images using the `NSText` method `setImportsGraphics:`. (`NSTextView` and `NSTextField` also have implementations of this method.)

Images that have been imported can be written as part of an RTFD document. RTFD documents use a file package, or directory, to store the components of the document (the "D" stands for "directory"). The file package has the name of the document plus an `.rtfd` extension. The file package always contains a file called `TXT.rtf` for the text of the document, and one or more TIFF or EPS files for the images, plus the files for other attachments. A text object can transfer information in an RTFD document to a file and read it from a file using the `NSText` methods `writeRTFDToFile:atomically:` and `readRTFDFromFile:`.

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Document Revision History

This table describes the changes to *Text Attachment Programming Topics for Cocoa*.

Date	Notes
2006-12-05	Added the NSText class name to mention of the replaceCharactersInRange:withRTFD: method.
2004-02-09	Added an index.
2003-04-02	Corrected typos in method names in "Adding Attachments to Text" (page 9). Reorganized introduction.
2002-11-12	Revision history was added to existing topic. It will be used to record changes to the content of the topic.

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