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# Application Kit Constants Reference



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# Application Kit Constants Reference

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<b>Declared in</b>	AppKitErrors.h NSErrors.h NSGraphics.h NSInterfaceStyle.h NSNibDeclarations.h NSWindow.h

## Overview

This document describes the constants defined in the Application Kit framework that are not defined in, or are not described in, a document for an individual class.

See *Application Kit Data Types Reference* for descriptions of other constants defined in enumerations.

## Constants

There are three types of constant in this document: global variables, errors, and exceptions.

### Global Variables

---

#### Color Space Names

Color-space names designate predefined color spaces.

```
NSString *NSCalibratedWhiteColorSpace;  
NSString *NSCalibratedBlackColorSpace;  
NSString *NSCalibratedRGBColorSpace;  
NSString *NSDeviceWhiteColorSpace;  
NSString *NSDeviceBlackColorSpace;  
NSString *NSDeviceRGBColorSpace;  
NSString *NSDeviceCMYKColorSpace;  
NSString *NSNamedColorSpace;  
NSString *NSPatternColorSpace;  
NSString *NSCustomColorSpace;
```

### Constants

`NSCalibratedWhiteColorSpace`

Calibrated color space with white and alpha components (pure white is 1.0)

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

`NSCalibratedBlackColorSpace`

Calibrated color space with black and alpha components (pure black is 1.0)

Available in Mac OS X v10.0 and later.

Deprecated in Mac OS X v10.6.

Declared in `NSGraphics.h`.

`NSCalibratedRGBColorSpace`

Calibrated color space with red, green, blue, and alpha components.

You can also create a color with HSB (hue, saturation, brightness) and alpha components and can extract these components.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

`NSDeviceWhiteColorSpace`

Device-dependent color space with white and alpha components (pure white is 1.0)

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

`NSDeviceBlackColorSpace`

Device-dependent color space with black and alpha components (pure black is 1.0)

Available in Mac OS X v10.0 and later.

Deprecated in Mac OS X v10.6.

Declared in `NSGraphics.h`.

`NSDeviceRGBColorSpace`

Device-dependent color space with red, green, blue, and alpha components.

You can also create a color with HSB (hue, saturation, brightness) and alpha components and can extract these components.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

`NSDeviceCMYKColorSpace`

Device-dependent color space with cyan, magenta, yellow, black, and alpha components

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

#### NSNamedColorSpace

Catalog name and color name components

The components of this color space are indexes into lists or catalogs of prepared colors. The catalogs of named colors come with lookup tables that are able to generate the correct color on a given device.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

#### NSPatternColorSpace

Pattern image (tiled)

Identifies a pattern color space, which is simply an image that is repeated over and over again in a tiled pattern.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

#### NSCustomColorSpace

Custom `NSColorSpace` object and floating-point components describing a color in that space

A custom color-space object represents a color space that is not necessarily predefined by the Application Kit. See “Working With Color Spaces” for information on creating custom color-space objects.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

#### Discussion

You can use a color-space name in certain methods of `NSColor` that create or convert color objects. The name identifies the color space to be used for the operation.

#### Declared In

`NSGraphics.h`

## Grayscale Values

These constants are the standard gray values for the 2-bit deep grayscale color space.

```
const float NSWhite;  
const float NSLightGray;  
const float NSDarkGray;  
const float NSBlack;
```

#### Constants

##### NSWhite

A constant that specifies the white shade in the 2-bit deep grayscale color space.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

##### NSLightGray

A constant that specifies the light gray shade in the 2-bit deep grayscale color space.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

`NSDarkGray`

A constant that specifies the dark gray shade in the 2-bit deep grayscale color space.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

`NSBlack`

A constant that specifies the black shade in the 2-bit deep grayscale color space.

Available in Mac OS X v10.0 and later.

Declared in `NSGraphics.h`.

## NSInterfaceStyleDefault

`NSInterfaceStyleDefault` can be used to override the platform's default interface style.

```
NSString *NSInterfaceStyleDefault;
```

### Constants

`NSInterfaceStyleDefault`

For more information, see the function `NSInterfaceStyleForKey`.

Available in Mac OS X v10.0 and later.

Declared in `NSInterfaceStyle.h`.

## Interface Builder Constants

Type qualifiers used by Interface Builder to synchronize with Xcode. For more information, see *Communicating With Objects* in *Cocoa Fundamentals Guide*.

```
#define IBAction void  
#define IBOutlet
```

### Constants

`IBAction`

Type qualifier used by Interface Builder to synchronize actions added programmatically with its internal list of action methods defined for a project.

Available in Mac OS X v10.0 and later.

Declared in `NSNibDeclarations.h`.

`IBOutlet`

Identifier used to qualify an instance-variable declaration so that Interface Builder can synchronize the display and connection of outlets with Xcode.

Available in Mac OS X v10.0 and later.

Declared in `NSNibDeclarations.h`.

## NSWindow—Sizes

Obsolete constant values. Do not use.

```
NSSize NSIconSize;  
NSSize NSTokenSize;
```

### Constants

NSIconSize

Obsolete constant values. Do not use.

Available in Mac OS X v10.0 through Mac OS X v10.3.

Declared in `NSWindow.h`.

NSTokenSize

Obsolete constant values. Do not use.

Available in Mac OS X v10.0 through Mac OS X v10.3.

Declared in `NSWindow.h`.

## Errors

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### Attributed String Errors

These constants represent errors generated by `NSAttributedString`.

```
enum {  
    NSTextReadInapplicableDocumentTypeError = 65806,  
    NSTextWriteInapplicableDocumentTypeError = 66062,  
    NSTextReadWriteErrorMinimum = 65792,  
    NSTextReadWriteErrorMaximum = 66303  
};
```

### Constants

`NSTextReadInapplicableDocumentTypeError`

Indicates a problem reading data with the specified format.

Available in Mac OS X v10.4 and later.

Declared in `AppKitErrors.h`.

`NSTextWriteInapplicableDocumentTypeError`

Indicates a problem writing data of the specified format.

Available in Mac OS X v10.4 and later.

Declared in `AppKitErrors.h`.

`NSTextReadWriteErrorMinimum`

The beginning of a range of error codes reserved for future use.

Available in Mac OS X v10.4 and later.

Declared in `AppKitErrors.h`.

`NSTextReadWriteErrorMaximum`

The end of a range of error codes reserved for future use.

Available in Mac OS X v10.4 and later.

Declared in `AppKitErrors.h`.

### Discussion

These constants are returned in an `NSError` object.

## Services Error Codes

These constants represent errors returned by application services.

```
enum {
    NSServiceApplicationNotFoundError = 66560,
    NSServiceApplicationLaunchFailedError = 66561,
    NSServiceRequestTimedOutError = 66562,
    NSServiceInvalidPasteboardDataError = 66563,
    NSServiceMalformedServiceDictionaryError = 66564,
    NSServiceMiscellaneousError = 66800,
    NSServiceErrorMinimum = 66560,
    NSServiceErrorMaximum = 66817
};
```

### Constants

`NSServiceApplicationNotFoundError`

The service provider could not be found.

Available in Mac OS X v10.5 and later.

Declared in `AppKitErrors.h`.

`NSServiceApplicationLaunchFailedError`

The service providing application could not be launched. This will typically contain an underlying error with an Launch Services error code.

Available in Mac OS X v10.5 and later.

Declared in `AppKitErrors.h`.

`NSServiceRequestTimedOutError`

The service providing application did not open its service listening port in time, or the app didn't respond to the request in time; see the Console log to figure out which (the errors are typically reported the same way to the user).

Available in Mac OS X v10.5 and later.

Declared in `AppKitErrors.h`.

`NSServiceInvalidPasteboardDataError`

The service providing app did not return a pasteboard with any of the promised types, or we couldn't write the data from the pasteboard to the object receiving the returned data.

Available in Mac OS X v10.5 and later.

Declared in `AppKitErrors.h`.

`NSServiceMalformedServiceDictionaryError`

The service dictionary did not contain the necessary keys. Messages will typically be logged to the console giving more details.

Available in Mac OS X v10.5 and later.

Declared in `AppKitErrors.h`.

`NSServiceMiscellaneousError`

Other errors, representing programmatic mistakes in the service consuming application. These show a generic error message to the user.

Available in Mac OS X v10.5 and later.

Declared in `AppKitErrors.h`.

`NSServiceErrorMinimum`

Inclusive service error range, for checking future error codes.

Available in Mac OS X v10.5 and later.

Declared in `AppKitErrors.h`.

`NSServiceErrorMaximum`

Inclusive service error range, for checking future error codes.

Available in Mac OS X v10.5 and later.

Declared in `AppKitErrors.h`.

## Exceptions

---

### Application Kit Exception Names

These constants name the exceptions that the Application Kit can raise.

```
NSString *NSTextLineTooLongException;  
NSString *NSTextNoSelectionException;  
NSString *NSWordTablesWriteException;  
NSString *NSWordTablesReadException;  
NSString *NSTextReadException;  
NSString *NSTextWriteException;  
NSString *NSPasteboardCommunicationException;  
NSString *NSPrintingCommunicationException;  
NSString *NSAbortModalException;  
NSString *NSAbortPrintingException;  
NSString *NSIllegalSelectorException;  
NSString *NSAppKitVirtualMemoryException;  
NSString *NSBadRTFDirectiveException;  
NSString *NSBadRTFFontTableException;  
NSString *NSBadRTFStyleSheetException;  
NSString *NSTypedStreamVersionException;  
NSString *NSTIFFException;  
NSString *NSPrintPackageException;  
NSString *NSBadRTFColorTableException;  
NSString *NSDraggingException;  
NSString *NSColorListIOException;  
NSString *NSColorListNotEditableException;  
NSString *NSBadBitmapParametersException;  
NSString *NSWindowServerCommunicationException;  
NSString *NSFontUnavailableException;  
NSString *NSPPDIncludeNotFoundException;  
NSString *NSPPDParseException;  
NSString *NSPPDIncludeStackOverflowException;  
NSString *NSPPDIncludeStackUnderflowException;  
NSString *NSRTFFPropertyStackOverflowException;  
NSString *NSAppKitIgnoredException;  
NSString *NSBadComparisonException;  
NSString *NSImageCacheException;  
NSString *NSNibLoadingException;  
NSString *NSBrowserIllegalDelegateException;  
NSString *NSAccessibilityException;
```

### Constants

`NSTextLineTooLongException`  
Exception generated if a line is too long in a `NSText` object.

Available in Mac OS X v10.0 and later.

Declared in `NSErrors.h`.

`NSTextNoSelectionException`  
Available in Mac OS X v10.0 and later.

Declared in `NSErrors.h`.

`NSWordTablesWriteException`  
Available in Mac OS X v10.0 and later.

Declared in `NSErrors.h`.

`NSWordTablesReadException`  
Available in Mac OS X v10.0 and later.

Declared in `NSErrors.h`.

`NSTextReadException`

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

**Declared in `NSErrors.h`.**

`NSTextWriteException`

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

**Declared in `NSErrors.h`.**

`NSPasteboardCommunicationException`

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

**Declared in `NSErrors.h`.**

`NSPrintingCommunicationException`

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

**Declared in `NSErrors.h`.**

`NSAbortModalException`

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

**Declared in `NSErrors.h`.**

`NSAbortPrintingException`

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

**Declared in `NSErrors.h`.**

`NSIllegalSelectorException`

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

**Declared in `NSErrors.h`.**

`NSAppKitVirtualMemoryException`

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

**Declared in `NSErrors.h`.**

`NSBadRTFDirectiveException`

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

**Declared in `NSErrors.h`.**

`NSBadRTFFontTableException`

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

**Declared in `NSErrors.h`.**

`NSBadRTFStyleSheetException`

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

**Declared in `NSErrors.h`.**

`NSTypedStreamVersionException`

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

**Declared in `NSErrors.h`.**

`NSTIFFException`

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

**Declared in `NSErrors.h`.**

`NSPrintPackageException`

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

**Declared in `NSError.h`.**

`NSBadRTFColorTableException`

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

**Declared in `NSError.h`.**

`NSDraggingException`

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

**Declared in `NSError.h`.**

`NSColorListIOException`

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

**Declared in `NSError.h`.**

`NSColorListNotEditableException`

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

**Declared in `NSError.h`.**

`NSBadBitmapParametersException`

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

**Declared in `NSError.h`.**

`NSWindowServerCommunicationException`

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

**Declared in `NSError.h`.**

`NSFontUnavailableException`

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

**Declared in `NSError.h`.**

`NSPPDIncludeNotFoundException`

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

**Declared in `NSError.h`.**

`NSPPDParseException`

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

**Declared in `NSError.h`.**

`NSPPDIncludeStackOverflowException`

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

**Declared in `NSError.h`.**

`NSPPDIncludeStackUnderflowException`

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

**Declared in `NSError.h`.**

`NSRTFPropertyStackOverflowException`

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

**Declared in `NSError.h`.**

`NSAppKitIgnoredException`

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

**Declared in** `NSError.h`.

`NSBadComparisonException`

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

**Declared in** `NSError.h`.

`NSImageCacheException`

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

**Declared in** `NSError.h`.

`NSNibLoadingException`

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

**Declared in** `NSError.h`.

`NSBrowserIllegalDelegateException`

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

**Declared in** `NSError.h`.

`NSAccessibilityException`

**Available in Mac OS X v10.2 and later.**

**Declared in** `NSError.h`.

**Declared In**

`NSError.h`



# Document Revision History

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This table describes the changes to *Application Kit Constants Reference*.

Date	Notes
2009-06-02	Added Service Error Codes.
2007-10-31	Created constant elements for AppKit Exceptions. Added IBOutlet and IBAction.
2006-05-23	First publication of this content as a separate document.

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