# NSDatePickerCell Class Reference

Cocoa > User Experience



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## NSDatePickerCell Class Reference

Inherits from NSActionCell : NSCell : NSObject

Conforms to NSCoding (NSCell)

NSCopying (NSCell) NSObject (NSObject)

Framework /System/Library/Frameworks/AppKit.framework

**Availability** Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h

Related sample code DatePicker

## Overview

An NSDatePickerCell instance controls the behavior of an NSDatePicker control, or of a single date picker cell in a matrix.

## **Tasks**

## **Configuring Appearance**

- backgroundColor (page 7)

Returns the receiver's background color.

- setBackgroundColor: (page 11)

Sets the receiver's background color

drawsBackground (page 10)

Returns whether the receiver draws the background.

- setDrawsBackground: (page 14)

Sets whether the receiver draws the background.

textColor (page 16)

Returns the receiver's text color.

- setTextColor: (page 15)

Sets the receiver's text color.

```
- datePickerStyle (page 9)
```

Returns the receiver's date picker style.

```
- setDatePickerStyle: (page 13)
```

Sets the receiver's date picker style.

- datePickerElements (page 8)

Returns a bitmask that indicates which visual elements of the date picker are currently shown, and which won't be usable because they are hidden.

```
- setDatePickerElements: (page 12)
```

Sets a bitmask that indicates which visual elements of the date picker are currently shown, and which won't be usable because they are hidden.

### Range Mode

```
- datePickerMode (page 8)
```

Returns the receiver's date picker mode.

```
- setDatePickerMode: (page 12)
```

Sets the receiver's date picker mode.

## **Object Values**

```
dateValue (page 9)
```

Returns the receiver's date.

```
- setDateValue: (page 13)
```

Sets the receiver's date to a new starting value.

```
- timeInterval (page 17)
```

Returns the time interval that represents the date range.

```
- setTimeInterval: (page 15)
```

Sets the time interval of the date range.

- calendar (page 8)

Returns the calendar used by the receiver.

```
- setCalendar: (page 11)
```

Sets the receiver's calendar.

- locale (page 10)

Returns the receiver's locale.

```
- setLocale: (page 14)
```

Sets the receiver's locale.

timeZone (page 17)

Returns the receiver's time zone.

- setTimeZone: (page 16)

Sets the receiver's time zone.

## **Date Range Constraints**

- minDate (page 11)

Returns the minimum date value that the receiver allows as input.

- setMinDate: (page 15)

Sets the minimum date allowed as input by the receiver to the given date.

- maxDate (page 10)

Returns the maximum date value that the receiver allows as input.

- setMaxDate: (page 14)

Sets the maximum date allowed as input by the receiver to the given date.

## **Getting and Setting the Delegate**

- delegate (page 9)

Returns the receiver's delegate.

- setDelegate: (page 13)

Sets the receiver's delegate.

#### **Content Validation**

- datePickerCell:validateProposedDateValue:timeInterval: (page 17) delegate method

The delegate receives this message each time the user attempts to change the receiver's value, allowing the delegate the opportunity to override the change.

## **Instance Methods**

## back ground Color

Returns the receiver's background color.

- (NSColor \*)backgroundColor

#### **Return Value**

The receiver's background color.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- setBackgroundColor: (page 11)

#### Declared In

NSDatePickerCell.h

#### calendar

Returns the calendar used by the receiver.

```
- (NSCalendar *)calendar
```

#### **Return Value**

The calendar used by the receiver.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setCalendar: (page 11)
```

#### Declared In

NSDatePickerCell.h

#### datePickerElements

Returns a bitmask that indicates which visual elements of the date picker are currently shown, and which won't be usable because they are hidden.

- (NSDatePickerElementFlags)datePickerElements

#### **Return Value**

A bitmask that specifies the date picker elements displayed by the receiver. See "Constants" (page 18) for a description of the possible values.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setDatePickerElements: (page 12)
```

#### Declared In

NSDatePickerCell.h

#### datePickerMode

Returns the receiver's date picker mode.

- (NSDatePickerMode)datePickerMode

#### **Return Value**

The receiver's date picker mode.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setDatePickerMode: (page 12)
```

#### **Declared In**

NSDatePickerCell.h

## datePickerStyle

Returns the receiver's date picker style.

- (NSDatePickerStyle)datePickerStyle

#### **Return Value**

The receiver's date picker style.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setDatePickerStyle: (page 13)
```

#### **Declared In**

NSDatePickerCell.h

### dateValue

Returns the receiver's date.

```
- (NSDate *)dateValue
```

#### **Return Value**

The receiver's date.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setDateValue: (page 13)
```

#### **Declared In**

NSDatePickerCell.h

## delegate

Returns the receiver's delegate.

- (id)delegate

#### **Return Value**

The receiver's delegate.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setDelegate: (page 13)
```

#### **Related Sample Code**

DatePicker

#### **Declared In**

NSDatePickerCell.h

## drawsBackground

Returns whether the receiver draws the background.

- (BOOL)drawsBackground

#### **Return Value**

YES if the receiver draws the background, otherwise NO.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setDrawsBackground: (page 14)
```

#### **Declared In**

NSDatePickerCell.h

### locale

Returns the receiver's locale.

```
- (NSLocale *)locale
```

#### **Return Value**

The receiver's locale.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setLocale: (page 14)
```

#### **Declared In**

NSDatePickerCell.h

#### maxDate

Returns the maximum date value that the receiver allows as input.

```
- (NSDate *)maxDate
```

#### **Return Value**

The maximum date value that the receiver allows as input.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setMaxDate: (page 14)
```

#### **Declared In**

NSDatePickerCell.h

#### minDate

Returns the minimum date value that the receiver allows as input.

```
- (NSDate *)minDate
```

#### **Return Value**

The minimum date value that the receiver allows as input.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setMinDate: (page 15)
```

#### **Declared In**

NSDatePickerCell.h

## set Background Color:

Sets the receiver's background color

```
- (void)setBackgroundColor:(NSColor *)color
```

#### **Parameters**

color

The new background color.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- backgroundColor (page 7)

#### Declared In

NSDatePickerCell.h

### setCalendar:

Sets the receiver's calendar.

- (void)setCalendar:(NSCalendar \*)newCalendar

#### **Parameters**

newCalendar

The calendar used by the receiver.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- backgroundColor (page 7)

#### Declared In

NSDatePickerCell.h

### setDatePickerElements:

Sets a bitmask that indicates which visual elements of the date picker are currently shown, and which won't be usable because they are hidden.

- (void)setDatePickerElements:(NSDatePickerElementFlags)elementFlags

#### **Parameters**

elementFlags

A bitmask that specifies the date picker elements displayed by the receiver. See "Constants" (page 18) for a description of the possible values.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- datePickerElements (page 8)

#### Declared In

NSDatePickerCell.h

#### setDatePickerMode:

Sets the receiver's date picker mode.

- (void)setDatePickerMode:(NSDatePickerMode)newMode

#### **Parameters**

newMode

The new date picker mode.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- datePickerMode (page 8)

#### **Declared In**

NSDatePickerCell.h

## setDatePickerStyle:

Sets the receiver's date picker style.

- (void)setDatePickerStyle:(NSDatePickerStyle)newStyle

#### **Parameters**

newStyle

The new date picker style.

## Availability

Available in Mac OS X v10.4 and later.

#### See Also

- datePickerStyle (page 9)

#### **Declared In**

NSDatePickerCell.h

#### setDateValue:

Sets the receiver's date to a new starting value.

- (void)setDateValue:(NSDate \*)newStartDate

#### **Parameters**

newStartDate

The new starting date.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- dateValue (page 9)

#### **Declared In**

NSDatePickerCell.h

## setDelegate:

Sets the receiver's delegate.

- (void) setDelegate: (id) anObject

#### **Parameters**

anObject

The receiver's delegate.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- delegate (page 9)

#### **Declared In**

NSDatePickerCell.h

## setDrawsBackground:

Sets whether the receiver draws the background.

- (void)setDrawsBackground:(B00L)flag

#### **Parameters**

flag

YES if the receiver draws the background, otherwise NO.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- drawsBackground (page 10)

#### **Declared In**

NSDatePickerCell.h

## setLocale:

Sets the receiver's locale.

```
- (void)setLocale:(NSLocale *)newLocale
```

#### **Parameters**

newLocale

The receiver's locale.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- locale (page 10)

#### Declared In

NSDatePickerCell.h

#### setMaxDate:

Sets the maximum date allowed as input by the receiver to the given date.

```
- (void)setMaxDate:(NSDate *)date
```

#### **Parameters**

date

The maximum date the receiver allows as input. Pass nil to allow any date as the maximum value.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- maxDate (page 10)

#### **Declared In**

NSDatePickerCell.h

## setMinDate:

Sets the minimum date allowed as input by the receiver to the given date.

```
- (void)setMinDate:(NSDate *)date
```

#### **Parameters**

date

The minimum date the receiver allows as input. Pass nil to allow any date as the minimum value.

#### Discussion

Passing nil for date allows any date as the minimum value.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- minDate (page 11)

#### **Declared In**

NSDatePickerCell.h

#### setTextColor:

Sets the receiver's text color.

```
- (void)setTextColor:(NSColor *)color
```

#### **Parameters**

color

The new text color.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

- textColor (page 16)

#### **Declared In**

NSDatePickerCell.h

#### setTimeInterval:

Sets the time interval of the date range.

- (void)setTimeInterval:(NSTimeInterval)newTimeInterval

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#### **Parameters**

newTimeInterval

The time interval of the date range.

#### Discussion

The time interval only applies when the receiver is in the NSRangeDateMode mode.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- timeInterval (page 17)
```

#### **Declared In**

NSDatePickerCell.h

## setTimeZone:

Sets the receiver's time zone.

```
- (void)setTimeZone:(NSTimeZone *)newTimeZone
```

#### **Parameters**

newTimeZone

The receiver's time zone.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- timeZone (page 17)
```

#### **Declared In**

NSDatePickerCell.h

#### textColor

Returns the receiver's text color.

```
- (NSColor *)textColor
```

#### **Return Value**

The receiver's text color.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setTextColor: (page 15)
```

#### **Declared In**

NSDatePickerCell.h

#### timeInterval

Returns the time interval that represents the date range.

```
- (NSTimeInterval)timeInterval
```

#### **Return Value**

The time interval that represents the date range.

#### Discussion

The date range begins at the date returned by dateValue (page 9). This method returns 0 when the receiver is not in the NSRangeDateMode mode.

#### **Special Considerations**

Prior to Mac OS X v 10.5 this method always returned 0.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setTimeInterval: (page 15)
```

#### **Declared In**

NSDatePickerCell.h

### timeZone

Returns the receiver's time zone.

```
- (NSTimeZone *)timeZone
```

#### **Return Value**

The receiver's time zone.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### See Also

```
- setTimeZone: (page 16)
```

#### **Declared In**

NSDatePickerCell.h

## **Delegate Methods**

## date Picker Cell: validate Proposed Date Value: time Interval:

The delegate receives this message each time the user attempts to change the receiver's value, allowing the delegate the opportunity to override the change.

```
- (void)datePickerCell:(NSDatePickerCell *)aDatePickerCell
  validateProposedDateValue:(NSDate **)proposedDateValue
  timeInterval:(NSTimeInterval *)proposedTimeInterval
```

#### **Parameters**

aDatePickerCell

The cell cell that sent the message.

proposedDateValue

On input, contains the proposed new date. The delegate may change this value before returning. proposedTimeInterval

On input, contains the proposed new time interval. The delegate may change this value before returning.

#### Discussion

When returning a new proposedDateValue, the NSDate instance should be autoreleased, and the proposedDateValue should not be released by the delegate.

The proposedDateValue and proposedTimeInterval are guaranteed to lie between the dates returned by minDate (page 11) and maxDate (page 10). If you modify these values, you should ensure that the new values are within the appropriate range.

#### **Availability**

Available in Mac OS X v10.4 and later.

#### **Declared In**

NSDatePickerCell.h

## Constants

#### **NSDatePickerStyle**

Specifies a type for constants that define the visual appearance of the NSDatePickerCell.

typedef NSUInteger NSDatePickerStyle;

#### Discussion

For a discussion of possible values, see "Date Picker Style" (page 18).

#### **Availability**

Available in Mac OS X v10.4 and later.

#### Declared In

NSDatePickerCell.h

## **Date Picker Style**

The NSDatePickerStyle constants define the visual appearance of the NSDatePickerCell. These values are used by datePickerStyle (page 9) and setDatePickerStyle: (page 13).

```
enum {
    NSTextFieldAndStepperDatePickerStyle
                                                   = 0.
                                                   = 1,
    NSClockAndCalendarDatePickerStyle
    NSTextFieldDatePickerStyle
                                                   = 2
typedef NSUInteger NSDatePickerStyle;
NSTextFieldAndStepperDatePickerStyle
      Provide a text field and stepper style interface.
      Available in Mac OS X v10.4 and later.
      Declared in NSDatePickerCell.h.
NSClockAndCalendarDatePickerStyle
      Provide a visual clock and calendar style interface.
      Available in Mac OS X v10.4 and later.
      Declared in NSDatePickerCell.h.
NSTextFieldDatePickerStyle
      Provide a text field interface.
      Available in Mac OS X v10.5 and later.
      Declared in NSDatePickerCell.h.
```

#### **NSDatePickerMode**

NSDatePickerCell.h

Specifies a type for constants that define whether the control provides a single date, or a range of dates.

```
typedef NSUInteger NSDatePickerMode;
```

#### Discussion

**Declared In** 

For a discussion of possible values, see "Date Picker Mode" (page 19).

#### **Availability**

Available in Mac OS X v10.4 and later.

#### Declared In

NSDatePickerCell.h

#### **Date Picker Mode**

The NSDatePickerMode constants define whether the control provides a single date, or a range of dates. These values are used by datePickerMode (page 8) and setDatePickerMode: (page 12).

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```
enum {
    NSSingleDateMode = 0,
    NSRangeDateMode = 1
};
typedef NSUInteger NSDatePickerMode;
```

#### Constants

NSSingleDateMode

Allow selection of a single date.

Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h.

NSRangeDateMode

Allow selection of a range of dates. (First implemented in Mac OS X v 10.5.)

Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h.

#### **Special Considerations**

Prior to Mac OS X v 10.5 only NSSingleDateMode was implemented.

#### **Declared In**

NSDatePickerCell.h

#### NSDatePickerElementFlags

Specifies a type for constants that allow you to specify the date and time elements that the NSDatePickerCell can edit.

```
typedef NSUInteger NSDatePickerElementFlags;
```

#### Discussion

For a discussion of possible values, see "Date Picker Elements" (page 20).

#### **Availability**

Available in Mac OS X v10.4 and later.

#### Declared In

NSDatePickerCell.h

#### **Date Picker Elements**

The NSDatePickerElementFlag constants allow you to specify the date and time elements that the NSDatePickerCell can edit by combining these constants using the C bitwise OR operator. These values are used by datePickerElements (page 8) and setDatePickerElements: (page 12):

```
enum {
    NSHourMinuteDatePickerElementFlag = 0x000c,
    NSHourMinuteSecondDatePickerElementFlag = 0x000e,
    NSTimeZoneDatePickerElementFlag = 0x0010,
```

#### Constants

NSHourMinuteDatePickerElementFlag

Display and allow editing of the hour and minute elements of the date.

Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h.

NSHourMinuteSecondDatePickerElementFlag

Display and allow editing of the hour, minute and second elements of the date.

Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h.

NSTimeZoneDatePickerElementFlag

Display and allow editing of the time zone.

This flag has been declared for possible future use, and does not yet have any effect.

Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h.

NSYearMonthDatePickerElementFlag

Display and allow editing of the year and month elements of the date.

Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h.

NSYearMonthDayDatePickerElementFlag

Display and allow editing of the year, month and day elements of the date.

Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h.

NSEraDatePickerElementFlag

Display and allow editing of the era of the date, if applicable.

This flag has been declared for possible future use, and does not yet have any effect.

Available in Mac OS X v10.4 and later.

Declared in NSDatePickerCell.h.

#### **Declared In**

NSDatePickerCell.h

Constants 2008-06-09 | © 2008 Apple Inc. All Rights Reserved.

# **Document Revision History**

This table describes the changes to NSDatePickerCell Class Reference.

Date	Notes
2008-06-09	Added information concerning support for time intervals.
2007-04-01	Updated for Mac OS X v10.5.
2006-05-23	First publication of this content as a separate document.

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