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# NSTextTab Class Reference

[Cocoa](#) > [Text & Fonts](#)



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# NSTextTab Class Reference

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<b>Inherits from</b>	NSObject
<b>Conforms to</b>	NSCoding NSCopying NSObject (NSObject)
<b>Framework</b>	/System/Library/Frameworks/AppKit.framework
<b>Availability</b>	Available in Mac OS X v10.0 and later.
<b>Companion guide</b>	Text System Overview
<b>Declared in</b>	NSParagraphStyle.h
<b>Related sample code</b>	Quartz Composer WWDC 2005 TextEdit TextEditPlus

## Overview

An `NSTextTab` object represents a tab in an `NSParagraphStyle` object, storing an alignment type and location. `NSTextTab` objects are most frequently used with the Application Kit's text system and with `NSRulerView` and `NSRulerMarker` objects. See the appropriate class specifications for more information on these uses.

The text system supports four alignment types: left, center, right, and decimal (based on the decimal separator character of the locale in effect). These alignment types are absolute, not based on the line sweep direction of text. For example, tabbed text is always positioned to the left of a right-aligned tab, whether the line sweep direction is left to right or right to left. A tab's location, on the other hand, is relative to the back margin. A tab set at 1.5", for example, is at 1.5" from the right in right to left text.

## Adopted Protocols

### NSCoding

- `encodeWithCoder:`
- `initWithCoder:`

### NSCopying

- `copyWithZone:`

## Tasks

### Creating an NSTextTab

- `initWithType:location:` (page 7)  
Initializes a newly allocated NSTextTab with an alignment of *type* at *location* on the paragraph.
- `initWithTextAlignment:location:options:` (page 6)  
Initializes a text tab with the text alignment, location, and options.

### Getting Tab Stop Information

- `location` (page 7)  
Returns the receiver's ruler location relative to the back margin.
- `tabStopType` (page 8)  
Returns the receiver's tab stop type.

### Getting Text Tab Information

- `alignment` (page 6)  
Returns the text alignment of the receiver.
- `options` (page 7)  
Returns the dictionary of attributes associated with the receiver.

## Instance Methods

### **alignment**

Returns the text alignment of the receiver.

- (NSTextAlignment)alignment

#### **Return Value**

The text alignment of the receiver as an NSTextAlignment constant

#### **Availability**

Available in Mac OS X v10.3 and later.

#### **Declared In**

NSParagraphStyle.h

### **initWithTextAlignment:location:options:**

Initializes a text tab with the text alignment, location, and options.

```
- (id)initWithTextAlignment:(NSTextAlignment)alignment location:(CGFloat)loc
options:(NSDictionary *)options
```

**Discussion**

The text alignment is used to determine the position of text inside the tab column. See [NSTextTabType](#) (page 8) for a mapping between alignments and tab stop types

**Availability**

Available in Mac OS X v10.3 and later.

**Declared In**

NSParagraphStyle.h

**initWithType:location:**

Initializes a newly allocated NSTextTab with an alignment of *type* at *location* on the paragraph.

```
- (id)initWithType:(NSTextTabType)type location:(CGFloat)location
```

**Discussion**

The location is relative to the back margin, based on the line sweep direction of the paragraph. *type* can be any of the values described in [NSTextTabType](#) (page 8).

**Availability**

Available in Mac OS X v10.0 and later.

**Related Sample Code**

Quartz Composer WWDC 2005 TextEdit  
TextEditPlus

**Declared In**

NSParagraphStyle.h

**location**

Returns the receiver's ruler location relative to the back margin.

```
- (CGFloat)location
```

**Return Value**

The receiver's ruler location relative to the back margin.

**Availability**

Available in Mac OS X v10.0 and later.

**Declared In**

NSParagraphStyle.h

**options**

Returns the dictionary of attributes associated with the receiver.

- (NSDictionary \*)options

**Return Value**

The dictionary of attributes associated with the receiver.

**Availability**

Available in Mac OS X v10.3 and later.

**Declared In**

NSParagraphStyle.h

**tabStopType**

Returns the receiver's tab stop type.

- (NSTextTabType)tabStopType

**Return Value**

The receiver's tab stop type. Possible values are listed in [NSTextTabType](#) (page 8).

**Availability**

Available in Mac OS X v10.0 and later.

**Declared In**

NSParagraphStyle.h

## Constants

**NSTextTabType**

These constants describe the various type of tab stop.

```
typedef enum _NSTextTabType {
    NSLeftTabStopType = 0,
    NSRightTabStopType,
    NSCenterTabStopType,
    NSDecimalTabStopType
} NSTextTabType;
```

**Constants**

NSLeftTabStopType

A left-aligned tab stop.

Available in Mac OS X v10.0 and later.

Declared in NSParagraphStyle.h.

NSRightTabStopType

A right-aligned tab stop.

Available in Mac OS X v10.0 and later.

Declared in NSParagraphStyle.h.



**NSCenterTabStopType**

A center-aligned tab stop.

Available in Mac OS X v10.0 and later.

Declared in `NSParagraphStyle.h`.

**NSDecimalTabStopType**

Aligns columns of numbers by the decimal point.

Available in Mac OS X v10.0 and later.

Declared in `NSParagraphStyle.h`.

**Discussion**

The following mappings define the conversions between text alignment in `NSTextTab` and tab stop types defined by `NSTextTab`:

Alignment	Tab Stop Type
<code>NSLeftTextAlignment</code>	<code>NSLeftTabStopType</code>
<code>NSRightTextAlignment</code>	<code>NSRightTabStopType</code>
<code>NSCenterTextAlignment</code>	<code>NSCenterTabStopType</code>
<code>NSJustifiedTextAlignment</code>	<code>NSLeftTabStopType</code>
<code>NSNaturalTextAlignment</code>	<code>NSLeftTabStopType</code> or <code>NSRightTabStopType</code> , depending on the user setting
<code>NSRightTextAlignment with terminator</code>	<code>NSDecimalTabStopType</code>

**Availability**

Available in Mac OS X v10.0 and later.

**Declared In**

`NSParagraphStyle.h`

**Terminating character**

This constant specifies the terminating character for a tab column.

```
NSString *NSTabColumnTerminatorsAttributeName;
```

**Constants**

`NSTabColumnTerminatorsAttributeName`

The value is an `NSCharacterSet` object.

The character set is used to determine the terminating character for a tab column. The tab and newline characters are implied even if they don't exist in the character set. This attribute is optional.

Available in Mac OS X v10.3 and later.

Declared in `NSParagraphStyle.h`.

**Declared In**

`NSParagraphStyle.h`



# Document Revision History

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

Date	Notes
2006-05-23	First publication of this content as a separate document.

**REVISION HISTORY**

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NSLeftTabStopType [constant 8](#)  
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