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# CTFontCollection Reference

[Carbon > Text & Fonts](#)



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

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# CTFontCollection Reference

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<b>Derived From:</b>	CType
<b>Framework:</b>	ApplicationServices/CoreText
<b>Declared in</b>	CTFontCollection.h

## Overview

The CTFontCollection opaque type represents a font collection, that is, a group of font descriptors taken together as a single object.

Font collections provide the capabilities of font enumeration, access to global and custom font collections, and access to the font descriptors comprising the collection.

## Functions by Task

### Creating Font Collections

- [CTFontCollectionCreateFromAvailableFonts](#) (page 6)  
Returns a new font collection containing all available fonts.
- [CTFontCollectionCreateWithFontDescriptors](#) (page 7)  
Returns a new font collection based on the given array of font descriptors.
- [CTFontCollectionCreateCopyWithFontDescriptors](#) (page 6)  
Returns a copy of the original collection augmented with the given new font descriptors.

### Getting Font Descriptors

- [CTFontCollectionCreateMatchingFontDescriptors](#) (page 7)  
Returns an array of font descriptors matching the collection.
- [CTFontCollectionCreateMatchingFontDescriptorsSortedWithCallback](#) (page 7)  
Returns the array of matching font descriptors sorted with the callback function.

### Getting the Type Identifier

- [CTFontCollectionGetTypeID](#) (page 8)  
Returns the type identifier for Core Text font collection references.

## Functions

### CTFontCollectionCreateCopyWithFontDescriptors

Returns a copy of the original collection augmented with the given new font descriptors.

```
CTFontCollectionRef CTFontCollectionCreateCopyWithFontDescriptors (
    CTFontCollectionRef original,
    CFArrayRef descriptors,
    CFDictionaryRef options
);
```

#### Parameters

*original*

The original font collection reference.

*descriptors*

An array of font descriptors to augment those of the original collection.

*options*

The options dictionary. For possible values, see “[Constants](#)” (page 9).

#### Return Value

A copy of the original font collection augmented by the new font descriptors and options.

#### Discussion

The new font descriptors are merged with the existing descriptors to create a single set.

#### Availability

Available in Mac OS X v10.5 and later.

#### Declared In

CTFontCollection.h

### CTFontCollectionCreateFromAvailableFonts

Returns a new font collection containing all available fonts.

```
CTFontCollectionRef CTFontCollectionCreateFromAvailableFonts (
    CFDictionaryRef options
);
```

#### Parameters

*options*

The options dictionary. For possible values, see “[Constants](#)” (page 9).

#### Return Value

A new collection containing all fonts available to the current application.

#### Availability

Available in Mac OS X v10.5 and later.

#### Declared In

CTFontCollection.h

**CTFontCollectionCreateMatchingFontDescriptors**

Returns an array of font descriptors matching the collection.

```
CFArrayRef CTFontCollectionCreateMatchingFontDescriptors (
    CTFontCollectionRef collection
);
```

**Parameters**

*collection*

The font collection reference.

**Return Value**

A retained reference to an array of normalized font descriptors matching the collection definition.

**Availability**

Available in Mac OS X v10.5 and later.

**Declared In**

CTFontCollection.h

**CTFontCollectionCreateMatchingFontDescriptorsSortedWithCallback**

Returns the array of matching font descriptors sorted with the callback function.

```
CFArrayRef CTFontCollectionCreateMatchingFontDescriptorsSortedWithCallback (
    CTFontCollectionRef collection,
    CTFontCollectionSortDescriptorsCallback sortCallback,
    void *refCon
);
```

**Parameters**

*collection*

The collection reference.

*sortCallback*

The sorting callback function that defines the sort order.

*refCon*

Pointer to client data define context for the callback.

**Return Value**

An array of font descriptors matching the criteria of the collection sorted by the results of the sorting callback function.

**Availability**

Available in Mac OS X v10.5 and later.

**Declared In**

CTFontCollection.h

**CTFontCollectionCreateWithFontDescriptors**

Returns a new font collection based on the given array of font descriptors.

```
CTFontCollectionRef CTFontCollectionCreateWithFontDescriptors (
    CFArrayRef descriptors,
    CFDictionaryRef options
);
```

**Parameters***descriptors*

An array of font descriptors.

*options*The options dictionary. For possible values, see [“Constants”](#) (page 9).**Return Value**

A new font collection based on the provided font descriptors.

**Discussion**

The contents of the returned collection are defined by matching the provided descriptors against all available font descriptors.

**Availability**

Available in Mac OS X v10.5 and later.

**Declared In**

CTFontCollection.h

**CTFontCollectionGetTypeID**

Returns the type identifier for Core Text font collection references.

```
CTTypeID CTFontCollectionGetTypeID (
    void
);
```

**Return Value**

The identifier for the opaque type CTFontCollection.

**Availability**

Available in Mac OS X v10.5 and later.

**Declared In**

CTFontCollection.h

## Data Types

**CTFontCollectionRef**

A reference to a font collection.

```
typedef const struct __CTFontCollection * CTFontCollectionRef;
```

**Availability**

Available in Mac OS X v10.5 and later.



**Declared In**

CTFontCollection.h

**CTFontCollectionSortDescriptorsCallback**

The collection sorting callback.

```
typedef CFComparisonResult
(*CTFontCollectionSortDescriptorsCallback)(CTFontDescriptorRef first,
CTFontDescriptorRef second, void *refCon);
```

**Discussion**

This callback can be specified to obtain the matching font descriptors of a collection in sorted order. The callback function should return the comparison result of the first descriptor to the second descriptor.

**Declared In**

CTFontCollection.h

## Constants

**kCTFontCollectionRemoveDuplicatesOption**

An option key to specify filtering of duplicates.

```
const CFStringRef kCTFontCollectionRemoveDuplicatesOption;
```

**Constants**

```
kCTFontCollectionRemoveDuplicatesOption
```

Option key to specify filtering of duplicates.

Available in Mac OS X v10.5 and later.

Declared in CTFontCollection.h.

**Discussion**

Specify this option key in the options dictionary with a nonzero value to enable automatic filtering of duplicate font descriptors.

**Declared In**

CTFontCollection.h



# Document Revision History

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This table describes the changes to *CTFontCollection Reference*.

Date	Notes
2007-05-16	New document that describes the Core Text opaque type used to store a collection of font references.

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