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# ABSearchElement Class Reference

Data Management: Contact Data



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# ABSearchElement Class Reference

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<b>Inherits from</b>	NSObject
<b>Conforms to</b>	NSObject (NSObject)
<b>Framework</b>	/System/Library/Frameworks/AddressBook.framework
<b>Availability</b>	Available in Mac OS X v10.2 and later.
<b>Companion guide</b>	Address Book Programming Guide for Mac OS X
<b>Declared in</b>	ABSearchElement.h ABTypedefs.h
<b>Related sample code</b>	AddressBookCocoa Birthdays

## Overview

The `ABSearchElement` class is used to specify a search query for records in the Address Book database.

The `ABSearchElement` class is “toll-free bridged” with its procedural C opaque-type counterpart. This means that the `ABSearchElementRef` type is interchangeable in function or method calls with instances of the `ABSearchElement` class.

## Tasks

### Searching

+ [searchElementForConjunction:children:](#) (page 6)

Returns a compound search element, created by combining the search elements in an array with the given conjunction.

### Matching

- [matchesRecord:](#) (page 6)

Tests whether or not a record matches a search element.

## Class Methods

### searchElementForConjunction:children:

Returns a compound search element, created by combining the search elements in an array with the given conjunction.

```
+ (ABSearchElement *)searchElementForConjunction:(ABSearchConjunction)conjunction
  children:(NSArray *)children
```

#### Parameters

*conjunction*

The logical operator with which to combine the search elements.

*children*

An array of search elements to be combined.

#### Return Value

A compound search element, created by combining the given search elements with the given conjunction

#### Discussion

The objects in the *children* array must be `ABSearchElement` objects. The conjunction can be `kABSearchAnd` or `kABSearchOr`. If *children* is `nil` or empty, this method raises an exception.

#### Availability

Available in Mac OS X v10.2 and later.

#### See Also

- + `searchElementForProperty:label:key:value:comparison:` (`ABPerson`)
- + `searchElementForProperty:label:key:value:comparison:` (`ABGroup`)
- `recordsMatchingSearchElement:` (`ABAddressBook`)

#### Declared In

`ABSearchElement.h`

## Instance Methods

### matchesRecord:

Tests whether or not a record matches a search element.

```
- (BOOL)matchesRecord:(ABRecord *)record
```

#### Parameters

*record*

The record to be tested against the search object.

#### Return Value

YES if the *record* argument satisfies the conditions in the search element; otherwise, NO.

**Discussion**

If *record* is *nil*, this method raises an exception.

**Availability**

Available in Mac OS X v10.2 and later.

**See Also**

- + [searchElementForProperty:label:key:value:comparison:](#) (ABPerson)
- + [searchElementForProperty:label:key:value:comparison:](#) (ABGroup)
- + [searchElementForConjunction:children:](#) (page 6)

**Declared In**

ABSearchElement.h

## Constants

### Search Conjunctions

Logical operators used to combine search elements.

```
enum _ABSearchConjunction {
    kABSearchAnd,
    kABSearchOr
};
typedef CFIndex ABSearchConjunction;
```

**Constants**

kABSearchAnd

Join the search elements together with the AND operand.

Available in Mac OS X v10.2 and later.

Declared in ABTypedefs.h.

kABSearchOr

Join the search elements together with the OR operand.

Available in Mac OS X v10.2 and later.

Declared in ABTypedefs.h.

**Discussion**

These constants are used by the [searchElementForConjunction:children:](#) (page 6) method.

### Search Comparisons

Comparisons used to construct search elements.

```

enum _ABSearchComparison {
    kABEqual,
    kABNotEqual,
    kABLessThan,
    kABLessThanOrEqual,
    kABGreaterThan,
    kABGreaterThanOrEqual,
    kABEqualCaseInsensitive,
    kABContainsSubString,
    kABContainsSubStringCaseInsensitive,
    kABPrefixMatch,
    kABPrefixMatchCaseInsensitive,
    kABBitsInBitFieldMatch,
    kABDoesNotContainSubString,
    kABDoesNotContainSubStringCaseInsensitive,
    kABNotEqualCaseInsensitive,
    kABSuffixMatch,
    kABSuffixMatchCaseInsensitive,
    kABWithinIntervalAroundToday,
    kABWithinIntervalAroundTodayYearless,
    kABNotWithinIntervalAroundToday,
    kABNotWithinIntervalAroundTodayYearless,
    kABWithinIntervalFromToday,
    kABWithinIntervalFromTodayYearless,
    kABNotWithinIntervalFromToday,
    kABNotWithinIntervalFromTodayYearless
};
typedef CFIndex ABSearchComparison;

```

**Constants**

kABEqual

Search for elements that are equal to the value.

Available in Mac OS X v10.2 and later.

Declared in ABTypedefs.h.

kABNotEqual

Search for elements that are not equal to the value.

Available in Mac OS X v10.2 and later.

Declared in ABTypedefs.h.

kABLessThan

Search for elements that are less than the value.

Available in Mac OS X v10.2 and later.

Declared in ABTypedefs.h.

kABLessThanOrEqual

Search for elements that are less than or equal to the value.

Available in Mac OS X v10.2 and later.

Declared in ABTypedefs.h.

kABGreaterThan

Search for elements that are greater than the value.

Available in Mac OS X v10.2 and later.

Declared in ABTypedefs.h.

- `kABGreaterThanOrEqual`  
Search for elements that are greater than or equal to the value.  
Available in Mac OS X v10.2 and later.  
Declared in `ABTypedefs.h`.
- `kABEqualCaseInsensitive`  
Search for elements that are equal to the value, ignoring case.  
Available in Mac OS X v10.2 and later.  
Declared in `ABTypedefs.h`.
- `kABContainsSubString`  
Search for elements that contain the value.  
Available in Mac OS X v10.2 and later.  
Declared in `ABTypedefs.h`.
- `kABContainsSubStringCaseInsensitive`  
Search for elements that contain the value, ignoring case.  
Available in Mac OS X v10.2 and later.  
Declared in `ABTypedefs.h`.
- `kABPrefixMatch`  
Search for elements that begin with the value.  
Available in Mac OS X v10.2 and later.  
Declared in `ABTypedefs.h`.
- `kABPrefixMatchCaseInsensitive`  
Search for elements that begin with the value, ignoring case.  
Available in Mac OS X v10.2 and later.  
Declared in `ABTypedefs.h`.
- `kABBitsInBitFieldMatch`  
Search for elements that match the bits in `ABPersonFlags`.  
Available in Mac OS X v10.3 and later.  
Declared in `ABTypedefs.h`.
- `kABDoesNotContainSubString`  
Search for elements that do not contain the value.  
Available in Mac OS X v10.4 and later.  
Declared in `ABTypedefs.h`.
- `kABDoesNotContainSubStringCaseInsensitive`  
Search for elements that do not contain the value, ignoring case.  
Available in Mac OS X v10.4 and later.  
Declared in `ABTypedefs.h`.
- `kABNotEqualCaseInsensitive`  
Search for elements that are not equal to the value, ignoring case.  
Available in Mac OS X v10.4 and later.  
Declared in `ABTypedefs.h`.

`kABSuffixMatch`

Search for elements that end with the value.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABSuffixMatchCaseInsensitive`

Search for elements that end with the value, ignoring case.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABWithinIntervalAroundToday`

Search for elements that are within a time interval (in seconds) forward or backward from today.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABWithinIntervalAroundTodayYearless`

Search for elements that are within a time interval (in seconds) forward or backward from this day in any year.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABNotWithinIntervalAroundToday`

Search for elements that are *not* within a time interval (in seconds) forward or backward from today.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABNotWithinIntervalAroundTodayYearless`

Search for elements that are *not* within a time interval (in seconds) forward or backward from this day in any year.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABWithinIntervalFromToday`

Search for elements that are within a time interval (in seconds) forward from today.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABWithinIntervalFromTodayYearless`

Search for elements that are within a time interval (in seconds) forward from this day in any year.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABNotWithinIntervalFromToday`

Search for elements that are *not* within a time interval (in seconds) forward from today.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

`kABNotWithinIntervalFromTodayYearless`

Search for elements that are *not* within a time interval (in seconds) forward from this day in any year.

Available in Mac OS X v10.4 and later.

Declared in `ABTypedefs.h`.

### Discussion

These constants are used by the `ABPerson` method

`searchElementForProperty:label:key:value:comparison:` and the `ABGroup` method

`searchElementForProperty:label:key:value:comparison:`



# Document Revision History

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

Date	Notes
2009-07-24	Added descriptions of parameters and return values to API symbols, as needed.
2009-06-02	Added descriptions of parameters and return values to API symbols, as needed.
2006-05-23	First publication of this content as a separate document.
	First publication of this content as a separate document.

## REVISION HISTORY

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