NSCompoundPredicate Class Reference

Cocoa > Data Management

2006-07-04

Apple Inc.
© 2006 Apple Computer, Inc.
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

The Apple logo is a trademark of Apple Inc.

Use of the "keyboard" Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Every effort has been made to ensure that the information in this document is accurate. Apple is not responsible for typographical errors.

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

Apple, the Apple logo, Cocoa, Mac, and Mac OS are trademarks of Apple Inc., registered in the United States and other countries.

Simultaneously published in the United States and Canada.

Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED "AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.

IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Contents

NSCompoundPredicate Class Reference 5

Overview 5
Tasks 5
  Constructors 5
  Getting Information About a Compound Predicate 6
Class Methods 6
  andPredicateWithSubpredicates: 6
  notPredicateWithSubpredicate: 6
  orPredicateWithSubpredicates: 7
Instance Methods 7
  compoundPredicateType 7
  initWithType:subpredicates: 8
  subpredicates 8
Constants 8
  Compound Predicate Types 8

Document Revision History 11

Index 13

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

NSCompoundPredicate Class Reference

Inherits from	NSPredicate : NSObject
Conforms to	NSCoding (NSPredicate) NSCopying (NSPredicate) NSObject (NSObject)
Framework	/System/Library/Frameworks/Foundation.framework
Availability	Available in Mac OS X v10.4 and later.
Companion guide	Predicate Programming Guide
Declared in	NSCompoundPredicate.h
Related sample code	CoreRecipes iSpend PredicateEditorSample SpotlightFortunes

Overview

`NSCompoundPredicate` is a subclass of `NSPredicate` used to represent logical "gate" operations (AND/OR/NOT) and comparison operations.

Comparison operations are based on two expressions, as represented by instances of the `NSExpression` class. Expressions are created for constant values, key paths, and so on.

On Mac OS X v10.5 and later, `NSCompoundPredicate` allows you to create an AND or OR compound predicate (but not a NOT compound predicate) using an array with 0,1, or more elements. A compound predicate with 0 elements evaluates to TRUE, and a compound predicate with a single sub-predicate evaluates to the truth of its sole subpredicate.

Tasks

Constructors

`+ andPredicateWithSubpredicates:` (page 6)
Returns a new predicate formed by AND-ing the predicates in a given array.

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

+ notPredicateWithSubpredicate: (page 6)
    Returns a new predicate formed by NOT-ing a given predicate.
+ orPredicateWithSubpredicates: (page 7)
    Returns a new predicate formed by OR-ing the predicates in a given array.
- initWithType:subpredicates: (page 8)
    Returns the receiver initialized to a given type using predicates from a given array.

Getting Information About a Compound Predicate

- compoundPredicateType (page 7)
    Returns the predicate type for the receiver.
- subpredicates (page 8)
    Returns the array of the receiver's subpredicates.

Class Methods

andPredicateWithSubpredicates:

Returns a new predicate formed by AND-ing the predicates in a given array.

```
+ (NSPredicate *)andPredicateWithSubpredicates:(NSArray *)subpredicates
```

Parameters

subpredicates
    An array of NSPredicate objects.

Return Value
A new predicate formed by AND-ing the predicates specified by *subpredicates*.

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

Related Sample Code
iSpend
PredicateEditorSample
SpotlightFortunes

Declared In
NSCompoundPredicate.h

notPredicateWithSubpredicate:

Returns a new predicate formed by NOT-ing a given predicate.

```
+ (NSPredicate *)notPredicateWithSubpredicate:(NSPredicate *)predicate
```


2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

Parameters

predicate

A predicate.

Return Value

A new predicate formed by NOT-ing the predicate specified by *predicate*.

Availability

Available in Mac OS X v10.4 and later.

Declared In

NSCompoundPredicate.h

orPredicateWithSubpredicates:

Returns a new predicate formed by OR-ing the predicates in a given array.

```
+ (NSPredicate *)orPredicateWithSubpredicates:(NSArray *)subpredicates
```

Parameters

subpredicates

An array of `NSPredicate` objects.

Return Value

A new predicate formed by OR-ing the predicates specified by *subpredicates*.

Availability

Available in Mac OS X v10.4 and later.

Related Sample Code

iSpend

Declared In

NSCompoundPredicate.h

Instance Methods

compoundPredicateType

Returns the predicate type for the receiver.

```
- (NSCompoundPredicateType)compoundPredicateType
```

Return Value

The predicate type for the receiver.

Availability

Available in Mac OS X v10.4 and later.

Declared In

NSCompoundPredicate.h

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

initWithType:subpredicates:

Returns the receiver initialized to a given type using predicates from a given array.

```
- (id)initWithType:(NSCompoundPredicateType)type subpredicates:(NSArray
    *)subpredicates
```

Parameters

type

The type of the new predicate.

subpredicates

An array of `NSPredicate` objects.

Return Value
The receiver initialized with its type set to `type` and subpredicates array to *subpredicates*.

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

Related Sample Code
PredicateEditorSample

Declared In
`NSCompoundPredicate.h`

subpredicates

Returns the array of the receiver's subpredicates.

```
- (NSArray *)subpredicates
```

Return Value
The array of the receiver's subpredicates.

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

Declared In
`NSCompoundPredicate.h`

Constants

Compound Predicate Types

These constants describe the possible types of `NSCompoundPredicate`.

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

```
typedef enum {
    NSNotPredicateType = 0,
    NSAndPredicateType,
    NSOrPredicateType,
} NSCompoundPredicateType;
```

Constants

`NSNotPredicateType`

A logical NOT predicate.

Available in Mac OS X v10.4 and later.

Declared in `NSCompoundPredicate.h`.

`NSAndPredicateType`

A logical AND predicate.

Available in Mac OS X v10.4 and later.

Declared in `NSCompoundPredicate.h`.

`NSOrPredicateType`

A logical OR predicate.

Available in Mac OS X v10.4 and later.

Declared in `NSCompoundPredicate.h`.

Declared In

`NSCompoundPredicate.h`

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

Document Revision History

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

Date	Notes
2006-07-04	Updated for Mac OS X v10.5.
2006-05-23	First publication of this content as a separate document.

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

Document Revision History

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.

Index

A

`andPredicateWithSubpredicates:` class method 6

C

Compound Predicate Types 8
`compoundPredicateType` instance method 7

I

`initWithType:subpredicates:` instance method 8

N

`notPredicateWithSubpredicate:` class method 6
`NSAndPredicateType` constant 9
`NSNotPredicateType` constant 9
`NSOrPredicateType` constant 9

O

`orPredicateWithSubpredicates:` class method 7

S

`subpredicates` instance method 8

2006-07-04 | © 2006 Apple Computer, Inc. All Rights Reserved.