
NSComparisonMethods Protocol Reference





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NSComparisonMethods Protocol Reference

(informal protocol)

Framework	/System/Library/Frameworks/Foundation.framework
Companion guide	Cocoa Scripting Guide
Declared in	NSScriptWhoseTests.h

Overview

This informal protocol defines a set of default comparison methods useful for the comparisons in `NSSpecifierTest`.

If you have scriptable objects that need to perform comparisons for scripting purposes, you may need to implement some of the methods declared in `NSScriptingComparisonMethods`. The default implementation provided for many of these methods by `NSObject` is appropriate for objects that implement a single comparison method whose selector, signature, and description match the following:

- (NSComparisonResult)compare:(id)object;

This method should return `NSOrderedAscending` if the receiver is less than *object*, `NSOrderedDescending` if the receiver is greater than *object*, and `NSOrderedSame` if the receiver and *object* are equal. For example, `NSString` does not implement most of the methods declared in this informal protocol, but `NSString` objects still handle messages conforming to this protocol properly because `NSString` implements a `compare:` method that meets the necessary requirements. Cocoa also includes appropriate `compare:` method implementations for the `NSDate`, `NSDecimalNumber`, and `NSNumber` classes.

Tasks

Performing Comparisons

- `doesContain:` (page 6) *required method*
Returns a Boolean value that indicates whether the receiver contains a given object. (required)
- `isCaseInsensitiveLike:` (page 7) *required method*
Returns a Boolean value that indicates whether receiver is considered to be “like” a given string when the case of characters in the receiver is ignored. (required)
- `isEqualTo:` (page 7) *required method*
Returns a Boolean value that indicates whether the receiver is equal to another given object. (required)

- [isGreaterThan:](#) (page 8) *required method*
Returns a Boolean value that indicates whether the receiver is greater than another given object. (required)
- [isGreaterThanOrEqualTo:](#) (page 8) *required method*
Returns a Boolean value that indicates whether the receiver is greater than or equal to another given object. (required)
- [isLessThan:](#) (page 9) *required method*
Returns a Boolean value that indicates whether the receiver is less than another given object. (required)
- [isLessThanOrEqualTo:](#) (page 9) *required method*
Returns a Boolean value that indicates whether the receiver is less than or equal to another given object. (required)
- [isLike:](#) (page 10) *required method*
Returns a Boolean value that indicates whether the receiver is "like" another given object. (required)
- [isNotEqualTo:](#) (page 10) *required method*
Returns a Boolean value that indicates whether the receiver is not equal to another given object. (required)

Instance Methods

doesContain:

Returns a Boolean value that indicates whether the receiver contains a given object. (required)

```
- (BOOL)doesContain:(id)object
```

Parameters

object

The object to search for in the receiver.

Return Value

YES if the receiver contains *object*, otherwise NO.

Discussion

Currently, `doesContain:` messages are never sent to any object from within Cocoa itself.

The default implementation for this method provided by `NSObject` returns YES if the receiver is actually an `NSArray` object and an `indexOfObjectIdenticalTo:` message sent to the same object would return something other than `NSNotFound`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSScriptWhoseTests.h`

isCaseInsensitiveLike:

Returns a Boolean value that indicates whether receiver is considered to be “like” a given string when the case of characters in the receiver is ignored. (required)

- (BOOL)isCaseInsensitiveLike:(NSString *)*aString*

Parameters

aString

The string with which to compare the receiver.

Return Value

YES if the receiver is considered to be “like” *aString* when the case of characters in the receiver is ignored, otherwise NO.

Discussion

Currently, `isCaseInsensitiveLike:` messages are never sent to any object from within Cocoa itself.

The default implementation for this method provided by `NSObject` returns NO. `NSString` also provides an implementation of this method, which returns YES if the receiver matches a pattern described by *aString*, ignoring the case of the characters in the receiver.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSScriptWhoseTests.h`

isEqualTo:

Returns a Boolean value that indicates whether the receiver is equal to another given object. (required)

- (BOOL)isEqualTo:(id)*object*

Parameters

object

The object with which to compare the receiver.

Return Value

YES if the receiver is equal to *object*, otherwise NO. In effect returns NO if receiver is nil.

Discussion

During the evaluation of an `NSWhoseSpecifier` object that contains a test whose operator is `NSEqualToComparison`, an `isEqualTo:` message may be sent to each potentially specified object, if neither the potentially specified object nor the object being tested against implements a `scriptingIsEqualTo:` method.

The default implementation for this method provided by `NSObject` returns YES if an `isEqualTo:` message sent to the same object would return YES.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSScriptWhoseTests.h`

isGreaterThan:

Returns a Boolean value that indicates whether the receiver is greater than another given object. (required)

- (BOOL)isGreaterThan:(id) *object*

Parameters

object

The object with which to compare the receiver.

Return Value

YES if the receiver is greater than *object*, otherwise NO.

Discussion

During the evaluation of an `NSWhoseSpecifier` object that contains a test whose operator is `NSGreaterThanComparison`, an `isGreaterThan:` message may be sent to each potentially specified object, if the potentially specified object does not implement a `scriptingIsGreaterThan:` method and the object being tested against does not implement a `scriptingIsLessThanOrEqualTo:` method.

The default implementation for this method provided by `NSObject` returns YES if a `compare:` message sent to the same object would return `NSOrderedDescending`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSScriptWhoseTests.h`

isGreaterThanOrEqualTo:

Returns a Boolean value that indicates whether the receiver is greater than or equal to another given object. (required)

- (BOOL)isGreaterThanOrEqualTo:(id) *object*

Parameters

object

The object with which to compare the receiver.

Return Value

YES if the receiver is greater than or equal to *object*, otherwise NO.

Discussion

During the evaluation of an `NSWhoseSpecifier` object that contains a test whose operator is `NSGreaterThanOrEqualToComparison`, an `isGreaterThanOrEqualTo:` message may be sent to each potentially specified object, if the potentially specified object does not implement a `scriptingIsGreaterThanOrEqualTo:` method and the object being tested against does not implement a `scriptingIsLessThan:` method.

The default implementation for this method provided by `NSObject` returns YES if a `compare:` message sent to the same object would return `NSOrderedSame` or `NSOrderedDescending`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSScriptWhoseTests.h

isLessThan:

Returns a Boolean value that indicates whether the receiver is less than another given object. (required)

- (BOOL)isLessThan:(id)object

Parameters

object

The object with which to compare the receiver.

Return Value

YES if the receiver is less than *object*, otherwise NO.

Discussion

During the evaluation of an `NSWhoseSpecifier` object that contains a test whose operator is `NSLessThanComparison`, an `isLessThan:` message may be sent to each potentially specified object, if the potentially specified object does not implement a `scriptingIsLessThan:` method and the object being tested against does not implement a `scriptingIsGreaterThanOrEqualTo:` method.

The default implementation for this method provided by `NSObject` method returns YES if a `compare:` message sent to the same object would return `NSOrderedAscending`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSScriptWhoseTests.h

isLessThanOrEqualTo:

Returns a Boolean value that indicates whether the receiver is less than or equal to another given object. (required)

- (BOOL)isLessThanOrEqualTo:(id)object

Parameters

object

The object with which to compare the receiver.

Return Value

YES if the receiver is less than or equal to *object*, otherwise NO.

Discussion

During the evaluation of an `NSWhoseSpecifier` object that contains a test whose operator is `NSLessThanOrEqualToComparison`, an `isLessThanOrEqualTo:` message may be sent to each potentially specified object, if the potentially specified object does not implement a `scriptingIsLessThanOrEqualTo:` method and the object being tested against does not implement a `scriptingIsGreaterThan:` method.

The default implementation for this method provided by `NSObject` method returns YES if a `compare:` message sent to the same object would return `NSOrderedAscending` or `NSOrderedSame`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSScriptWhoseTests.h

isLike:

Returns a Boolean value that indicates whether the receiver is "like" another given object. (required)

```
- (BOOL)isLike:(NSString *)object
```

Parameters

object

The object with which to compare the receiver.

Return Value

YES if the receiver is considered to be "like" *object*, otherwise NO.

Discussion

Currently, `isLike:` messages are never sent to any object from within Cocoa itself.

The default implementation for this method provided by `NSObject` method returns NO. `NSString` also provides an implementation of this method, which returns YES if the receiver matches a pattern described by *object*.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSScriptWhoseTests.h

isNotEqualTo:

Returns a Boolean value that indicates whether the receiver is not equal to another given object. (required)

```
- (BOOL)isNotEqualTo:(id)object
```

Parameters

object

The object with which to compare the receiver.

Return Value

YES if the receiver is not equal to *object*, otherwise NO.

Discussion

Currently, `isNotEqualTo:` messages are never sent to any object from within Cocoa itself.

The default implementation for this method provided by `NSObject` method returns YES if an `isEqual:` message sent to the same object would return NO.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSScriptWhoseTests.h

Document Revision History

This table describes the changes to *NSComparisonMethods Protocol Reference*.

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

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