
NSRecursiveLock Class Reference

Data Management: Event Handling



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NSRecursiveLock Class Reference

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Conforms to	NSLocking NSObject (NSObject)
Framework	/System/Library/Frameworks/Foundation.framework
Availability	Available in Mac OS X v10.0 and later.
Companion guide	Threading Programming Guide
Declared in	NSLock.h
Related sample code	CIColorTracking LSMSmartCategorizer QTCoreVideo101 QTCoreVideo102 QTCoreVideo201

Overview

`NSRecursiveLock` defines a lock that may be acquired multiple times by the same thread without causing a deadlock, a situation where a thread is permanently blocked waiting for itself to relinquish a lock. While the locking thread has one or more locks, all other threads are prevented from accessing the code protected by the lock.

Adopted Protocols

- NSLocking
- lock
 - unlock

Tasks

Acquiring a Lock

- [lockBeforeDate:](#) (page 6)
Attempts to acquire a lock before a given date.
- [tryLock](#) (page 7)
Attempts to acquire a lock, and immediately returns a Boolean value that indicates whether the attempt was successful.

Naming the Lock

- [setName:](#) (page 7)
Assigns a name to the receiver
- [name](#) (page 6)
Returns the name associated with the receiver.

Instance Methods

lockBeforeDate:

Attempts to acquire a lock before a given date.

```
- (BOOL)lockBeforeDate:(NSDate *)limit
```

Parameters

limit

The time before which the lock should be acquired.

Return Value

YES if the lock is acquired before *limit*, otherwise NO.

Discussion

The thread is blocked until the receiver acquires the lock or *limit* is reached.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSLock.h

name

Returns the name associated with the receiver.

```
- (NSString *)name
```

Return Value

The name of the receiver.

Availability

Available in Mac OS X v10.5 and later.

See Also

- [setName:](#) (page 7)

Declared In

NSLock.h

setName:

Assigns a name to the receiver

```
- (void)setName:(NSString *)newName
```

Parameters

newName

The new name for the receiver. This method makes a copy of the specified string.

Discussion

You can use a name string to identify a lock within your code. Cocoa also uses this name as part of any error descriptions involving the receiver.

Availability

Available in Mac OS X v10.5 and later.

See Also

- [name](#) (page 6)

Declared In

NSLock.h

tryLock

Attempts to acquire a lock, and immediately returns a Boolean value that indicates whether the attempt was successful.

```
- (BOOL)tryLock
```

Return Value

YES if successful, otherwise NO.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSLock.h

Document Revision History

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

Date	Notes
2007-04-30	Updated for Mac OS X v10.5.
2006-05-23	First publication of this content as a separate document.

REVISION HISTORY

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S

setName: [instance method 7](#)

T

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