NSLocking Protocol Reference

Cocoa > Process Management

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Contents

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Adopted by	NSConditionLock NSLock NSRecursiveLock
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

Overview

The `NSLocking` protocol declares the elementary methods adopted by classes that define lock objects. A lock object is used to coordinate the actions of multiple threads of execution within a single application. By using a lock object, an application can protect critical sections of code from being executed simultaneously by separate threads, thus protecting shared data and other shared resources from corruption.

Tasks

Working with Locks

- `lock` (page 5)
  Attempts to acquire a lock, blocking a thread's execution until the lock can be acquired.
- `unlock` (page 6)
  Relinquishes a previously acquired lock.

Instance Methods

lock

Attempts to acquire a lock, blocking a thread's execution until the lock can be acquired.

```
- (void)lock
```

Discussion
An application protects a critical section of code by requiring a thread to acquire a lock before executing the code. Once the critical section is past, the thread relinquishes the lock by invoking `unlock` (page 6).

Availability
Available in Mac OS X v10.0 and later.

Related Sample Code
SimpleThreads

Declared In
`NSLock.h`

unlock

Relinquishes a previously acquired lock.

```
- (void)unlock
```

Availability
Available in Mac OS X v10.0 and later.

Related Sample Code
SimpleThreads

Declared In
`NSLock.h`

Document Revision History

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

Date	Notes
2007-01-22	Updated for Mac OS X v10.5.
2006-05-23	First publication of this content as a separate document.

Document Revision History

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