API Collection

Processes and Threads

Manage your app's interaction with the host operating system and other processes, and implement low-level concurrency features.

Topics

Run Loop Scheduling

`class RunLoop`

The programmatic interface to objects that manage input sources.

`class Timer`

A timer that fires after a certain time interval has elapsed, sending a specified message to a target object.

Process Info

`class ProcessInfo`

A collection of information about the current process.

Threads and Locking

`class Thread`

A thread of execution.

`protocol NSLocking`

The elementary methods adopted by classes that define lock objects.

`class` `NSLock`

An object that coordinates the operation of multiple threads of execution within the same application.

`class` `NSRecursiveLock`

A lock that may be acquired multiple times by the same thread without causing a deadlock.

`class` `NSDistributedLock`

A lock that multiple applications on multiple hosts can use to restrict access to some shared resource, such as a file.

`class` `NSConditionLock`

A lock that can be associated with specific, user-defined conditions.

`class` `NSCondition`

A condition variable whose semantics follow those used for POSIX-style conditions.

Operations

`class` `OperationQueue`

A queue that regulates the execution of operations.

`class` `Operation`

An abstract class that represents the code and data associated with a single task.

`class` `BlockOperation`

An operation that manages the concurrent execution of one or more blocks.

Scripts and External Tasks

`class` `Process`

An object that represents a subprocess of the current process.

`class` `NSUserScriptTask`

An object that executes scripts.

`class` `NSUserAppleScriptTask`

An object that executes AppleScript scripts.

`class` `NSUserAutomatorTask`

An object that executes Automator workflows.

`class` `NSUserUnixTask`

An object that executes unix applications.

See Also

Low-Level Utilities

- XPC

  Manage secure interprocess communication.

- Object Runtime

  Get low-level support for basic Objective-C features, Cocoa design patterns, and Swift integration.

- Streams, Sockets, and Ports

  Use low-level Unix features to manage input and output among files, processes, and the network.