
NSPipe Class Reference

[Cocoa](#) > [Interapplication Communication](#)





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

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NSPipe Class Reference

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Conforms to	NSObject (NSObject)
Framework	/System/Library/Frameworks/Foundation.framework
Availability	Available in Mac OS X v10.0 and later.
Companion guide	Interacting with the Operating System
Declared in	NSFileHandle.h
Related sample code	Moriarity

Overview

`NSPipe` objects provide an object-oriented interface for accessing pipes. An `NSPipe` object represents both ends of a pipe and enables communication through the pipe. A pipe is a one-way communications channel between related processes; one process writes data, while the other process reads that data. The data that passes through the pipe is buffered; the size of the buffer is determined by the underlying operating system. `NSPipe` is an abstract class, the public interface of a class cluster.

Tasks

Creating an NSPipe Object

- [init](#) (page 7)
Returns an initialized `NSPipe` object.
- + [pipe](#) (page 6)
Returns an `NSPipe` object.

Getting the File Handles for a Pipe

- [fileHandleForReading](#) (page 6)
Returns the receiver's read file handle.

- [fileHandleForWriting](#) (page 7)

Returns the receiver's write file handle.

Class Methods

pipe

Returns an NSPipe object.

+ (id)pipe

Return Value

An initialized NSPipe object. Returns nil if the method encounters errors while attempting to create the pipe or the NSFileHandle objects that serve as endpoints of the pipe.

Availability

Available in Mac OS X v10.0 and later.

Related Sample Code

Moriarity

Declared In

NSFileHandle.h

Instance Methods

fileHandleForReading

Returns the receiver's read file handle.

- (NSFileHandle *)fileHandleForReading

Return Value

The receiver's read file handle. The descriptor represented by this object is deleted, and the object itself is automatically deallocated when the receiver is deallocated.

Discussion

You use the returned file handle to read from the pipe using NSFileHandle's read methods—availableData, readDataToEndOfFile, and readDataOfLength:.

You don't need to send closeFile to this object or explicitly release the object after you have finished using it.

Availability

Available in Mac OS X v10.0 and later.

Declared In

NSFileHandle.h

fileHandleForWriting

Returns the receiver's write file handle.

```
- (NSFileHandle *)fileHandleForWriting
```

Return Value

The receiver's write file handle. This object is automatically deallocated when the receiver is deallocated.

Discussion

You use the returned file handle to write to the pipe using `NSFileHandle`'s `writeData:` method. When you are finished writing data to this object, send it a `closeFile` message to delete the descriptor. Deleting the descriptor causes the reading process to receive an end-of-data signal (an empty `NSData` object).

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSFileHandle.h`

init

Returns an initialized `NSPipe` object.

```
- (id)init
```

Return Value

An initialized `NSPipe` object. Returns `nil` if the method encounters errors while attempting to create the pipe or the `NSFileHandle` objects that serve as endpoints of the pipe.

Availability

Available in Mac OS X v10.0 and later.

See Also

+ [pipe](#) (page 6)

Declared In

`NSFileHandle.h`

Document Revision History

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

Date	Notes
2007-01-26	Updated for Mac OS X v10.5.
2006-05-23	First publication of this content as a separate document.

REVISION HISTORY

Document Revision History

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