# NSPortCoder Class Reference

Cocoa > Interapplication Communication



2007-01-29

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Inherits from	NSCoder : NSObject
Conforms to	NSObject (NSObject)
Framework	/System/Library/Frameworks/Foundation.framework
Availability	Available in Mac OS X v10.0 and later.
Companion guide	Distributed Objects Programming Topics
Declared in	NSPortCoder.h

## Overview

NSPortCoder is a concrete subclass of NSCoder used in the distributed objects system to transmit object proxies (and sometimes objects themselves) between NSConnection objects. An NSPortCoder instance is always created and used by an NSConnection object; you should never need to explicitly create or use one directly yourself.

## Tasks

## Creating an NSPortCoder Object

- initWithReceivePort:sendPort:components: (page 8) Initializes and returns an NSPortCoder object.

## **Getting the Connection**

connection (page 7)

Returns the NSConnection object that uses the receiver.

## **Encoding NSPort Objects**

- encodePortObject: (page 8)
  - Encodes a given port so it can be properly reconstituted in the receiving process or thread.
- decodePortObject (page 7)

**Decodes and returns an** NSPort **object that was previously encoded with any of the general** encode...Object: **messages**.

## **Checking for Encoding**

- isBycopy (page 9)

Returns a Boolean value that indicates whether the receiver is encoding an object by copying it.

- isByref (page 9)

Returns a Boolean value that indicates whether the receiver is encoding an object by reference.

## Dispatching

- dispatch (page 7)

Processes and acts upon the distributed object message with which the receiver was initialized.

## **Class Methods**

### portCoderWithReceivePort:sendPort:components:

Creates and returns a new NSPortCoder object.

+ (id)portCoderWithReceivePort:(NSPort \*)rcvPort sendPort:(NSPort \*)sndPort components:(NSArray \*)comps

#### Parameters

receiverPort

The receiver port.

sendPort

The send port.

# components An array containing an encoded distributed objects message.

### **Return Value**

A new NSPortCoder object connected to the communication ports *receiverPort* and *sendPort*, with an encoded distributed objects message stored in *components*.

#### Availability

Available in Mac OS X v10.0 and later.

#### See Also

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- dispatch (page 7)

- initWithReceivePort:sendPort:components: (page 8)

Declared In NSPortCoder.h

## **Instance Methods**

## connection

Returns the NSConnection object that uses the receiver.

- (NSConnection \*)connection

#### **Return Value**

The NSConnection object that uses the receiver. In an object's encodeWithCoder: method, this is the sending (server) connection. In initWithCoder: this is the receiving (client) connection.

#### Availability

Available in Mac OS X v10.0 and later.

Declared In

NSPortCoder.h

## decodePortObject

Decodes and returns an NSPort object that was previously encoded with any of the general encode...Object: messages.

- (NSPort \*)decodePortObject

#### **Return Value**

An NSPort object that was previously encoded with any of the general encode...Object: messages.

#### Discussion

This method is primarily for use by NSPort objects themselves—you can always use decodeObject to decode any object.

NSPort invokes this method in its initWithCoder: method so the appropriate kernel information for the port can be decoded. A subclass of NSPortCoder shouldn't decode an NSPort by sending it an initWithCoder: message. See Subclassing NSCoder for more information.

#### Availability

Available in Mac OS X v10.0 and later.

Declared In NSPortCoder.h

## dispatch

Processes and acts upon the distributed object message with which the receiver was initialized.

- (void)dispatch

#### Availability

Available in Mac OS X v10.0 and later.

#### See Also

- + portCoderWithReceivePort:sendPort:components: (page 6)
- initWithReceivePort:sendPort:components: (page 8)

#### **Declared In**

NSPortCoder.h

### encodePortObject:

Encodes a given port so it can be properly reconstituted in the receiving process or thread.

```
- (void)encodePortObject:(NSPort *)aPort
```

#### Parameters

aPort

The port to encode.

#### Discussion

This method is primarily for use by NSPort objects themselves—you can always use the general encode...Object: methods to encode any object.

NSPort invokes this method in its encodeWithCoder: method so that the appropriate kernel information for the port can be encoded. A subclass of NSPortCoder should not encode an NSPort by sending it an encodeWithCoder: message. See Subclassing NSCoder for more information.

#### Availability

Available in Mac OS X v10.0 and later.

Declared In NSPortCoder.h

### initWithReceivePort:sendPort:components:

Initializes and returns an NSPortCoder object.

- (id)initWithReceivePort:(NSPort \*)receiverPort sendPort:(NSPort \*)sendPort components:(NSArray \*)components

#### Parameters

receiverPort

The receive port.

sendPort

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The send port.

#### components

An array containing an encoded distributed objects message.

#### Discussion

Initializes a newly allocated NSPortCoder object connected to the communication ports *receiverPort* and *sendPort*, with an encoded distributed objects message stored in *components*.

#### Availability

Available in Mac OS X v10.0 and later.

#### See Also

- + portCoderWithReceivePort:sendPort:components: (page 6)
- dispatch (page 7)

Declared In

NSPortCoder.h

## isBycopy

Returns a Boolean value that indicates whether the receiver is encoding an object by copying it.

- (BOOL) is Bycopy

#### **Return Value**

YES if the receiver is encoding an object by copying it, NO if it expects a proxy.

#### Discussion

See Distributed Objects Programming Topics for more information.

#### Availability

Available in Mac OS X v10.0 and later.

#### See Also

- isByref (page 9)

#### Declared In NSPortCoder.h

## isByref

Returns a Boolean value that indicates whether the receiver is encoding an object by reference.

- (BOOL)isByref

#### **Return Value**

YES if the receiver is encoding an object byref, NO if it expects a copy.

#### Discussion

See Distributed Objects Programming Topics for more information.

#### Availability

Available in Mac OS X v10.0 and later.

#### See Also

- isBycopy (page 9)

NSPortCoder Class Reference

**Declared In** NSPortCoder.h

# **Document Revision History**

This table describes the changes to NSPortCoder Class Reference.

Date	Notes
2007-01-29	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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