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# NSPortNameServer Class Reference

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



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# Contents

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## **NSPortNameServer Class Reference 5**

---

- Overview 5
- Tasks 5
  - Getting the Server Object 5
  - Looking Up Ports 5
  - Registering Ports 6
- Class Methods 6
  - systemDefaultPortNameServer 6
- Instance Methods 6
  - portForName: 6
  - portForName:host: 7
  - registerPort:name: 7
  - removePortForName: 8

---

## **Document Revision History 9**

---

## **Index 11**

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# NSPortNameServer Class Reference

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

## Overview

`NSPortNameServer` provides an object-oriented interface to the port registration service used by the distributed objects system. `NSConnection` objects use it to contact each other and to distribute objects over the network; you should rarely need to interact directly with an `NSPortNameServer`.

You get an `NSPortNameServer` object by using the `systemDefaultPortNameServer` (page 6) class method—never allocate and initialize an instance directly. With the default server object you can register an `NSPort` object under a given name, making it available on the network, and also unregister it so that it can't be looked up (although other applications that have already looked up the `NSPort` object can still use it until it becomes invalid). See the `NSPort` class specification for more information.

## Tasks

### Getting the Server Object

- + `systemDefaultPortNameServer` (page 6)  
Returns the single instance of `NSPortNameServer` for the application.

### Looking Up Ports

- `portForName:` (page 6)  
Looks up and returns the port registered under the specified name on the local host.
- `portForName:host:` (page 7)  
Looks up and returns the port registered under the specified name on a specified host.

## Registering Ports

- [registerPort:name:](#) (page 7)  
Makes a given port available on the network under a specified name.
- [removePortForName:](#) (page 8)  
Unregisters the port for a given name on the local host.

## Class Methods

### systemDefaultPortNameServer

Returns the single instance of `NSPortNameServer` for the application.

```
+ (NSPortNameServer *)systemDefaultPortNameServer
```

#### Return Value

The single instance of `NSPortNameServer` for the application.

#### Availability

Available in Mac OS X v10.0 and later.

#### Declared In

`NSPortNameServer.h`

## Instance Methods

### portForName:

Looks up and returns the port registered under the specified name on the local host.

```
- (NSPort *)portForName:(NSString *)portName
```

#### Parameters

*portName*

The name of the desired port.

#### Return Value

The port associated with *portName* on the local host. Returns `nil` if no such port exists.

#### Discussion

Invokes [portForName:host:](#) (page 7) with `nil` as the host name.

#### Availability

Available in Mac OS X v10.0 and later.

#### See Also

- [portForName:host:](#) (page 7)

**Declared In**

NSPortNameServer.h

**portForName:host:**

Looks up and returns the port registered under the specified name on a specified host.

```
- (NSPort *)portForName:(NSString *)portName host:(NSString *)hostName
```

**Parameters***portName*

The name of the desired port.

*hostName*

The name of the host. *hostName* is an Internet domain name (for example, “sales.anycorp.com”). If *hostName* is *nil* or empty, the local host is checked.

**Return Value**

The port associated with *portName* on the host *hostName*. Returns *nil* if no such port exists.

**Availability**

Available in Mac OS X v10.0 and later.

**Declared In**

NSPortNameServer.h

**registerPort:name:**

Makes a given port available on the network under a specified name.

```
- (BOOL)registerPort:(NSPort *)aPort name:(NSString *)portName
```

**Parameters***aPort*

The port to make available.

*portName*

The name for the port.

**Return Value**

YES if successful, NO otherwise (for example, if another NSPort object has already been registered under *portName*).

**Discussion**

A port can be registered under multiple names. If it is, it must be unregistered for each name with [removePortForName:](#) (page 8) to make it completely unavailable.

**Availability**

Available in Mac OS X v10.2 and later.

**Declared In**

NSPortNameServer.h

**removePortForName:**

Unregisters the port for a given name on the local host.

```
- (BOOL)removePortForName:(NSString *)portName
```

**Parameters**

*portName*

The name of the port to unregister.

**Return Value**

YES if successful, otherwise NO.

**Discussion**

If the operation is successful, the port can no longer be looked up using the name *portName*. Other applications that already have a reference to the port can continue to use it until it becomes invalid.

**Availability**

Available in Mac OS X v10.0 and later.

**Declared In**

NSPortNameServer.h



# Document Revision History

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This table describes the changes to *NSPortNameServer 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

### Document Revision History

# Index

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## P

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portForName: [instance method 6](#)  
portForName:host: [instance method 7](#)

## R

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registerPort:name: [instance method 7](#)  
removePortForName: [instance method 8](#)

## S

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systemDefaultPortNameServer [class method 6](#)