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# NSHTTPCookie Class Reference

Networking, Internet, & Web: Protocol Streams



2008-11-13



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# Contents

---

## **NSHTTPCookie Class Reference 5**

---

Overview	5
Adopted Protocols	5
Tasks	6
Create Cookie Instances	6
Convert Cookies to Request Headers	6
Getting Cookie Properties	6
Class Methods	7
cookiesWithResponseHeaderFields:forURL:	7
cookieWithProperties:	7
requestHeaderFieldsWithCookies:	8
Instance Methods	8
comment	8
commentURL	9
domain	9
expiresDate	9
initWithProperties:	10
isHTTPOnly	10
isSecure	11
isSessionOnly	11
name	11
path	12
portList	12
properties	12
value	13
version	13
Constants	14
HTTP Cookie Property Keys	14

---

## **Document Revision History 17**

---

## **Index 19**

---



# NSHTTPCookie 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 v10.2 with Safari 1.0 installed. Available in Mac OS X v10.2.7 and later.
<b>Companion guide</b>	URL Loading System
<b>Declared in</b>	NSHTTPCookie.h

## Overview

An NSHTTPCookie object represents an HTTP cookie. It's an immutable object initialized from a dictionary containing the cookie attributes.

Two versions of cookies are supported:

- Version 0: This version refers to “traditional” or “old-style” cookies, the original cookie format defined by Netscape. The majority of cookies encountered are in this format.
- Version 1: This version refers to cookies as defined in RFC 2965, HTTP State Management Mechanism.

## Adopted Protocols

### NSCopying

- copyWithZone:

## Tasks

### Create Cookie Instances

- + [cookiesWithResponseHeaderFields:forURL:](#) (page 7)  
Returns an array of NSHTTPCookie objects corresponding to the provided response header fields for the provided URL.
- + [cookieWithProperties:](#) (page 7)  
Creates and initializes an NSHTTPCookie object using the provided properties.
- [initWithProperties:](#) (page 10)  
Returns an initialized NSHTTPCookie object using the provided properties.

### Convert Cookies to Request Headers

- + [requestHeaderFieldsWithCookies:](#) (page 8)  
Returns a dictionary of header fields corresponding to a provided array of cookies.

### Getting Cookie Properties

- [comment](#) (page 8)  
Returns the receiver's comment string.
- [commentURL](#) (page 9)  
Returns the receiver's comment URL.
- [domain](#) (page 9)  
Returns the domain of the receiver's cookie.
- [expiresDate](#) (page 9)  
Returns the receiver's expiration date.
- [isHTTPOnly](#) (page 10)  
Returns whether the receiver should only be sent to HTTP servers per RFC 2965.
- [isSecure](#) (page 11)  
Returns whether his cookie should only be sent over secure channels.
- [isSessionOnly](#) (page 11)  
Returns whether the receiver should be discarded at the end of the session (regardless of expiration date).
- [name](#) (page 11)  
Returns the receiver's name.
- [path](#) (page 12)  
Returns the receiver's path.
- [portList](#) (page 12)  
Returns the receiver's port list.
- [properties](#) (page 12)  
Returns the receiver's cookie properties.

- [value](#) (page 13)  
Returns the receiver's value.
- [version](#) (page 13)  
Returns the receiver's version.

## Class Methods

### **cookiesWithResponseHeaderFields:forURL:**

Returns an array of NSHTTPCookie objects corresponding to the provided response header fields for the provided URL.

```
+ (NSArray *)cookiesWithResponseHeaderFields:(NSDictionary *)headerFields
forURL:(NSURL *)theURL
```

#### **Parameters**

*headerFields*

The header fields used to create the NSHTTPCookie objects.

*theURL*

The URL associated with the created cookies.

#### **Return Value**

The array of newly created cookies.

#### **Discussion**

This method will ignore irrelevant header fields in *headerFields*, allowing dictionaries to contain additional data.

#### **Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

#### **Declared In**

NSHTTPCookie.h

### **cookieWithProperties:**

Creates and initializes an NSHTTPCookie object using the provided properties.

```
+ (id)cookieWithProperties:(NSDictionary *)properties
```

#### **Parameters**

*properties*

The properties for the new cookie object, expressed as key value pairs.

#### **Return Value**

The newly created cookie object. Returns `nil` if the provided properties are invalid.

**Discussion**

See “[Constants](#)” (page 14) for more information on the available header field constants and the constraints imposed on the values in the dictionary.

**Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

**See Also**

- [initWithProperties:](#) (page 10)

**Declared In**

NSHTTPCookie.h

**requestHeaderFieldsWithCookies:**

Returns a dictionary of header fields corresponding to a provided array of cookies.

```
+ (NSDictionary *)requestHeaderFieldsWithCookies:(NSArray *)cookies
```

**Parameters**

*cookies*

The cookies from which the header fields are created.

**Return Value**

The dictionary of header fields created from the provided cookies. This dictionary can be used to add cookies to a request.

**Discussion**

See “[Constants](#)” (page 14) for details on the header field keys and values in the returned dictionary.

**Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

**Declared In**

NSHTTPCookie.h

## Instance Methods

**comment**

Returns the receiver's comment string.

```
- (NSString *)comment
```

**Return Value**

The receiver's comment string or `nil` if the cookie has no comment. This string is suitable for presentation to the user, explaining the contents and purpose of this cookie.

### **Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### **Declared In**

NSHTTPCookie.h

## **commentURL**

Returns the receiver's comment URL.

- (NSURL \*)commentURL

### **Return Value**

The receiver's comment URL or `nil` if the cookie has none. This value specifies a URL which is suitable for presentation to the user as a link for further information about this cookie.

### **Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### **Declared In**

NSHTTPCookie.h

## **domain**

Returns the domain of the receiver's cookie.

- (NSString \*)domain

### **Return Value**

The domain of the receiver's cookie.

### **Discussion**

If the domain does not start with a dot, then the cookie will only be sent to the exact host specified by the domain. If the domain does start with a dot, then the cookie will be sent to other hosts in that domain as well, subject to certain restrictions. See RFC 2965 for more detail.

### **Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### **Declared In**

NSHTTPCookie.h

## **expiresDate**

Returns the receiver's expiration date.

- (NSDate \*)expiresDate

**Return Value**

The receiver's expiration date, or `nil` if there is no specific expiration date such as in the case of "session-only" cookies. The expiration date is the date when the cookie should be deleted.

**Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

**Declared In**

NSHTTPCookie.h

**initWithProperties:**

Returns an initialized `NSHTTPCookie` object using the provided properties.

```
- (id)initWithProperties:(NSDictionary *)properties
```

**Parameters**

*properties*

The properties for the new cookie object, expressed as key value pairs.

**Return Value**

The initialized cookie object. Returns `nil` if the provided properties are invalid.

**Discussion**

See "[Constants](#)" (page 14) for more information on the available header field constants and the constraints imposed on the values in the dictionary.

**Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

**See Also**

+ [cookieWithProperties:](#) (page 7)

**Declared In**

NSHTTPCookie.h

**isHTTPOnly**

Returns whether the receiver should only be sent to HTTP servers per RFC 2965.

```
- (BOOL)isHTTPOnly
```

**Return Value**

Returns `YES` if this cookie should only be sent via HTTP headers, `NO` otherwise.

**Discussion**

Cookies may be marked as HTTP only by a server (or by a javascript). Cookies marked as such must only be sent via HTTP Headers in HTTP requests for URL's that match both the path and domain of the respective cookies.

**Important:** Cookies specified as HTTP only should not be delivered to any javascript applications to prevent cross-site scripting vulnerabilities.

**Availability**

Available in Mac OS X v10.6 and later.

**Declared In**

NSHTTPCookie.h

## isSecure

Returns whether his cookie should only be sent over secure channels.

- (BOOL)isSecure

**Return Value**

YES if this cookie should only be sent over secure channels, otherwise NO.

**Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

**Declared In**

NSHTTPCookie.h

## isSessionOnly

Returns whether the receiver should be discarded at the end of the session (regardless of expiration date).

- (BOOL)isSessionOnly

**Return Value**

YES if the receiver should be discarded at the end of the session (regardless of expiration date), otherwise NO.

**Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

**Declared In**

NSHTTPCookie.h

## name

Returns the receiver's name.

- (NSString \*)name

**Return Value**

The receiver's name.

### Availability

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### Declared In

NSHTTPCookie.h

## path

Returns the receiver's path.

```
- (NSString *)path
```

### Return Value

The receiver's path.

### Discussion

The cookie will be sent with requests for this path in the cookie's domain, and all paths that have this prefix. A path of "/" means the cookie will be sent for all URLs in the domain.

### Availability

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### Declared In

NSHTTPCookie.h

## portList

Returns the receiver's port list.

```
- (NSArray *)portList
```

### Return Value

The list of ports for the cookie, returned as an array of `NSNumber` objects containing integers. If the cookie has no port list this method returns `nil` and the cookie will be sent to any port. Otherwise, the cookie is only sent to ports specified in the port list.

### Availability

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### Declared In

NSHTTPCookie.h

## properties

Returns the receiver's cookie properties.

```
- (NSDictionary *)properties
```

### Return Value

A dictionary representation of the receiver's cookie properties.

### Discussion

This dictionary can be used with [initWithProperties:](#) (page 10) or [cookieWithProperties:](#) (page 7) to create an equivalent `NSHTTPCookie` object.

See [initWithProperties:](#) (page 10) for more information on the constraints imposed on the *properties* dictionary.

### Availability

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### Declared In

`NSHTTPCookie.h`

## value

Returns the receiver's value.

- (`NSString *`)value

### Return Value

The receiver's value.

### Availability

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### Declared In

`NSHTTPCookie.h`

## version

Returns the receiver's version.

- (`NSUInteger`)version

### Return Value

The receiver's version. Version 0 maps to "old-style" Netscape cookies. Version 1 maps to RFC 2965 cookies.

### Availability

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

### Declared In

`NSHTTPCookie.h`

## Constants

### HTTP Cookie Property Keys

These constants define the supported keys in a dictionary containing cookie attributes.

```
extern NSString *NSHTTPCookieComment;
extern NSString *NSHTTPCookieCommentURL;
extern NSString *NSHTTPCookieDiscard;
extern NSString *NSHTTPCookieDomain;
extern NSString *NSHTTPCookieExpires;
extern NSString *NSHTTPCookieMaximumAge;
extern NSString *NSHTTPCookieName;
extern NSString *NSHTTPCookieOriginURL;
extern NSString *NSHTTPCookiePath;
extern NSString *NSHTTPCookiePort;
extern NSString *NSHTTPCookieSecure;
extern NSString *NSHTTPCookieValue;
extern NSString *NSHTTPCookieVersion;
```

#### Constants

`NSHTTPCookieComment`

An `NSString` object containing the comment for the cookie.

Only valid for Version 1 cookies and later. This header field is optional.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieCommentURL`

An `NSURL` object or `NSString` object containing the comment URL for the cookie.

Only valid for Version 1 cookies or later. This header field is optional.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieDiscard`

An `NSString` object stating whether the cookie should be discarded at the end of the session.

String value must be either "TRUE" or "FALSE". This header field is optional. Default is "FALSE", unless this is cookie is version 1 or greater and a value for `NSHTTPCookieMaximumAge` is not specified, in which case it is assumed "TRUE".

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieDomain`

An `NSString` object containing the domain for the cookie.

A value must be specified for either `NSHTTPCookieDomain` or `NSHTTPCookieOriginURL`. If this header field is missing the domain is inferred from the value for `NSHTTPCookieOriginURL`.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieExpires`

An `NSDate` object or `NSString` object specifying the expiration date for the cookie.

This header field is only used for Version 0 cookies. This header field is optional.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieMaximumAge`

An `NSString` object containing an integer value stating how long in seconds the cookie should be kept, at most.

Only valid for Version 1 cookies and later. Default is "0". This field is optional.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieName`

An `NSString` object containing the name of the cookie. This field is required.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieOriginURL`

An `NSURL` or `NSString` object containing the URL that set this cookie.

A value must be specified for either `NSHTTPCookieDomain` or `NSHTTPCookieOriginURL`.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookiePath`

An `NSString` object containing the path for the cookie.

Inferred from the value for `NSHTTPCookieOriginURL` if not provided. Default is "/". This header field is optional.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookiePort`

An `NSString` object containing comma-separated integer values specifying the ports for the cookie.

Only valid for Version 1 cookies or later. The default value is an empty string (""). This header field is optional.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieSecure`

An `NSString` object stating whether the cookie should be transmitted only over secure channels.

String value must be either "TRUE" or "FALSE". Default is "FALSE". This header field is optional.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieValue`

An `NSString` object containing the value of the cookie.

This header field is required.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

`NSHTTPCookieVersion`

An `NSString` object that specifies the version of the cookie.

Must be either “0” or “1”. The default is “0”. This header field is optional.

Available in Mac OS X v10.2 and later.

Declared in `NSHTTPCookie.h`.

**Availability**

Available in Mac OS X v10.2 with Safari 1.0 installed.

Available in Mac OS X v10.2.7 and later.

**Declared In**

`NSHTTPCookie.h`

# Document Revision History

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

Date	Notes
2008-11-13	Added isHTTPOnly method.
2006-05-23	First publication of this content as a separate document.

## REVISION HISTORY

### Document Revision History

# Index

---

## C

---

comment [instance method 8](#)  
commentURL [instance method 9](#)  
cookiesWithResponseHeaderFields:forURL: [class method 7](#)  
cookieWithProperties: [class method 7](#)

## D

---

domain [instance method 9](#)

## E

---

expiresDate [instance method 9](#)

## H

---

HTTP Cookie Property Keys [14](#)

## I

---

initWithProperties: [instance method 10](#)  
isHTTPOnly [instance method 10](#)  
isSecure [instance method 11](#)  
isSessionOnly [instance method 11](#)

## N

---

name [instance method 11](#)  
NSHTTPCookieComment [constant 14](#)  
NSHTTPCookieCommentURL [constant 14](#)  
NSHTTPCookieDiscard [constant 14](#)

NSHTTPCookieDomain [constant 14](#)  
NSHTTPCookieExpires [constant 15](#)  
NSHTTPCookieMaximumAge [constant 15](#)  
NSHTTPCookieName [constant 15](#)  
NSHTTPCookieOriginURL [constant 15](#)  
NSHTTPCookiePath [constant 15](#)  
NSHTTPCookiePort [constant 15](#)  
NSHTTPCookieSecure [constant 15](#)  
NSHTTPCookieValue [constant 15](#)  
NSHTTPCookieVersion [constant 16](#)

## P

---

path [instance method 12](#)  
portList [instance method 12](#)  
properties [instance method 12](#)

## R

---

requestHeaderFieldsWithCookies: [class method 8](#)

## V

---

value [instance method 13](#)  
version [instance method 13](#)