
NSHTTPCookie Class Reference

Networking, Internet, & Web: Protocol Streams



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NSHTTPCookie Class Reference

Inherits from	NSObject
Conforms to	NSObject (NSObject)
Framework	/System/Library/Frameworks/Foundation.framework
Availability	Available in Mac OS X v10.2 with Safari 1.0 installed. Available in Mac OS X v10.2.7 and later.
Companion guide	URL Loading System
Declared in	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 created cookies.

Discussion

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

If *headerFields* does not specify a domain for a given cookie, the cookie is created with a default domain value of *theURL*.

If *headerFields* does not specify a path for a given cookie, the cookie is created with a default path value of `"/"`.

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 is only sent to the exact host specified by the domain. If the domain does start with a dot, then the cookie is 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.

- (NSInteger)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. This field is required if you are using the NSHTTPCookieDomain key instead of the NSHTTPCookieOriginURL key.

If you are using the NSHTTPCookieOriginURL key, the path is inferred if it is not provided. The default value is "/".

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 indicating that the cookie should be transmitted only over secure channels.

Providing any value for this key indicates that the cookie should remain secure.

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

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

Date	Notes
2009-10-15	Updated the discussions of the <code>cookiesWithResponseHeaderFiles:forURL</code> method, the <code>NSHTTPCookieSecure</code> key, and the <code>NSHTTPCookiePath</code> key.
2008-11-13	Added <code>isHTTPOnly</code> method.
2006-05-23	First publication of this content as a separate document.

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