
NSURLCredential Class Reference

Networking, Internet, & Web: Protocol Streams



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

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Contents

NSURLCredential Class Reference 5

Overview	5
Adopted Protocols	5
Tasks	5
Creating a Credential	5
Getting Credential Properties	6
Class Methods	6
credentialForTrust:	6
credentialWithIdentity:certificates:persistence:	7
credentialWithUser:password:persistence:	7
Instance Methods	8
certificates	8
hasPassword	8
identity	9
initWithIdentity:certificates:persistence:	9
initWithTrust:	9
initWithUser:password:persistence:	10
password	11
persistence	11
user	11
Constants	12
NSURLCredentialPersistence	12

Document Revision History 13

Index 15

NSURLCredential Class Reference

Inherits from	NSObject
Conforms to	NSCopying 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	NSURLCredential.h
Related sample code	ImageClient

Overview

`NSURLCredential` is an immutable object representing an authentication credential consisting of authentication information specific to the type of credential and the type of persistent storage to use, if any.

Adopted Protocols

NSCopying
`copyWithZone:`

Tasks

Creating a Credential

+ `credentialForTrust:` (page 6)

Creates and returns an `NSURLCredential` object for server trust authentication with a given accepted trust.

- + [credentialWithUser:password:persistence:](#) (page 7)
Creates and returns an `NSURLCredential` object for internet password authentication with a given user name and password using a given persistence setting.
- + [credentialWithIdentity:certificates:persistence:](#) (page 7)
Creates and returns an `NSURLCredential` object for client certificate authentication with a given identity and a given array of client certificates using a given persistence setting.
- [initWithIdentity:certificates:persistence:](#) (page 9)
Returns an `NSURLCredential` object for client certificate authentication initialized with a given identity and a given array of client certificates using a given persistence setting.
- [initWithTrust:](#) (page 9)
Returns an `NSURLCredential` object for server trust authentication initialized with a given accepted trust.
- [initWithUser:password:persistence:](#) (page 10)
Returns an `NSURLCredential` object initialized with a given user name and password using a given persistence setting.

Getting Credential Properties

- [certificates](#) (page 8)
Returns an array of `SecCertificateRef` objects representing the certificates of the credential if it is a client certificate credential.
- [hasPassword](#) (page 8)
Returns a Boolean value that indicates whether the receiver has a password.
- [identity](#) (page 9)
Returns the identity of this credential if it is a client certificate credential.
- [password](#) (page 11)
Returns the receiver's password.
- [persistence](#) (page 11)
Returns the receiver's persistence setting.
- [user](#) (page 11)
Returns the receiver's user name.

Class Methods

credentialForTrust:

Creates and returns an `NSURLCredential` object for server trust authentication with a given accepted trust.

```
+ (NSURLCredential *)credentialForTrust:(SecTrustRef)trust
```

Parameters

trust

The accepted trust.

Discussion

Before creating a server trust credential, it is the responsibility of the delegate of an `NSURLConnection` object or an `NSURLDownload` object to evaluate the trust. Do this by calling `SecTrustEvaluate`, passing it the trust obtained from the `serverTrust` method of the server's `NSURLProtectionSpace` object. If the trust is invalid, the authentication challenge should be cancelled with `cancelAuthenticationChallenge:`.

Availability

Available in Mac OS X v10.6 and later.

Declared In

`NSURLCredential.h`

credentialWithIdentity:certificates:persistence:

Creates and returns an `NSURLCredential` object for client certificate authentication with a given identity and a given array of client certificates using a given persistence setting.

```
+ (NSURLCredential *)credentialWithIdentity:(SecIdentityRef)identity
  certificates:(NSArray *)certArray
  persistence:(NSURLCredentialPersistence)persistence
```

Parameters

identity

The identity for the credential.

certArray

An array of one or more `SecCertificateRef` objects representing certificates for the credential.

persistence

The persistence setting for the credential.

Availability

Available in Mac OS X v10.6 and later.

Declared In

`NSURLCredential.h`

credentialWithUser:password:persistence:

Creates and returns an `NSURLCredential` object for internet password authentication with a given user name and password using a given persistence setting.

```
+ (NSURLCredential *)credentialWithUser:(NSString *)user password:(NSString *)password
  persistence:(NSURLCredentialPersistence)persistence
```

Parameters

user

The user for the credential.

password

The password for *user*.

persistence

The persistence setting for the credential.

Return Value

An `NSURLCredential` object with user name *user*, password *password*, and using persistence setting *persistence*.

Discussion

If *persistence* is `NSURLCredentialPersistencePermanent` the credential is stored in the keychain.

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

- [initWithUser:password:persistence:](#) (page 10)

Related Sample Code

`ImageClient`

Declared In

`NSURLCredential.h`

Instance Methods

certificates

Returns an array of `SecCertificateRef` objects representing the certificates of the credential if it is a client certificate credential.

- (NSArray *)certificates

Return Value

The certificates of the credential, or `nil` if this is not a client certificate credential.

Availability

Available in Mac OS X v10.6 and later.

Declared In

`NSURLCredential.h`

hasPassword

Returns a Boolean value that indicates whether the receiver has a password.

- (BOOL)hasPassword

Return Value

YES if the receiver has a password, NO otherwise.

Discussion

This method does not attempt to retrieve the password.

If this credential's password is stored in the user's keychain, `password` (page 11) may return `NO` even if this method returns `YES`, since getting the password may fail, or the user may refuse access.

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

`NSURLCredential.h`

identity

Returns the identity of this credential if it is a client certificate credential.

- (`SecIdentityRef`)*identity*

Return Value

The identity of the credential, or `NULL` if this is not a client certificate credential.

Availability

Available in Mac OS X v10.6 and later.

Declared In

`NSURLCredential.h`

initWithIdentity:certificates:persistence:

Returns an `NSURLCredential` object for client certificate authentication initialized with a given identity and a given array of client certificates using a given persistence setting.

- (`id`)*initWithIdentity:(SecIdentityRef)identity certificates:(NSArray *)certArray persistence:(NSURLCredentialPersistence)persistence*

Parameters

identity

The identity for the credential.

certArray

An array of one or more `SecCertificateRef` objects representing certificates for the credential.

persistence

The persistence setting for the credential.

Availability

Available in Mac OS X v10.6 and later.

Declared In

`NSURLCredential.h`

initWithTrust:

Returns an `NSURLCredential` object for server trust authentication initialized with a given accepted trust.

```
- (id)initWithTrust:(SecTrustRef)trust
```

Parameters

trust

The accepted trust.

Discussion

Before creating a server trust credential, it is the responsibility of the delegate of an `NSURLConnection` object or an `NSURLDownload` object to evaluate the trust. Do this by calling `SecTrustEvaluate`, passing it the trust obtained from the `serverTrust` method of the server's `NSURLProtectionSpace` object. If the trust is invalid, the authentication challenge should be cancelled with `cancelAuthenticationChallenge:`.

Availability

Available in Mac OS X v10.6 and later.

Declared In

`NSURLCredential.h`

initWithUser:password:persistence:

Returns an `NSURLCredential` object initialized with a given user name and password using a given persistence setting.

```
- (id)initWithUser:(NSString *)user password:(NSString *)password
    persistence:(NSURLCredentialPersistence)persistence
```

Parameters

user

The user for the credential.

password

The password for *user*.

persistence

The persistence setting for the credential.

Return Value

An `NSURLCredential` object initialized with user name *user*, password *password*, and using persistence setting *persistence*.

Discussion

If *persistence* is `NSURLCredentialPersistencePermanent` the credential is stored in the keychain.

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

+ [credentialWithUser:password:persistence:](#) (page 7)

Declared In

`NSURLCredential.h`

password

Returns the receiver's password.

- (NSString *)password

Return Value

The receiver's password.

Discussion

If the password is stored in the user's keychain, this method may result in prompting the user for access.

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

- [hasPassword](#) (page 8)

Declared In

NSURLCredential.h

persistence

Returns the receiver's persistence setting.

- (NSURLCredentialPersistence)persistence

Return Value

The receiver's persistence setting.

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

NSURLCredential.h

user

Returns the receiver's user name.

- (NSString *)user

Return Value

The receiver's user 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

NSURLCredential.h

Constants

NSURLCredentialPersistence

These constants specify how long the credential will be kept.

```
typedef enum {
    NSURLCredentialPersistenceNone,
    NSURLCredentialPersistenceForSession,
    NSURLCredentialPersistencePermanent
} NSURLCredentialPersistence;
```

Constants

NSURLCredentialPersistenceNone

Credential won't be stored.

Available in Mac OS X v10.2 and later.

Declared in NSURLCredential.h.

NSURLCredentialPersistenceForSession

Credential will be stored only for this session.

Available in Mac OS X v10.2 and later.

Declared in NSURLCredential.h.

NSURLCredentialPersistencePermanent

Credential will be stored in the user's keychain and shared with other applications.

Available in Mac OS X v10.2 and later.

Declared in NSURLCredential.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

NSURLCredential.h

Document Revision History

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

Date	Notes
2009-08-12	Added API information for additional authentication methods.
2006-06-28	Updated the Constants section to conform to reference consistency guidelines.
2006-05-23	First publication of this content as a separate document.

REVISION HISTORY

Document Revision History

Index

C

certificates [instance method 8](#)
credentialForTrust: [class method 6](#)
credentialWithIdentity:certificates:persistence:
 [class method 7](#)
credentialWithUser:password:persistence: [class
method 7](#)

H

hasPassword [instance method 8](#)

I

identity [instance method 9](#)
initWithIdentity:certificates:persistence:
 [instance method 9](#)
initWithTrust: [instance method 9](#)
initWithUser:password:persistence: [instance
method 10](#)

N

NSURLCredentialPersistence [data type 12](#)
NSURLCredentialPersistenceForSession [constant
12](#)
NSURLCredentialPersistenceNone [constant 12](#)
NSURLCredentialPersistencePermanent [constant
12](#)

P

password [instance method 11](#)
persistence [instance method 11](#)

U

user [instance method 11](#)