
NSURLCache 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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NSURLCache 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	NSURLCache.h
Related sample code	URL CacheInfo

Overview

NSURLCache implements the caching of responses to URL load requests by mapping NSURLRequest objects to NSCachedURLResponse objects. It is a composite of an in-memory and an on-disk cache.

Methods are provided to manipulate the sizes of each of these caches as well as to control the path on disk to use for persistent storage of cache data.

Tasks

Getting and Setting Shared Cache

- + [sharedURLCache](#) (page 7)
Returns the shared NSURLCache instance.
- + [setSharedURLCache:](#) (page 6)
Sets the shared NSURLCache instance to a specified cache object.

Creating a New Cache Object

- [initWithMemoryCapacity:diskCapacity:diskPath:](#) (page 9)
Initializes an NSURLCache object with the specified values.

Getting and Storing Cached Objects

- [cachedResponseForRequest:](#) (page 8)
Returns the cached URL response in the cache for the specified URL request.
- [storeCachedResponse:forRequest:](#) (page 12)
Stores a cached URL response for a specified request

Removing Cached Objects

- [removeAllCachedResponses](#) (page 10)
Clears the receiver's cache, removing all stored cached URL responses.
- [removeCachedResponseForRequest:](#) (page 11)
Removes the cached URL response for a specified URL request.

Getting and Setting On-disk Cache Properties

- [currentDiskUsage](#) (page 8)
Returns the current size of the receiver's on-disk cache, in bytes.
- [diskCapacity](#) (page 9)
Returns the capacity of the receiver's on-disk cache, in bytes.
- [setDiskCapacity:](#) (page 11)
Sets the receiver's on-disk cache capacity

Getting and Setting In-memory Cache Properties

- [currentMemoryUsage](#) (page 9)
Returns the current size of the receiver's in-memory cache, in bytes.
- [memoryCapacity](#) (page 10)
Returns the capacity of the receiver's in-memory cache, in bytes.
- [setMemoryCapacity:](#) (page 12)
Sets the receiver's in-memory cache capacity.

Class Methods

setSharedURLCache:

Sets the shared NSURLCache instance to a specified cache object.

```
+ (void)setSharedURLCache:(NSURLCache *)cache
```

Parameters

cache

The cache object to use as the shared cache object.

Discussion

Applications that have special caching requirements or constraints should use this method to specify an NSURLCache instance with customized cache settings.

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

+ [sharedURLCache](#) (page 7)

Related Sample Code

URL CacheInfo

Declared In

NSURLCache.h

sharedURLCache

Returns the shared NSURLCache instance.

```
+ (NSURLCache *)sharedURLCache
```

Return Value

The shared NSURLCache instance.

Discussion

The disk path is set to: <user_home_directory>/Library/Caches/<current_process_name>. The user's home directory is determined by calling NSHomeDirectory and the current process name is determined using [[NSProcessInfo processInfo] processName].

Applications that do not have special caching requirements or constraints should find the default shared cache instance acceptable. Applications with more specific needs can create a custom NSURLCache object and set it as the shared cache instance using [setSharedURLCache:](#) (page 6).

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

+ [setSharedURLCache:](#) (page 6)

Related Sample Code

URL CacheInfo

Declared In

NSURLCache.h

Instance Methods

cachedResponseForRequest:

Returns the cached URL response in the cache for the specified URL request.

```
- (NSCachedURLResponse *)cachedResponseForRequest:(NSURLRequest *)request
```

Parameters

request

The URL request whose cached response is desired.

Return Value

The cached URL response for *request*, or `nil` if no response has been cached.

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

- [storeCachedResponse:forRequest:](#) (page 12)

Related Sample Code

URL CacheInfo

Declared In

NSURLCache.h

currentDiskUsage

Returns the current size of the receiver's on-disk cache, in bytes.

```
- (NSUInteger)currentDiskUsage
```

Return Value

The current size of the receiver's on-disk cache, in bytes.

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

- [diskCapacity](#) (page 9)

- [setDiskCapacity:](#) (page 11)

Related Sample Code

URL CacheInfo

Declared In

NSURLCache.h

currentMemoryUsage

Returns the current size of the receiver's in-memory cache, in bytes.

- (NSUInteger)currentMemoryUsage

Return Value

The current size of the receiver's in-memory cache, in bytes.

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

- [memoryCapacity](#) (page 10)
- [setMemoryCapacity:](#) (page 12)

Related Sample Code

URL CacheInfo

Declared In

NSURLCache.h

diskCapacity

Returns the capacity of the receiver's on-disk cache, in bytes.

- (NSUInteger)diskCapacity

Return Value

The capacity of the receiver's on-disk cache, in bytes.

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

- [currentDiskUsage](#) (page 8)
- [setDiskCapacity:](#) (page 11)

Declared In

NSURLCache.h

initWithMemoryCapacity:diskCapacity:diskPath:

Initializes an NSURLCache object with the specified values.

- (id)initWithMemoryCapacity:(NSUInteger)memoryCapacity
diskCapacity:(NSUInteger)diskCapacity diskPath:(NSString *)path

Parameters

memoryCapacity

The memory capacity of the cache, in bytes.

diskCapacity

The disk capacity of the cache, in bytes.

path

The location at which to store the on-disk cache.

Return Value

The initialized NSURLCache object.

Discussion

The returned NSURLCache is backed by disk, so developers can be more liberal with space when choosing the capacity for this kind of cache. A disk cache measured in the tens of megabytes should be acceptable in most cases.

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

+ [sharedURLCache](#) (page 7)

Related Sample Code

URL CacheInfo

Declared In

NSURLCache.h

memoryCapacity

Returns the capacity of the receiver's in-memory cache, in bytes.

- (NSUInteger)memoryCapacity

Return Value

The capacity of the receiver's in-memory cache, in bytes.

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

- [currentMemoryUsage](#) (page 9)

- [setMemoryCapacity:](#) (page 12)

Declared In

NSURLCache.h

removeAllCachedResponses

Clears the receiver's cache, removing all stored cached URL responses.

- (void)removeAllCachedResponses

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

- [removeCachedResponseForRequest:](#) (page 11)

Related Sample Code

URL CacheInfo

Declared In

NSURLCache.h

removeCachedResponseForRequest:

Removes the cached URL response for a specified URL request.

```
- (void)removeCachedResponseForRequest:(NSURLRequest *)request
```

Parameters

request

The URL request whose cached URL response should be removed. If there is no corresponding cached URL response, no action is taken.

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

- [removeAllCachedResponses](#) (page 10)

Declared In

NSURLCache.h

setDiskCapacity:

Sets the receiver's on-disk cache capacity

```
- (void)setDiskCapacity:(NSUInteger)diskCapacity
```

Parameters

diskCapacity

The new on-disk cache capacity, in bytes. The on-disk cache will truncate its contents to *diskCapacity*, if necessary.

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

- [currentDiskUsage](#) (page 8)

- [diskCapacity](#) (page 9)

Related Sample Code

URL CacheInfo

Declared In

NSURLCache.h

setMemoryCapacity:

Sets the receiver's in-memory cache capacity.

- (void)setMemoryCapacity:(NSUInteger)memoryCapacity

Parameters*memoryCapacity*The new in-memory cache capacity, in bytes. The in-memory cache will truncate its contents to *memoryCapacity*, if necessary.**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- [currentMemoryUsage](#) (page 9)- [memoryCapacity](#) (page 10)**Related Sample Code**

URL CacheInfo

Declared In

NSURLCache.h

storeCachedResponse:forRequest:

Stores a cached URL response for a specified request

- (void)storeCachedResponse:(NSCachedURLResponse *)cachedResponse
forRequest:(NSURLRequest *)request**Parameters***cachedResponse*

The cached URL response to store.

request

The request for which the cached URL response is being stored.

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- [cachedResponseForRequest:](#) (page 8)

Declared In

NSURLCache.h

Document Revision History

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

Date	Notes
2008-03-11	Updated discussion for the <code>-sharedURLCache</code> method.
2006-05-23	First publication of this content as a separate document.

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