

[Foundation](#) / [NSMutableURLRequest](#)

Class

NSMutableURLRequest

A mutable URL load request that is independent of protocol or URL scheme.

iOS 2.0+ | iPadOS 2.0+ | Mac Catalyst 13.1+ | macOS 10.2+ | tvOS 9.0+ | visionOS 1.0+ | watchOS 2.0+

```
class NSMutableURLRequest
```

Overview

In Swift, this object bridges to [NSURLRequest](#) and you use when you need reference semantics or other Foundation-specific behavior.

[NSMutableURLRequest](#) is a subclass of [NSURLRequest](#) that allows you to change the request's properties.

[NSMutableURLRequest](#) only represents information about the request. Use other classes, such as [URLSession](#), to send the request to a server. See [Fetching website data into memory](#) and [Uploading data to a website](#) for an introduction to these techniques.

Classes that create a network operation based on a request make a deep copy of that request. Thus, changing the request after creating a network operation has no effect on the ongoing operation. For example, if you use [dataTask\(with:completionHandler:\)](#) to create a data task from a request, and then later change the request, the data task continues using the original request.

Important

The Swift overlay to the Foundation framework provides the [URLRequest](#) structure, which bridges to the [NSMutableURLRequest](#) class and its immutable superclass, [NSURLRequest](#). For more information about value types, see [Working with Cocoa Frameworks in Using Swift with Cocoa and Objective-C \(Swift 4.1\)](#).

Topics

Working with a cache policy

```
var cachePolicy: NSURLRequest.CachePolicy
```

The request's cache policy.

```
enum CachePolicy
```

The constants used to specify interaction with the cached responses.

Accessing request components

```
var httpMethod: String
```

The HTTP request method.

```
var url: URL?
```

The URL being requested.

```
var httpBody: Data?
```

The request body.

```
var httpBodyStream: InputStream?
```

The request body as an input stream.

```
var mainDocumentURL: URL?
```

The main document URL.

Accessing header fields

```
var allHTTPHeaderFields: [String : String]?
```

A dictionary containing all of the HTTP header fields for a request.

```
func.addValue(String, forHTTPHeaderField: String)
```

Adds a value to the header field.

```
func.setValue(String?, forHTTPHeaderField: String)
```

Sets a value for the header field.

Controlling request behavior

`var timeoutInterval: TimeInterval`

The request's timeout interval, in seconds.

`var httpShouldHandleCookies: Bool`

A Boolean value that indicates whether the request should use the default cookie handling for the request.

~~`var httpShouldUsePipelining: Bool`~~

A Boolean value that indicates whether the request can continue transmitting data before receiving a response from an earlier transmission.

Deprecated

`var allowsCellularAccess: Bool`

A Boolean value that indicates whether a connection can use the device's cellular network (if present).

Supporting limited modes

`var allowsConstrainedNetworkAccess: Bool`

A Boolean value that indicates whether connections may use the network when the user has specified Low Data Mode.

`var allowsExpensiveNetworkAccess: Bool`

A Boolean value that indicates whether connections may use a network interface that the system considers expensive.

Accessing the service type

`var networkServiceType: NSURLRequest.NetworkServiceType`

The network service type of the connection.

`enum NetworkServiceType`

Constants that specify how a request uses network resources.

Working with hotspots

`func bind(to: NEHotspotHelperCommand)`

Binds a URL request to the network interface associated with the hotspot helper command instance.

Indicating the source of the request

```
var attribution: NSURLRequest.Attribution
```

The entity that initiates the network request.

```
enum Attribution
```

The entities that can make a network request.

Instance Properties

```
var allowsPersistentDNS: Bool
```

```
var allowsUltraConstrainedNetworkAccess: Bool
```

```
var assumesHTTP3Capable: Bool
```

```
var cookiePartitionIdentifier: String?
```

```
var requiresDNSSECValidation: Bool
```

Relationships

Inherits From

NSURLRequest

Conforms To

CVarArg

CustomDebugStringConvertible

CustomStringConvertible

Equatable

Hashable

NSCoding

NSCopying

NSMutableCopying

NSObjectProtocol

NSSecureCoding
Sendable
SendableMetatype

See Also

Requests and responses

`struct URLRequest`

A URL load request that is independent of protocol or URL scheme.

`class NSURLRequest`

A URL load request that is independent of protocol or URL scheme.

`class URLResponse`

The metadata associated with the response to a URL load request, independent of protocol and URL scheme.

`class HTTPURLResponse`

The metadata associated with the response to an HTTP protocol URL load request.