

[Authentication Services](#) / [ASWebAuthenticationSession](#)

Class

ASWebAuthenticationSession

A session that an app uses to authenticate a user through a web service.

iOS 12.0+ | iPadOS 12.0+ | Mac Catalyst 12.0+ | macOS 10.15+ | tvOS 16.0+ | visionOS 1.0+ | watchOS 6.2+

```
class ASWebAuthenticationSession
```

Mentioned in

- 📄 [Authenticating a User Through a Web Service](#)
- 📄 [Supporting Single Sign-On in a Web Browser App](#)

Overview

Use an [ASWebAuthenticationSession](#) instance to authenticate a user through a web service, including one run by a third party. Initialize the session with a URL that points to the authentication webpage. When the user starts the authentication session, the operating system shows a modal view telling them which domain the app is authenticating with and asking whether to proceed. If the user proceeds with the authentication attempt, a browser loads and displays the page, from which the user can authenticate. In iOS, the browser is a secure, embedded web view. In macOS, the system opens the user's default browser if it supports web authentication sessions, or Safari otherwise.

On completion, the service sends a callback URL to the session with an authentication token. The session passes this URL back to the app through a completion handler. [ASWebAuthenticationSession](#) ensures that only the calling app's session receives the authentication callback, even when more than one app registers the same callback URL scheme.

For more details, see [Authenticating a User Through a Web Service](#).

Topics

Creating a session

```
init(url: URL, callback: ASWebAuthenticationSession.Callback,  
completionHandler: ASWebAuthenticationSession.CompletionHandler)
```

Creates a web authentication session instance that uses a callback to evaluate a redirection URL.

```
class Callback
```

An object for evaluating navigation events in an authentication session.

```
typealias CompletionHandler
```

A completion handler for the web authentication session.

Configuring a session

```
var prefersEphemeralWebBrowserSession: Bool
```

A Boolean value that indicates whether the session should ask the browser for a private authentication session.

Starting and Stopping a Session

```
var canStart: Bool
```

A Boolean indicating whether the session can begin.

```
func start() -> Bool
```

Starts a web authentication session.

```
func cancel()
```

Cancels a web authentication session.

Presenting a Session

```
var presentationContextProvider: (any ASWebAuthenticationPresentation  
ContextProviding)?
```

A delegate that provides a display context in which the system can present an authentication session to the user.

```
protocol ASWebAuthenticationPresentationContextProviding
```

An interface the session uses to ask a delegate for a presentation context.

Recognizing Errors

```
struct ASWebAuthenticationSessionError
```

Errors that a web authentication session can generate.

```
let ASWebAuthenticationSessionErrorDomain: String
```

The error domain for a web authentication session.

```
enum Code
```

The error code for a web authentication session error.

Instance properties

```
var additionalHeaderFields: [String : String]?
```

Any additional header fields to set when loading the initial URL.

Deprecated symbols

```
init(url: URL, callbackURLScheme: String?, completionHandler: ASWebAuthenticationSession.CompletionHandler)
```

Creates a web authentication session instance.

Deprecated

Relationships

Inherits From

NSObject

Conforms To

CVarArg

CustomDebugStringConvertible

CustomStringConvertible

Equatable
Hashable
NSObjectProtocol

See Also

Web authentication sessions

 [Authenticating a User Through a Web Service](#)

Use a web authentication session to authenticate a user in your app.

 [Securing Logins with iCloud Keychain Verification Codes](#)

Use time-based codes generated on-device for a secure authentication experience.

`struct WebAuthenticationSession`

A SwiftUI environment value that views use to authenticate someone using a web service.

 [Supporting Single Sign-On in a Web Browser App](#)

Extend your web browser app to handle web authentication requests from other apps.

`class ASWebAuthenticationSessionWebBrowserSessionManager`

A session manager that mediates sharing data between an app and a web browser.

`ASWebAuthenticationSessionWebBrowserSupportCapabilities`

A collection of keys that a browser app uses to declare its ability to handle authentication requests from other apps.