

[AppKit / App and Environment](#)

API Collection

App and Environment

Learn about the objects that you use to interact with the system.

Topics

Life Cycle

`class NSApplication`

An object that manages an app's main event loop and resources used by all of that app's objects.

`class NSRunningApplication`

An object that can manipulate and provide information for a single instance of an app.

`protocol NSApplicationDelegate`

A set of methods that manage your app's life cycle and its interaction with common system services.

`func NSApplicationMain(Int32, UnsafeMutablePointer<UnsafeMutablePointer<CChar>?>) -> Int32`

Called by the main function to create and run the application.

Environment

`class NSWorkspace`

A workspace that can launch other apps and perform a variety of file-handling services.

`class OpenConfiguration`

The configuration options for opening URLs or launching apps.

```
struct NSAppKitVersion
```

Constants for determining which version of AppKit is available.

```
LSMinimumSystemVersion
```

The minimum version of the operating system required for the app to run in macOS.

Handoff

```
class NSUserActivity
```

A representation of the state of your app at a moment in time.

```
protocol NSUserActivityRestoring
```

A protocol that marks classes to restore the state of your app to continue a user activity.

App Services

```
class NSSharingService
```

An object that facilitates the sharing of content with social media services, or with apps like Mail or Safari.

```
class NSSharingServicePicker
```

A list of sharing services that the user can choose from.

```
protocol NSPreviewRepresentableActivityItem
```

An interface you adopt in custom objects that you want to share using the macOS share sheet.

```
class NSSharingServicePickerToolbarItem
```

A toolbar item that displays the macOS share sheet.

```
protocol NSServicesMenuRequestor
```

A set of methods that support interaction with items users can share through a sharing service.

```
protocol NSCloudSharingServiceDelegate
```

A set of methods for responding to the life cycle events of the cloud-sharing service.

≡ Services Functions

Configure the contents of your app's Services menu.

App Help

`class NSHelpManager`

An object for displaying online help for an app.

`protocol NSUserInterfaceItemSearching`

A set of methods an app can implement to provide Spotlight for Help for its own custom help data.

Errors

☰ AppKit Errors

These constants represent errors generated by AppKit.

See Also

App Structure

☰ Documents, Data, and Pasteboard

Organize your app's data and preferences, and share that data on the pasteboard or in iCloud.

☰ Cocoa Bindings

Automatically synchronize your data model with your app's interface using Cocoa Bindings.

☰ Resource Management

Manage the storyboards and nib files containing your app's user interface, and learn how to load data that is stored in resource files.

☰ App Extensions

Extend your app's basic functionality to other parts of the system.