

[Foundation](#) / Scripting Support

API Collection

# Scripting Support

Allow users to control your app with AppleScript and other automation technologies, or run scripts from within your app.

## Topics

### Script Execution

`class` `NSAppleScript`

An object that provides the ability to load, compile, and execute scripts.

### Apple Event Handling

`class` `NSAppleEventDescriptor`

A wrapper for the Apple event descriptor data type.

`class` `NSAppleEventManager`

A mechanism for registering handler routines for specific types of Apple events and dispatching events to those handlers.

### Script Commands

`class` `NSScriptCommand`

A self-contained scripting statement.

`class` `NSQuitCommand`

A command that quits the specified app.

`class NSSetCommand`

A command that sets one or more attributes or relationships to one or more values.

`class NSMoveCommand`

A command that moves one or more scriptable objects.

`class NSCreateCommand`

A command that creates a scriptable object.

`class NSDeleteCommand`

A command that deletes a scriptable object.

`class NSExistsCommand`

A command that determines whether a scriptable object exists.

`class NSGetCommand`

A command that retrieves a value or object from a scriptable object.

`class NSCloneCommand`

A command that clones one or more scriptable objects.

`class NSCountCommand`

A command that counts the number of objects of a specified class in the specified object container.

`class NSCloseCommand`

A command that closes one or more scriptable objects.

## Object Specifiers

`class NSScriptObjectSpecifier`

An abstract class used to represent natural language expressions.

`class NSPropertySpecifier`

A specifier for a simple attribute value, a one-to-one relationship, or all elements of a to-many relationship.

`class NSPositionalSpecifier`

A specifier for an insertion point in a container relative to another object in the container.

`class NSRandomSpecifier`

A specifier for an arbitrary object in a collection or, if not a one-to-many relationship, the sole object.

`class NSRangeSpecifier`

A specifier for a range of objects in a container.

`class NSUniqueIDSpecifier`

A specifier for an object in a collection (or container) by unique ID.

`class NSWhoseSpecifier`

A specifier that indicates every object in a collection matching a condition.

`class NSNameSpecifier`

A specifier for an object in a collection (or container) by name.

`class NSMiddleSpecifier`

A specifier indicating the middle object in a collection or, if not a one-to-many relationship, the sole object.

`class NSIndexSpecifier`

A specifier representing an object in a collection (or container) with an index number.

`class NSRelativeSpecifier`

A specifier that indicates an object in a collection by its position relative to another object.

## Script Dictionary Description

`class NSScriptSuiteRegistry`

The top-level repository of scriptability information for an app at runtime.

`class NSScriptClassDescription`

A scriptable class that a macOS app supports.

`class NSClassDescription`

An abstract class that provides the interface for querying the relationships and properties of a class.

`class NSScriptCommandDescription`

A script command that a macOS app supports.

## Object Matching Tests

`class NSScriptWhoseTest`

An abstract class that provides the basis for testing specifiers one at a time or in groups.

`class NSSpecifierTest`

A comparison between an object specifier and a test object.

`class NSLogicalTest`

The logical combination of one or more specifier tests.

## NSObject Script Support



`NSComparisonMethods`

A collection of default comparison methods useful for performing specifier tests.



`NSScriptingComparisonMethods`

A collection of methods useful for comparing script objects.



`NSScriptKeyValueCoding`

A collection of methods that provide additional capabilities for working with key-value coding.



`NSScriptObjectSpecifiers`

A collection of methods providing additional object specifier functionality.

`class NSScriptCoercionHandler`

A mechanism for converting one kind of scripting data to another.

`class NSScriptExecutionContext`

The context in which the current script command is executed.

## See Also

### App Support



`Task Management`

Manage your app's work and how it interacts with system services like Handoff and Shortcuts.



`Resources`

Access assets and other data bundled with your app.



## Notifications

Design patterns for broadcasting information and for subscribing to broadcasts.



## App Extension Support

Manage the interaction between an app extension and its hosting app.



## Errors and Exceptions

Respond to problem situations in your interactions with APIs, and fine-tune your app for better debugging.