

[Foundation](#) / AttributeScope

Protocol

AttributeScope

A type that organizes attributes into a grouping, and supports dynamic member lookup and serialization of attribute keys.

iOS 15.0+ | iPadOS 15.0+ | Mac Catalyst 15.0+ | macOS 12.0+ | tvOS 15.0+ | visionOS 1.0+ | watchOS 8.0+

```
protocol AttributeScope : DecodingConfigurationProviding, EncodingConfigurationProviding
```

Overview

Attribute owners — typically frameworks — define attributes with [AttributedStringKey](#) types. To allow access to attributes with dynamic member lookup, owners create one or more structures that conform to [AttributeScope](#). The scopes provide short names for their attributes that map to the [AttributedStringKey](#) type. The following example shows how to do this:

```
struct TextStyleAttributes : AttributeScope {
    let foregroundColor : ForegroundColorAttribute // ForegroundColorAttribute.Value
    let backgroundColor : BackgroundColorAttribute // BackgroundColorAttribute.Value
    let underlineStyle : UnderlineStyleAttribute // UnderlineStyleAttribute.Value == ...
    // etc.
}
```

This allows callers to use a syntax like `myAttributedString.foregroundColor = .red`.

Topics

Supporting Coding Configurations

`static var encodingConfiguration: AttributeScope Codable Configuration`

The configuration for encoding the attribute scope.

Required Default implementation provided.

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Type Properties

`static var attributeKeys: some Sequence<any AttributedStringKey.Type>`

A list of all attribute keys contained within this scope and any sub-scopes.

Relationships

Inherits From

DecodingConfigurationProviding, EncodingConfigurationProviding

Conforming Types

AttributeScopes.AccessibilityAttributes

AttributeScopes.AppKitAttributes

AttributeScopes.FoundationAttributes

AttributeScopes.FoundationAttributes.NumberFormatAttributes

AttributeScopes.SpeechAttributes

AttributeScopesSwiftUIAttributes

AttributeScopesUIKitAttributes