

[Foundation](#) / [CodableWithConfiguration](#)

Type Alias

CodableWithConfiguration

A type that can convert itself into and out of an external representation with the help of a configuration that handles encoding contained types.

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

```
typealias CodableWithConfiguration = DecodableWithConfiguration & EncodableWithConfiguration
```

Discussion

[CodableWithConfiguration](#) is a type alias for the [EncodableWithConfiguration](#) and [DecodableWithConfiguration](#) protocols. Use this protocol to support codability in a type that can't conform to [Codable](#) by itself, but can do so with additional statically-defined configuration provided by a [CodableConfiguration](#) instance.

[AttributedString](#) uses this approach to allow an instance to contain arbitrary attributes, including frameworks outside of Foundation or the platform SDK. It does this by including one or more [AttributeScope](#) instances, a type that conforms to [EncodingConfigurationProviding](#) and [DecodingConfigurationProviding](#). An attribute scope like [AttributeScopes.SwiftUIAttributes](#) defines attribute keys, and conforms to [AttributeScope](#) to provide configuration instances that know the [AttributedStringKey](#) types and their associated [Value](#) types. With this type information, an [AttributedString](#) can encode all of its attributes, even from frameworks other than Foundation.

See Also

Serializing Arbitrary Payloads

```
struct CodableConfiguration
```

A property wrapper that makes a type codable, by supplying a configuration that provides additional information for serialization.

```
protocol DecodableWithConfiguration
```

A protocol for types that support decoding when supplied with an additional configuration type.

```
protocol DecodingConfigurationProviding
```

A protocol whose conformers provide a configuration instance to help decode types that don't support encoding by themselves.

```
protocol EncodableWithConfiguration
```

A protocol for types that support encoding when supplied with an additional configuration type.

```
protocol EncodingConfigurationProviding
```

A protocol whose conformers provide a configuration instance to help encode types that don't support encoding by themselves.