

[Swift / Codable](#)

Type Alias

# Codable

A type that can convert itself into and out of an external representation.

iOS 8.0+ | iPadOS 8.0+ | Mac Catalyst 13.0+ | macOS 10.10+ | tvOS 9.0+ | visionOS 1.0+ | watchOS 2.0+

```
typealias Codable = Decodable & Encodable
```

## Discussion

Codable is a type alias for the Encodable and Decodable protocols. When you use Codable as a type or a generic constraint, it matches any type that conforms to both protocols.

## See Also

### Custom Encoding and Decoding

 Encoding and Decoding Custom Types

Make your data types encodable and decodable for compatibility with external representations such as JSON.

```
protocol Encodable
```

A type that can encode itself to an external representation.

```
protocol Decodable
```

A type that can decode itself from an external representation.

```
protocol CodingKey
```

A type that can be used as a key for encoding and decoding.

```
protocol CodingKeyRepresentable
```

A type that can be converted to and from a coding key.

```
struct CodingUserInfoKey
```

A user-defined key for providing context during encoding and decoding.