/ WAService

Protocol

WAService

A protocol that defines a service that a device can publish or subscribe to.

iOS 26.0+ | iPadOS 26.0+

```
protocol WAService : CustomString
Convertible, Decodable, Encodable, Hashable, Identifiable, Sendable
```

Overview

A service represents a specific function or use case that's performed over Wi-Fi Aware. Services are specific functionality and protocols that your app can publish or subscribe to on other devices.

Services are identified by a service name string that follows the rules in RFC 6763 and RFC 6335. For a service name of `example-service`, the full service name encoded in the `Info.plist` and sent over the air is either `_example-service._tcp` if using the TCP protocol or `_example-service._udp` if using any other protocol.

You must register your app with a unique name in the IANA service name registry to avoid conflicts with other apps and devices.

If you have an invalid service name in the `Info.plist`, your app crashes.

Topics

Selecting from your app's services

```
static var allServices: [String : Self]
```

A dictionary of all services declared by your app, indexed by service name.

Required

Checking a service name

`var name: String`

The full name of the service, as sent over the air.

Required

Relationships

Inherits From

`CustomStringConvertible`
`Decodable`
`Encodable`
`Equatable`
`Hashable`
`Identifiable`
`Sendable`
`SendableMetatype`

Conforming Types

`WAPublishableService`, `WASubscribableService`

See Also

Services to discover

`struct WASubscribableService`

A service your app discovers on remote devices and can connect to.

`struct WAPublishableService`

A service, hosted by your app, that remote devices can connect to.