

[Network](#) / NWPath

Structure

NWPath

An object that contains information about the properties of the network that a connection uses, or that are available to your app.

iOS 12.0+ | iPadOS 12.0+ | Mac Catalyst 12.0+ | macOS 10.14+ | tvOS 12.0+ | visionOS 1.0+ | watchOS 5.0+

```
struct NWPath
```

Topics

Checking Path Availability

```
let status: NWPath.Status
```

A status indicating whether a path can be used by connections.

```
enum Status
```

Status values indicating whether a path can be used by connections.

Inspecting Interfaces

```
func usesInterfaceType(NWInterface.InterfaceType) -> Bool
```

Checks if connections using the path may send traffic over a specific interface type.

```
let availableInterfaces: [NWInterface]
```

A list of all interfaces available to the path, in order of preference.

```
var gateways: [NWEEndpoint]
```

A list of gateways configured on the interfaces available to a path.

Checking Path Capabilities

```
let supportsIPv4: Bool
```

A Boolean indicating whether the path can route IPv4 traffic.

```
let supportsIPv6: Bool
```

A Boolean indicating whether the path can route IPv6 traffic.

```
let supportsDNS: Bool
```

A Boolean indicating whether the path has a DNS server configured.

```
var isConstrained: Bool
```

A Boolean indicating whether the path uses an interface in Low Data Mode.

```
let isExpensive: Bool
```

A Boolean indicating whether the path uses an interface that is considered expensive, such as Cellular or a Personal Hotspot.

Inspecting Connected Paths

```
let localEndpoint: NWEndpoint?
```

The local endpoint in use by a connection's network path.

```
let remoteEndpoint: NWEndpoint?
```

The remote endpoint in use by a connection's network path.

Instance Properties

```
var isUltraConstrained: Bool
```

Checks if the path uses an NWInterface that is considered to be constrained by user preference

```
var linkQuality: NWPath.LinkQuality
```

Represents the link quality measurement of the link layer network attachment

```
var unsatisfiedReason: NWPath.UnsatisfiedReason
```

```
var wifiAware: WAPath?
```

Current status and performance information for Wi-Fi Aware, or nil if this path is not over Wi-Fi Aware.

Enumerations

enum `LinkQuality`

Represents the link quality measurement of the link layer network attachment

enum `UnsatisfiedReason`

Relationships

Conforms To

`CustomDebugStringConvertible`

`Equatable`

`Sendable`

`SendableMetatype`

See Also

Paths and Interfaces

class `NWPathMonitor`

An observer that you use to monitor and react to network changes.

struct `NWInterface`

An interface that a network connection uses to send and receive data.