Enumeration

WAAccessCategory

The underling quality-of-service (QoS) the Wi-Fi layer uses to transmit data packets from a connection over the air.

iOS 26.0+ | iPadOS 26.0+

```
enum WAAccessCategory
```

Overview

A given `NetworkConnection` is bound to a single access category at the Wi-Fi layer, based on the configuration of `NWParameter`'s `serviceClass` property. This allows your app to specify how the Wi-Fi layer transmits the `NetworkConnection`'s data packets, selecting the performance characteristics that are relevant to the data flow.

Wi-Fi is a shared medium, so all Wi-Fi devices, networks, apps, and `NetworkConnections` share the overall Wi-Fi capacity between them. An app can improve the performance of its data flows, and that of all other nearby devices and Wi-Fi networks, by choosing the lowest QoS category that meets the requirements of each of its flows. When in doubt, use the default `.bestEffort` category.

For more information, refer to NWParameters.ServiceClass and NWParameters.

Access categories are typically created by the system on behalf of the client, so they usually don't need to be instantiated directly.

Topics

Providing throughput

`case` `bestEffort`

A default quality-of-service (QoS) type that provides high throughput for data transfers of any size.

`case` `background`

A quality-of-service (QoS) type that provides high throughput for delay-tolerant, noninteractive data transfers of any size.

`case` `interactiveVideo`

A quality-of-service (QoS) type that provides low-latency for moderate throughput flows.

`case` `interactiveVoice`

A quality-of-service (QoS) type that provides very low-latency for low-throughput flows.

Relationships

Conforms To

```
CaseIterable
Decodable
Encodable
Equatable
Hashable
Sendable
SendableMetatype
```

See Also

Connection performance

`struct` `NWPath`

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

struct `WAPath`

A representation of the current Wi-Fi Aware path.

enum `WAPerformanceMode`

The performance mode that indicates what performance criterion to prioritize.

struct `WAPerformanceReport`

The current performance state of the data path.