

IClientPublishOptions

August 18, 2026

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Kind: Interface

Source: `packages/microservices/external/mqtt-options.interface.ts`

Part of: [Microservices](#)

`IClientPublishOptions` defines MQTT-specific options applied when publishing a message from a microservice client. It controls the delivery quality of service, whether the broker retains the message, and whether the message is marked as a duplicate delivery.

Properties

Property	Type
<code>qos</code>	<code>QoS</code>
<code>retain</code>	<code>boolean</code>
<code>dup</code>	<code>boolean</code>

Diagram

```
graph LR
    Client[MQTT Client] -->|publish topic + payload| Options[IClientPublishOptions]
    Options --> QoS[QoS[qos: QoS]]
    Options --> Retain[Retain[retain: boolean]]
    Options --> Duplicate[Duplicate[dup: boolean]]
    Options --> Broker[MQTT Broker]
```

Usage

```
import { IClientPublishOptions } from '@nestjs/microservices';
```

```
const publishOptions: IClientPublishOptions = {
  qos: 1,
  retain: true,
  dup: false,
};

client.publish(
  'devices/thermostat/status',
  JSON.stringify({ temperature: 21.5 }),
  publishOptions,
);
```

AI Coding Instructions

- Set `qos` according to delivery requirements: `0` for best-effort, `1` for at-least-once delivery, and `2` for exactly-once delivery.
- Use `retain: true` only for topics where new subscribers should receive the latest published state.
- Keep `dup` as `false` for normal publishes; set it only when explicitly retransmitting a previously sent MQTT message.
- Pass these options to the underlying MQTT client's publish operation when implementing custom transport or client behavior.