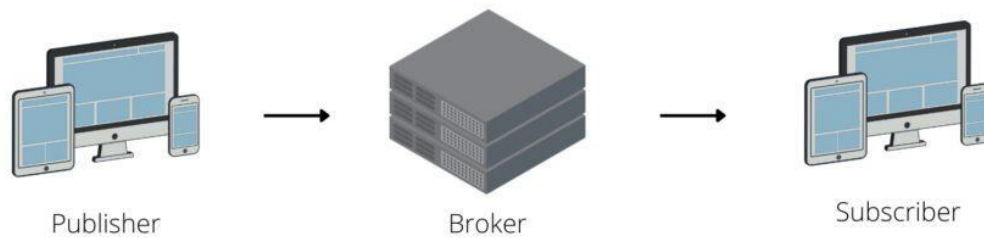


MQTT



What are the MQTT QoS levels?

There are three levels to note in MQTT QoS: 0, 1, 2. We've summarized what each level means below:

- QoS 0: at most once
- QoS 1: at least once
- QoS 2: exactly once

How does QoS 0 work in MQTT?

At the lowest level, QoS 0 in MQTT offers a best-effort delivery mechanism where the sender does not expect an acknowledgment or guarantee of message delivery. This means that the recipient does not acknowledge receiving the message, and the sender does not store or re-transmit it. QoS 0, commonly called “fire and forget,” functions akin to the underlying TCP protocol, where the message is sent without further follow-up or confirmation.

How does QoS 1 work in MQTT?

In QoS 1 of MQTT, the focus is on ensuring message delivery at least once to the receiver. When a message is published with QoS 1, the sender keeps a copy of the message until it receives a **PUBACK** packet from the receiver, confirming the successful receipt. If the sender doesn't receive the **PUBACK** packet within a reasonable time frame, it re-transmits the message to ensure its delivery.

How does QoS 2 work in MQTT?

QoS 2 offers the highest level of service in MQTT, ensuring that each message is delivered exactly once to the intended recipients. To achieve this, QoS 2 involves a four-part handshake between the sender and receiver.