

# Introduction to MQTT

The background of the slide features a blue gradient that transitions from a darker blue on the left to a lighter blue on the right. In the lower half, there are several wavy, overlapping lines in shades of yellow and light blue, creating a sense of movement and depth.

# What is MQTT ??

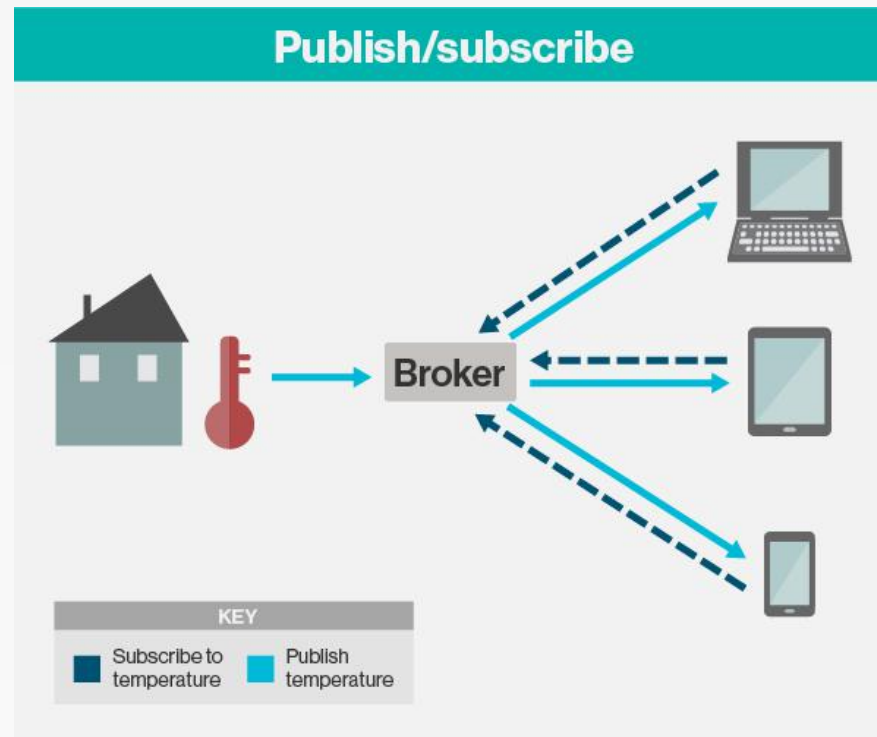
MQTT(Message Queue Telemetry Transport) is a Client Server publish/subscribe messaging transport protocol. This protocol is widely used in the field of IoT for communication between Machine to Machine because of its following features ,

- Light weight
- Simple messaging protocol
- Easy to implement
- Works with low Bandwidth Devices

Above features makes it ideal for IoT purposes likes sharing data generated by sensors to other machine for processing.

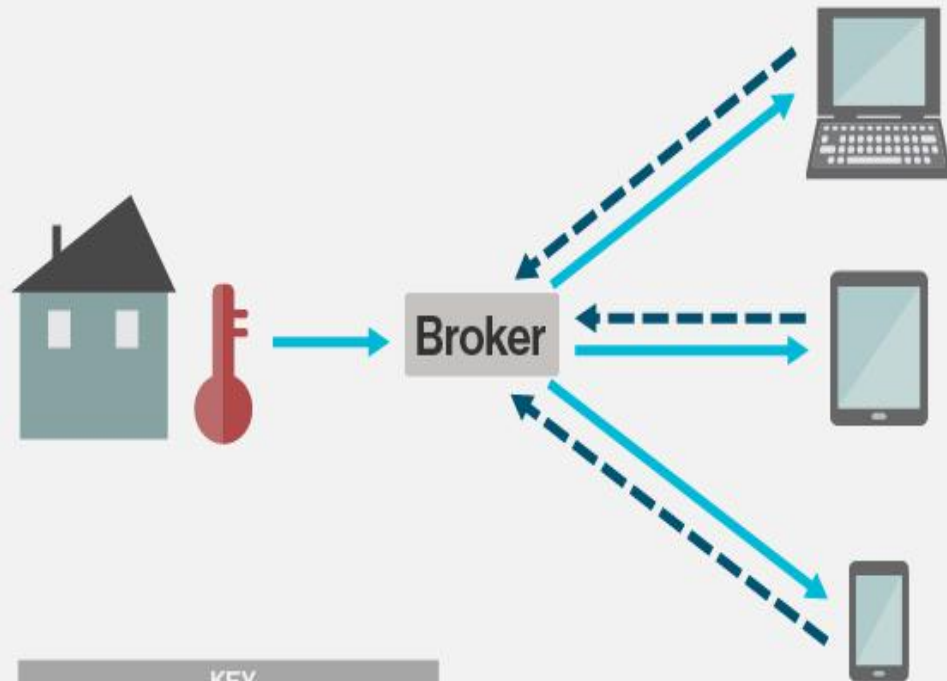
# Working of MQTT Protocol

- The system basically comprises of one Broker and multiple clients. In this case, clients are devices like smartphone, sensors, and other smart home appliances. They all communicate with the server which is known as Broker.



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## Publish/subscribe

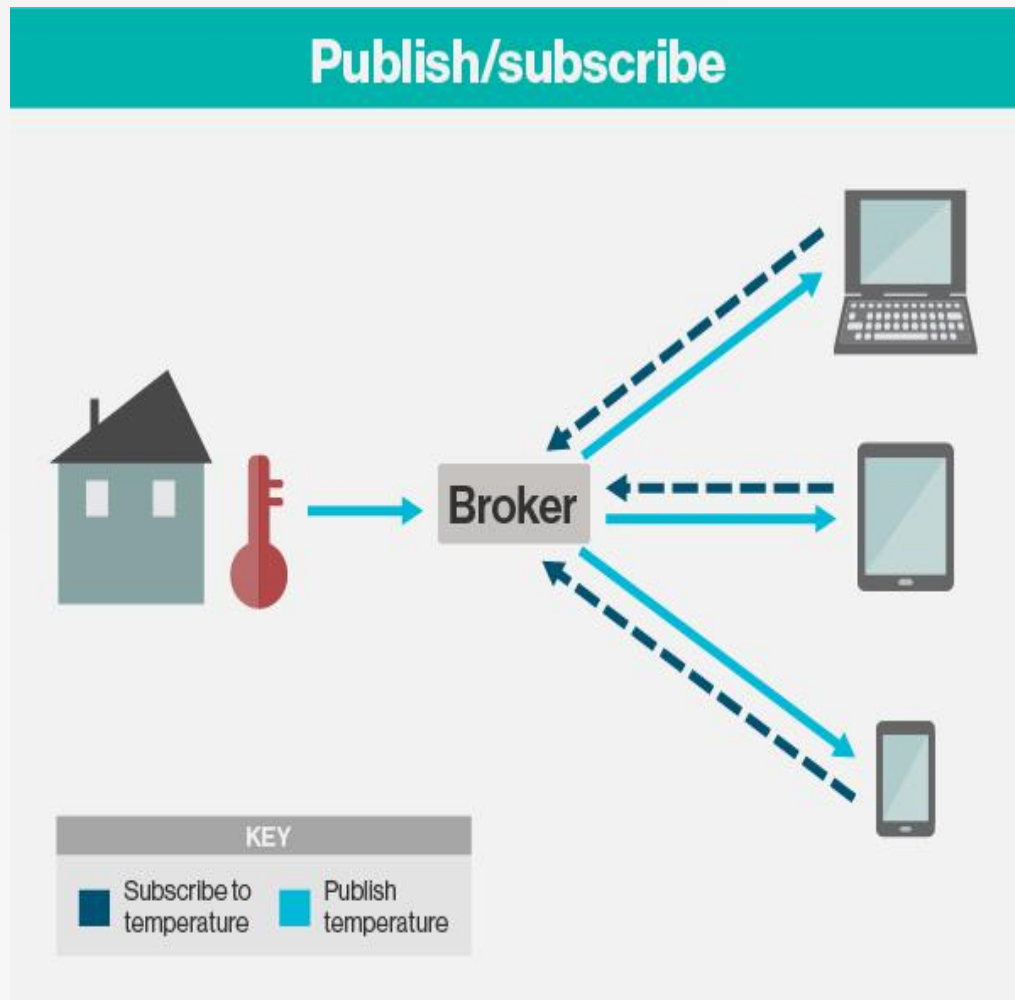


### KEY

- Subscribe to temperature
- Publish temperature

Every client needs to be connect to some address of broker which is known as topic subscribed in MQTT. On single broker there can be multiple topics & and each clients can subscribe to multiple topics

# Continued...



In the given figure we have 1 broker and 4 clients subscribed to topic temperature. Whenever sensor publishes the new value of temperature other 3 devices receive the new value temperature.