

MQTT notes

- PubSub protocol
- <https://www.youtube.com/watch?v=J5FJn-y4buM>

Designed for constrained devices and low-bandwidth, high-latency, unreliable networks.

- Simple
- Light Weight
- Publish-Subscribe
- Reliable Delivery

Key Concepts

- 01 Publish-Subscribe
- 02 Client & Server
- 03 Topic
- 04 QoS
- 05 Session

QoS 0

 Sensor Reading

QoS 1

 Status Update

QoS 2

 Control Command

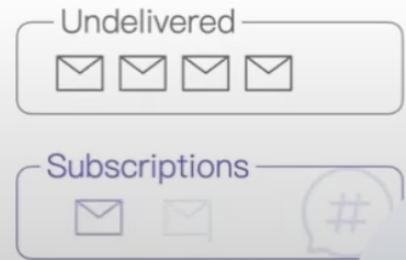
Session



Session in Client



Session in Server



Client

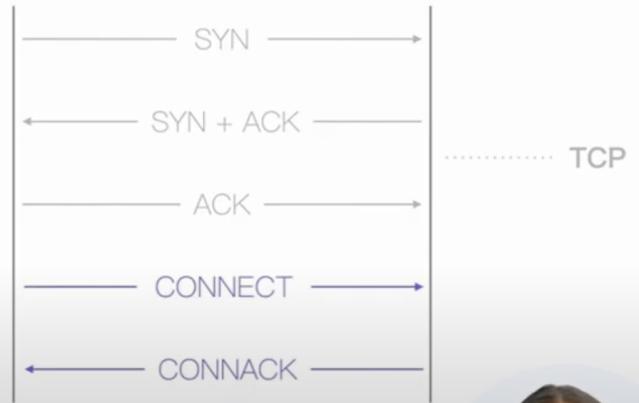
Server

STEP 1

Transport Protocol

STEP 2

MQTT



MQTT Clients

MQTT Server

MQTT Clients



Let the topic convey the information

home / [bedroom](#) / [d2ef08](#) / light 

home / [study](#) / [9a311e](#) / light 

home / [livingroom](#) / [ce20fe](#) / light 

command / ... / light status / ... / light telemetry / ... / temperature

- EMQX ports

Type	Bind
ssl	0.0.0.0:8883
tcp	0.0.0.0:1883
ws	0.0.0.0:8083
wss	0.0.0.0:8084

- Mqtt template to write to Influxdb

```
{
  "devices/+/messages": {
    "measurement": "devices",
    "tags": {
      "client_id": "$client_id"
    },
    "fields": {
      "temperature": ["$payload", "temperature"],
      "humidity": ["$payload", "humidity"]
    },
    "timestamp": "$timestamp"
  }
}
```

- Influxdb config

Set up InfluxDB

The initial setup process for an InfluxDB instance creates the following:

- An organization with the name you provide.
- A primary bucket with the name you provide.
- An admin [authorization](#) with the following properties:
 - The username and password that you provide.
 - An API token ([operator token](#)).
 - Read-write permissions for all resources in the InfluxDB instance.

To run an interactive setup that prompts you for the required information, use the InfluxDB user interface (UI) or the `influx` command line interface (CLI).

To automate the setup—for example, with a script that you write— use the `influx` command line interface (CLI) or the InfluxDB `/api/v2` API.

From:

<https://wiki.unloquer.org/> -

Permanent link:

<https://wiki.unloquer.org/personas/brolin/mqtt?rev=1696287278>

Last update: **2023/10/02 22:54**

