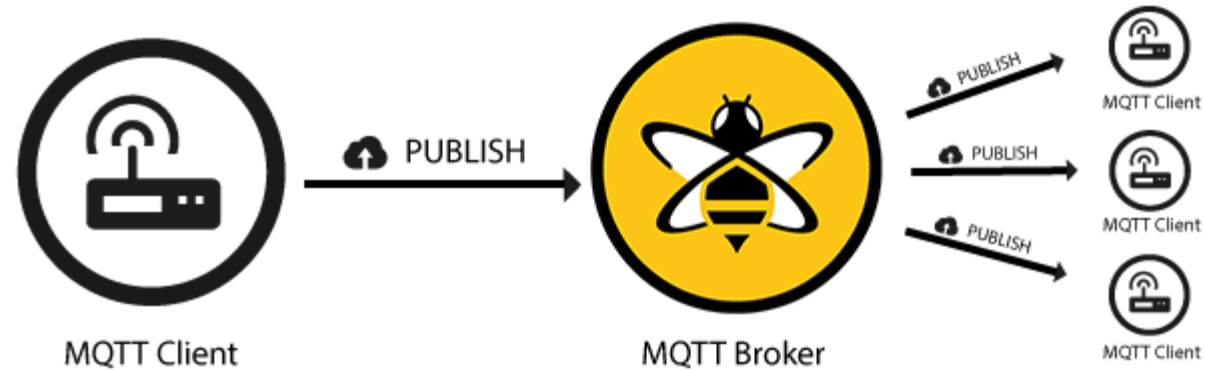


# MQTT – Publish/ Subscriber model

- Publisher: Sendet Nachrichten
- Broker: Leitet Nachrichten weiter an angemeldete Subscriber
- Subscriber: Empfängt Nachrichten über den Broker



# MQTT – Mosquitto (Broker)

- Mosquitto ist ein „open source message broker“, was das MQTT Protokoll implementiert.
- Installation auf dem Raspberry Pi:

```
sudo apt-get install -y mosquitto mosquitto-clients
```

- Testen des MQTT-Servers:

```
mosquitto_sub -h localhost -v -t test_channel
```

```
mosquitto_pub -h localhost -t test_channel -m „Test_Message“
```

# MQTT – Subscriber

```
7  def on_connect(client, userdata, flags, rc):
8      print("Connected with result code "+str(rc))
9
10     # Subscribing in on_connect() means that if we lose the connection and
11     # reconnect then subscriptions will be renewed.
12     client.subscribe(MQTT_PATH)
13
14     # The callback for when a PUBLISH message is received from the server.
15     def on_message(client, userdata, msg):
16         temp = float((msg.payload[0] << 24 | msg.payload[1] << 16 | msg.payload[2] << 8 | msg.payload[3]) / 100.0)
17         print(msg.topic,"Temperatur:",str(temp))
18     # more callbacks, etc
```