

# FIWARE POC- IoT Over MQTT

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Step 0:

Start Up:

```
git clone https://github.com/FIWARE/tutorials.IoT-over-MQTT.git
cd tutorials.IoT-over-MQTT
Docker-compose -p fiware up -d
```

```
curl -X GET 'http://localhost:4041/iot/about' --IoT Agent
curl -X GET 'http://localhost:1026/version' --IoT Context Broker
```

## 1) Register a service

```
curl -iX POST \
  'http://localhost:4041/iot/services' \
  -H 'Content-Type: application/json' \
  -H 'fiware-service: openiot' \
  -H 'fiware-servicepath: /' \
  -d '{
    "services": [
      {
        "apikey": "4jggokgpepnvsb2uv4s40d59ov",
        "cbroker": "http://localhost:1026",
        "entity_type": "MyDevice",
        "resource": ""
      }
    ]
  }'
```

## 2) Provision a IoT Device

```
curl -iX POST \
  'http://localhost:4041/iot/devices' \
  -H 'Content-Type: application/json' \
  -H 'fiware-service: openiot' \
  -H 'fiware-servicepath: /' \
  -d '{
    "devices": [
      {
        "device_id": "TempHumd001",
        "entity_name": "urn:ngsi-Id:TempHumd:001",
        "entity_type": "MyDevice",
        "protocol": "PDI-IoTA-UltraLight",
        "transport": "MQTT",
        "timezone": "Asia/India",
        "attributes": [
          { "object_id": "t", "name": "temperature:room", "type": "Integer" }
        ]
      }
    ]
  }'
```

## 3) Publishing a message to a topic

```
docker run -it --rm --name mqtt-publisher --network fiware_default efrecon/mqtt-client pub -h mosquitto -m "t|30" -t
"/4jggokgpepnvsb2uv4s40d59ov/TempHumd001/attrs"
```

## 4) To see the publish data in context broker

```
curl -G -X GET 'http://localhost:1026/v2/entities/urn:ngsi-Id:TempHumd:001' -d 'type=MyDevice' -H 'fiware-service:openiot' -H 'fiware-servicepath: /'
```

## 5) To see the registered services.

```
curl -X GET \
  'http://localhost:4041/iot/services' \
  -H 'fiware-service: openiot' \
  -H 'fiware-servicepath: /'
```

