

## MQTT test repository

Based on <https://codebase.zeiss.org/loT/MQTT> by zophue

### Testing

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Test with browser application (websockets) at <http://mitsuruog.github.io/what-mqtt/>

Working example `config.yml` file (direct internet access necessary, not working via proxy):

```
server: test.mosquitto.org port: 1883 topic: test/mqtt/a transport: tcp ssl: use_ssl: false
```

### Issues

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- Proxy
  - Socks proxy necessary for MQTT <http://stackoverflow.com/a/27839095/5276734> (WebSockets?)
  - "MQTT and HTTP Proxies seem to be one of the hardest challenges nowadays in corporate networks" <https://groups.google.com/forum/#!topic/mqtt/LDdrV5k2nek>

### Documentation

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- paho MQTT Python client <https://eclipse.org/paho/clients/python/docs/>
- MQTT <https://en.wikipedia.org/wiki/MQTT>
- Websockets proxy traversal [https://en.wikipedia.org/wiki/WebSocket#Proxy\\_traversal](https://en.wikipedia.org/wiki/WebSocket#Proxy_traversal)

Sources: - <https://www.dinotools.de/2015/04/12/mqtt-mit-python-nutzen> -

<https://www.heise.de/developer/artikel/Kommunikation-ueber-MQTT-3238975.html>

### AWS IoT Suite

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Follow the instructions from <https://github.com/mariocannistra/python-paho-mqtt-for-aws-iot>

Read <http://docs.aws.amazon.com/iot/latest/developerguide/protocols.html> for MQTT protocols and ports at AWS

Working example `config.yml` file (direct internet access necessary, not working via proxy):

```
server: 'data.iot.eu-central-1.amazonaws.com' topic: 'test/mqtt/a' transport: 'tcp' port: 8883 ssl: use_ssl: True caPath: 'lib/aws-iot-rootCA.crt' cert
```

### Python dependencies

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The file [environment.yml](#) contains all necessary packages for the Python code in this repository.

Use `$ conda env create --file environment.yml` to create a new conda environment for this repository or update your current root environment with

```
$ conda env update --file environment.yml --name root.
```