GS2200 MQTT

Release 1.0, March 15, 2019

Telit Wireless Solutions Japan K.K.

Contents

1 GS2200 MQTT Example

MQTTPublish.ino provides the MQTT publisher example. The GS2200 connects **"test.mosquitto.org"** MQTT broker and sends a few byte data as the Publisher. Here is the instruction.

- Copy **MQTT_pubsub.py** to your PC and run it **"python MQTT_pubsub.py"** on the command prompt
- Set the correct SSID and passphrase to the MACRO **"AP_SSID"** and **"PASSPHRASE"** in AppFunc.cpp
- Upload the sketch to SPRESENSE

You need to install python and paho-mqtt library. As for the python installation, please search it in the net. (This is out of the scope of this document.) As for the paho-mqtt installation, just run

"pip install paho-mqtt"

if python is already installed.

If everyting works fine, you can see the following result on the PC command prompt screen.

```
Telit/property 0
Telit/property 1
Telit/property 2
Telit/property 3
    :
```

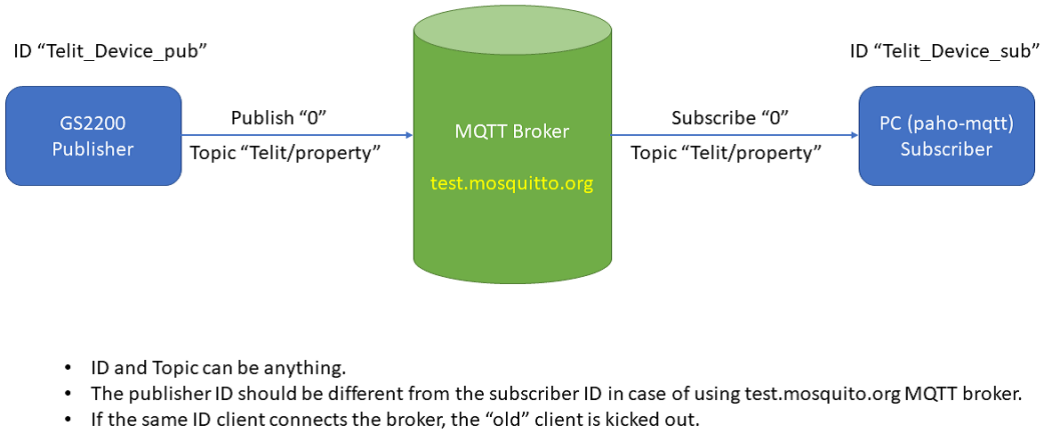

Figure 1: GS2200 MQTT Test Configuration

2 MQTT Client ID

The client ID of both publisher and subscriber should be different, otherwise the older connected client is kicked out from the MQTT broker, so that both clients never exchange the data.

The only way is to use the MQTT Retain feature. If the disconnected subscriber reconnects, it will receive the retained data, but this is not efficient way, because either client disconnects every time when other client reconnects the MQTT broker.

The client ID should be managed to have a different name. The alternative solution is to set "empty" ID like below. When receiving MQTT Connect command without the Client ID, the MQTT broker generates the random ID automatically.

AT Command
AT+MQTTCONNECT=Hostname_MQTTServer,1883,,

python script
client = mqtt.Client()
client.connect(HostName_MQTTServer)

3 python script

As the name of the python script implies, the script **MQTT_pubsub.py** can run both publisher and subscriber. If MQTT connection is established, it runs as the subscriber by on_connect() function. If you want to run the publisher, remove the comment of the line below.

#startTimer(3,True)

This will trigger the publisher every 3 second.

4 Histroy

Revision	Date	Description
1.0	March 15, 2019	First Version