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Category	■FAQ □SOP	Related OS	N/A
Abstract	How to use SimpleMQTT to send data to AWS IoT Core with modifiable topic?		
Keyword	MQTT, AWS		
Related Product	ADAM-3600, ECU-1152, ECU-1251, ECU-1051		

■ Problem Description:

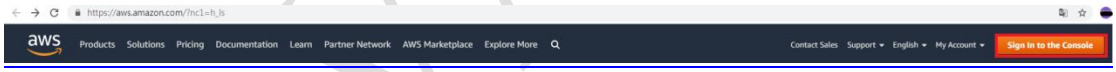
This document shows how to use SimpleMQTT to send data to AWS IoT Core with modifiable topic.

■ Answer:

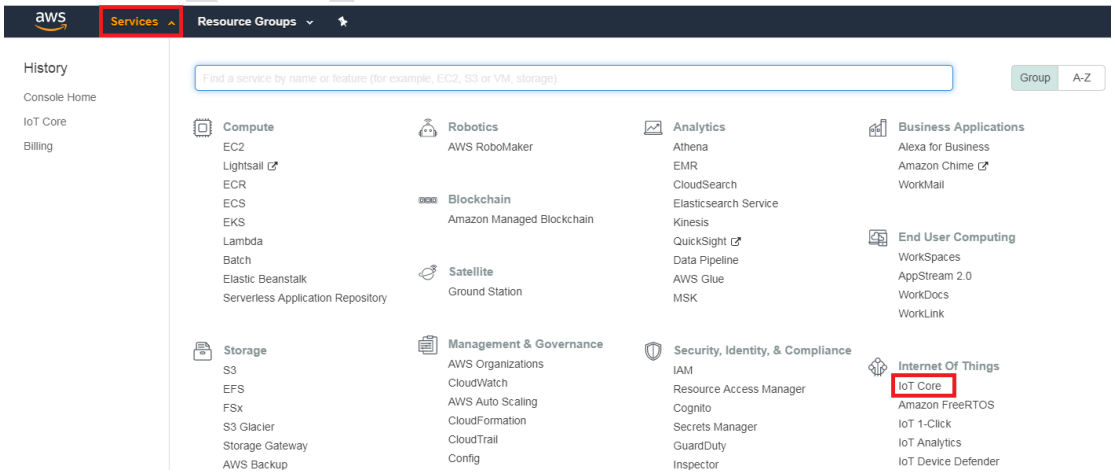
About AWS information, please reference the developer guide on the website.
https://docs.aws.amazon.com/zh_tw/iot/latest/developerguide/iot-gs.html

1. Enter IoT core

User needs to have AWS account and login in. Plesae refer to the website of AWS:
https://aws.amazon.com/?nc1=h_ls
Sign in or create new account on the top.

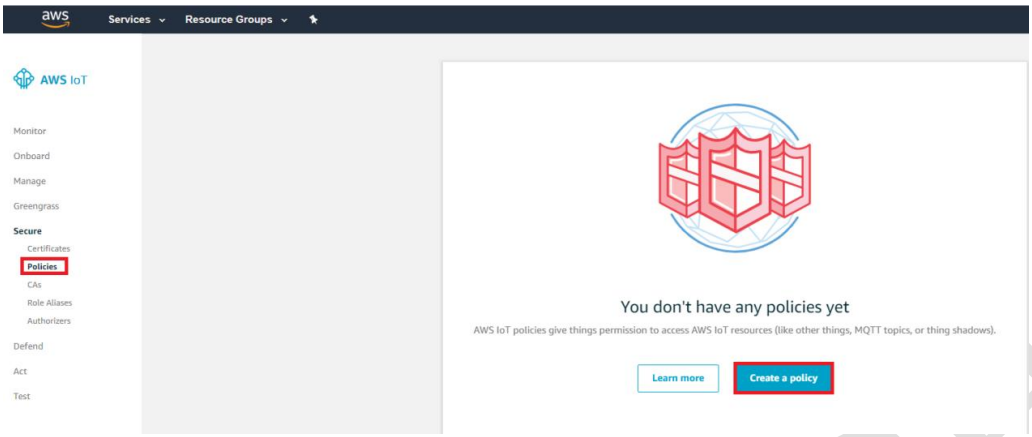


Click “Services” on the top and choose “IoT Core” on the page.



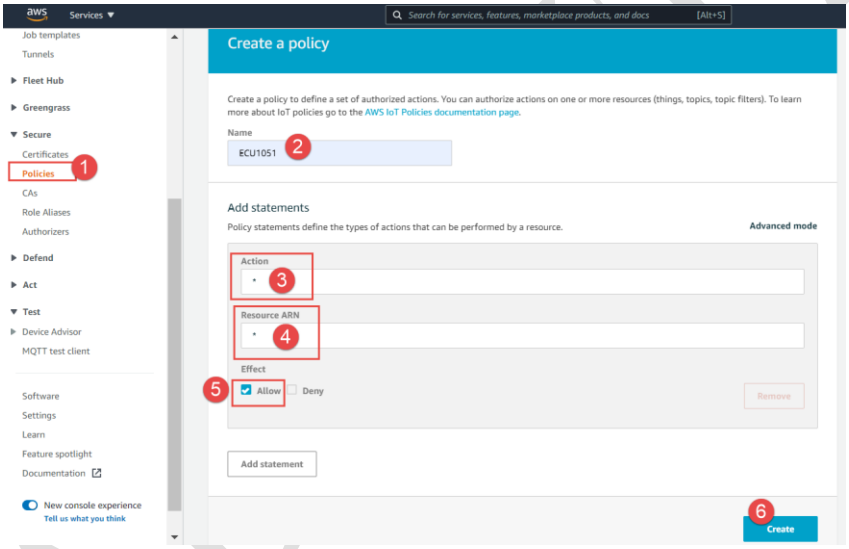
2. Create policies

   Secure→Policies→Create a policy



Keyin policy name, add statements and click ”Create”.

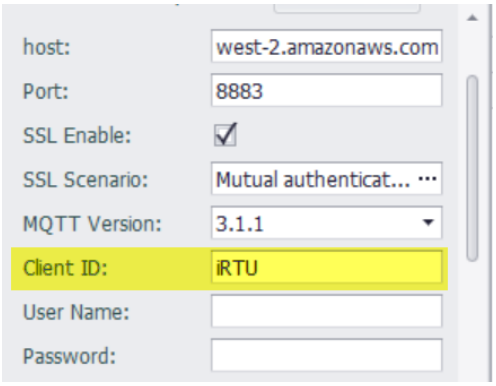
- Name: (policy name)
- Action: *
- Resource ARN: *
- Effect: **Allow**

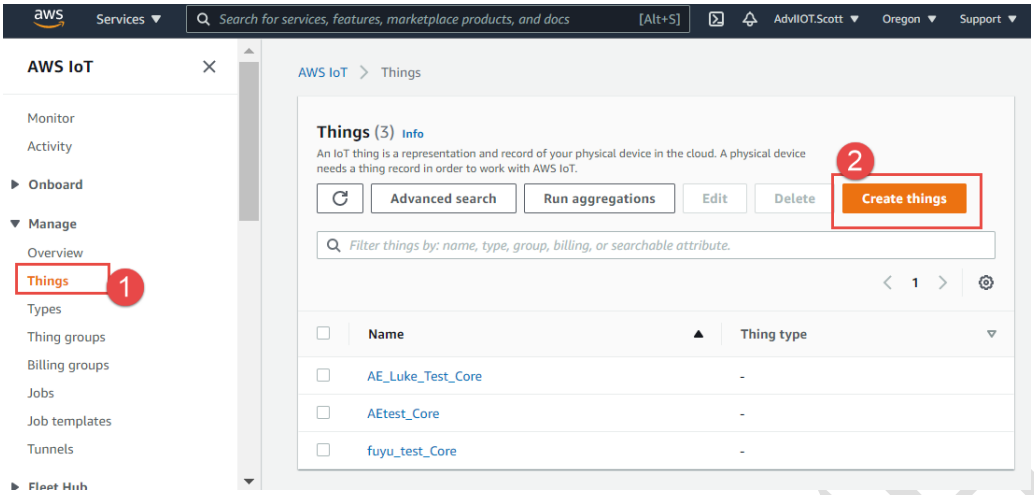


3. Regist a “Things” which name should match with the client ID in EdgeLink studio.

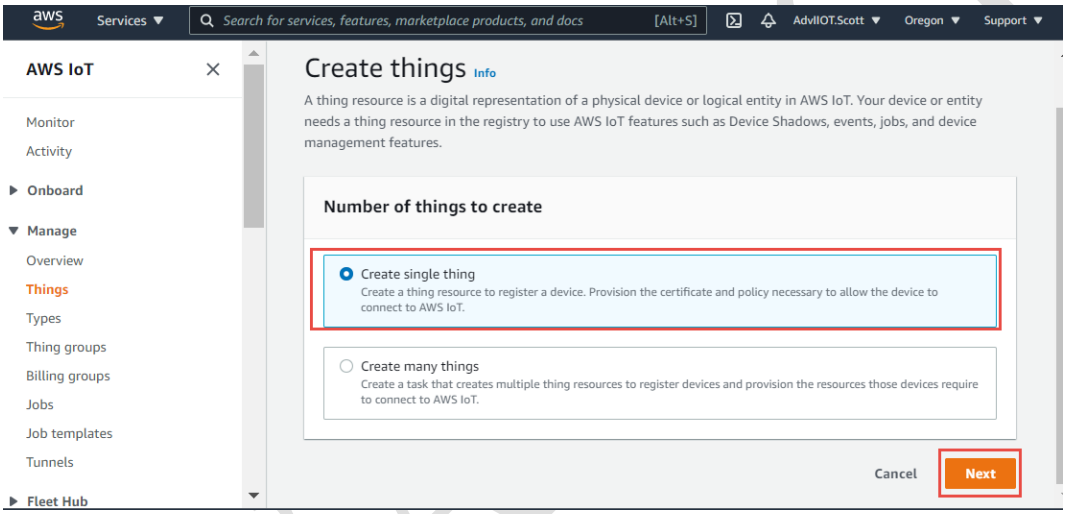
   Select “management” ➔ “things” ➔ “create things”.

   The thing name is used as the default MQTT client ID if not setting anything in EdgeLink.

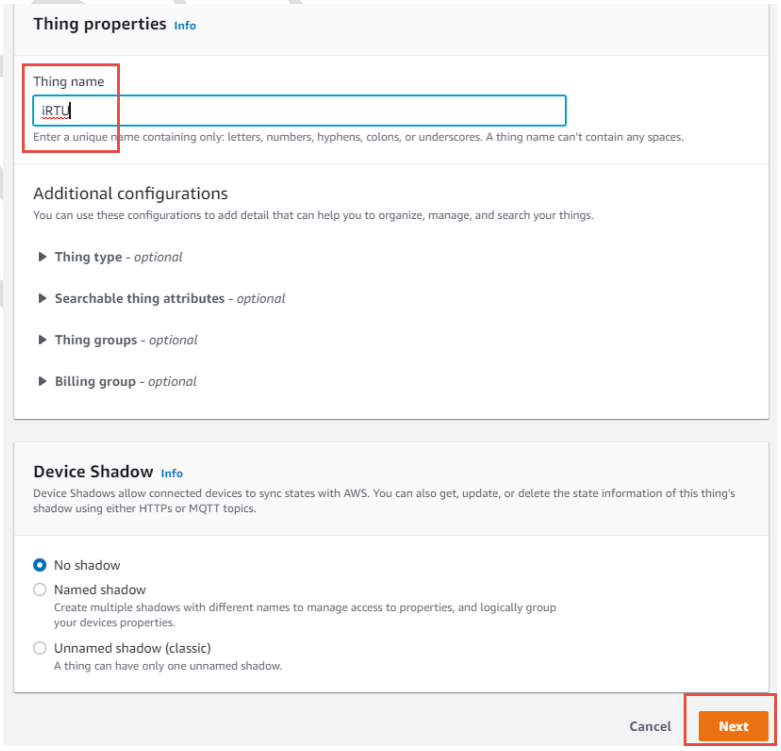




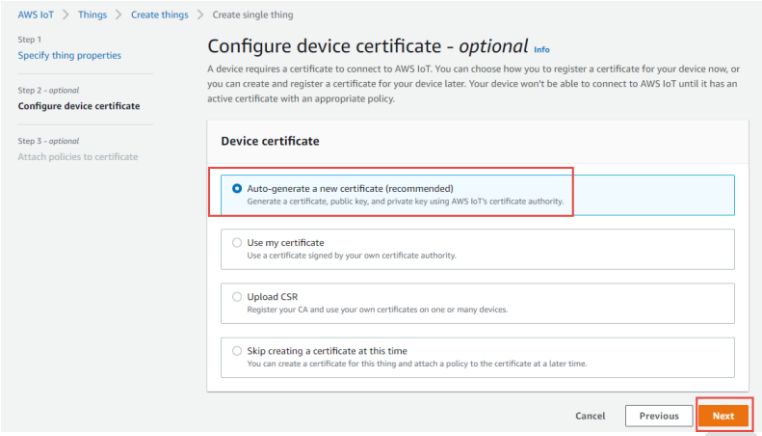
Crate single thing.



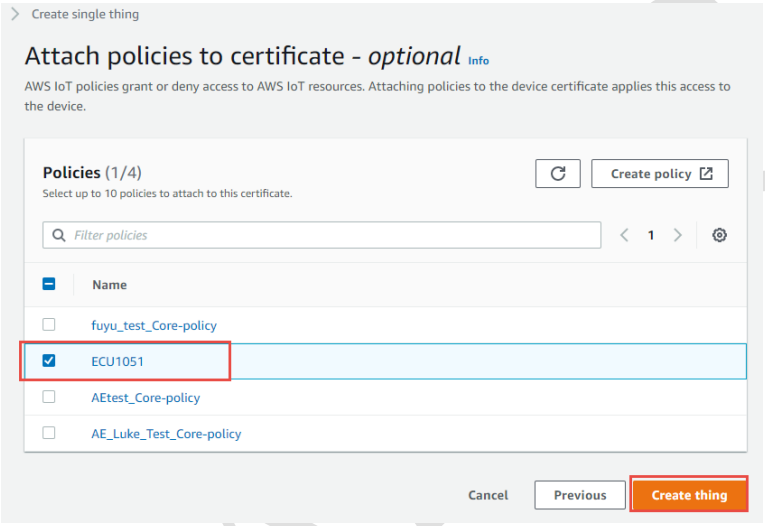
Type-in the thing name.



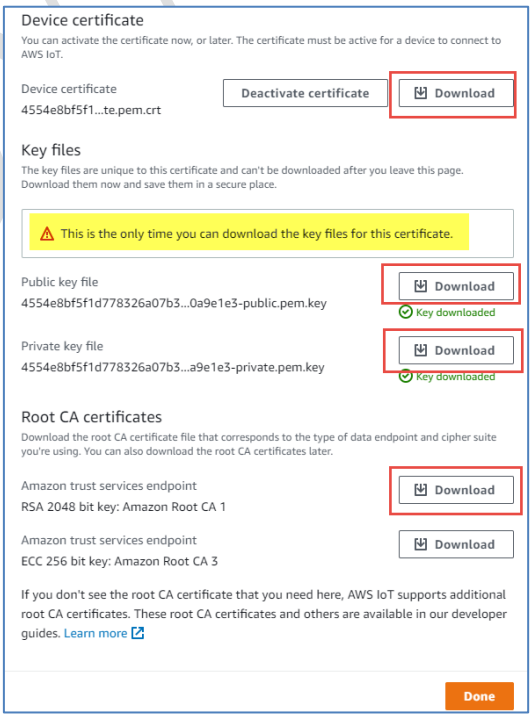
Create a certificate for the thing.



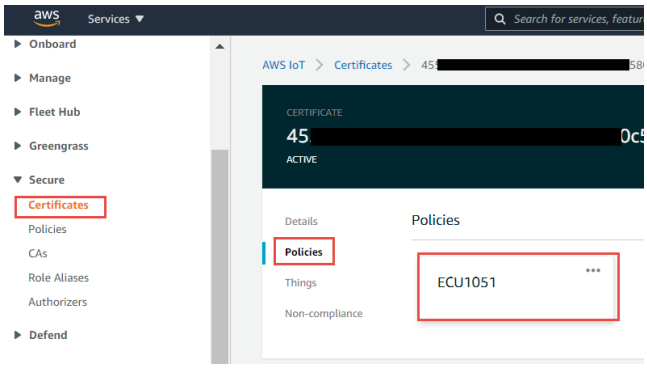
Attach the policy.

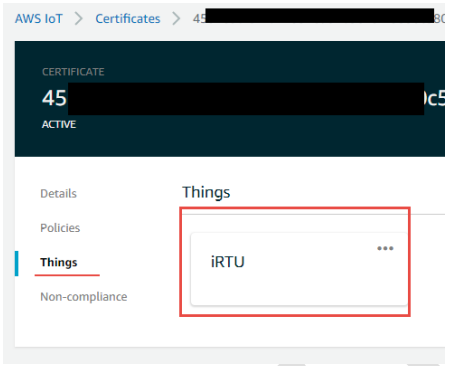


Download the certificates. Note! This is the only chance to download the certificates.

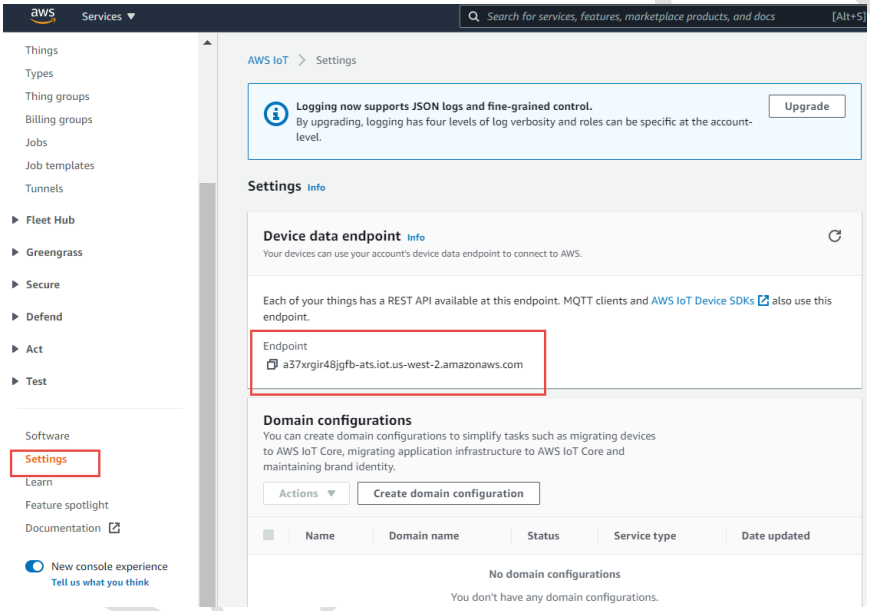


Check the setting. In “secure” ➔ “certificates” ➔ “policies” will have the policy you created. And the “things” content the thing name you created.





4. Go to “setting” and copy the “endpoint”, paste it into the EdgeLink setting.



5. Setup the EdgeLink project.

(1) This example is using simpleMQTT.

(2) Enable the function.

(3) Host: endpoint

(4) Port: 8883

(5) Protocol: mqtts/tls

(6) Certificate: mutual authentication.

Verify host.

CA file: AmazonRootCA1.pem

Client certificate file: *.certificate.pem.crt

Client key file: *.private.pem.key

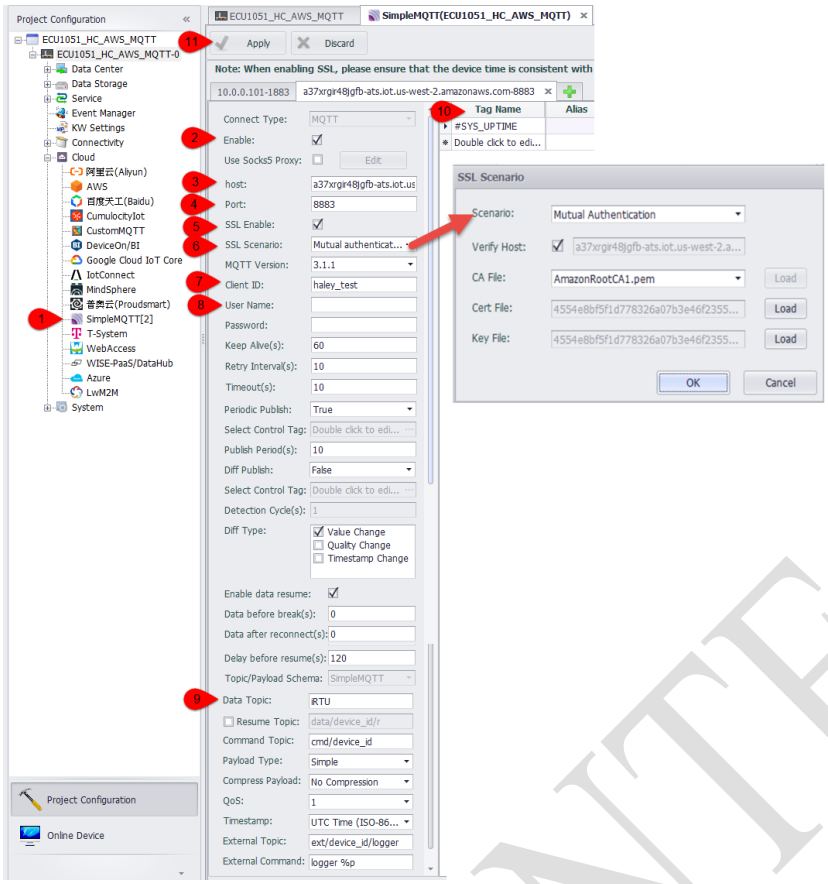
(7) Client ID: can be anything, but unique.

(8) User name/ password: leave it empty.

(9) Topic: can be anything.

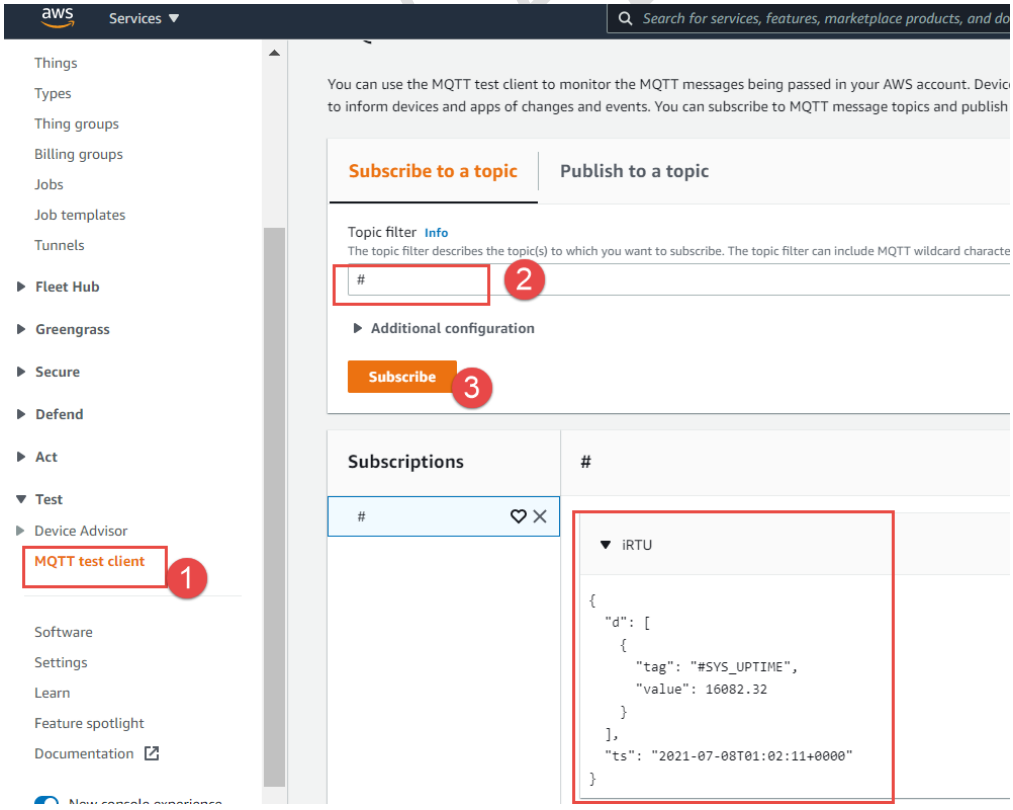
(10) Select given tags to upload.

(11) Click “apply” to complete the setting.



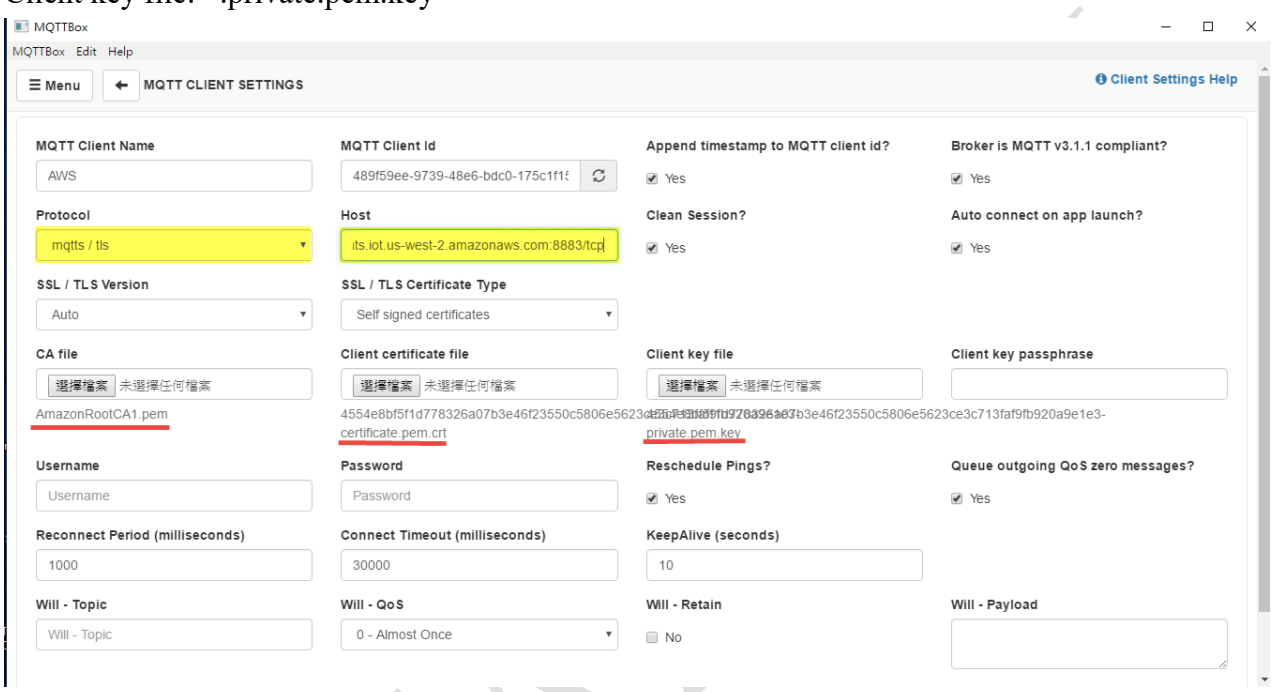
Results:

In “test” ➔ “MQTT test client” ➔ “subscribe to a topic”, here shows the received data.



Use 3rd party MQTT client (ex: Paho, MQTTbox) to verify.

Setting in MQTTbox.
Protocol: mqtts/tls
Host: endpoint:8883/tcp
CA file: AmazonRootCA1.pem
Client certificate file: *.certificate.pem.crt
Client key file: *.private.pem.key



Subscribe the topic according to the EdgeLink setting.