

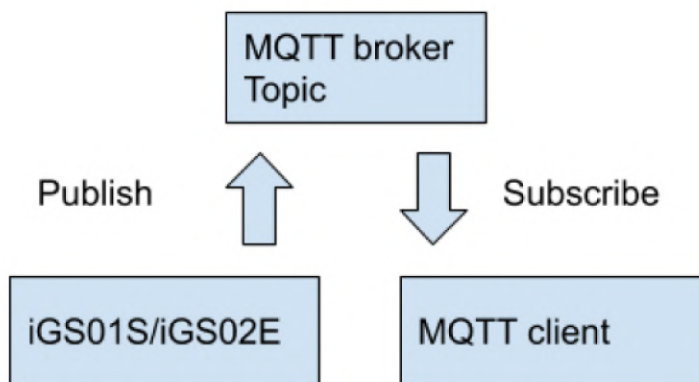
iGS01S/iGS02E MQTT Tutorial

AP NOTE 012

Ver.1

Introduction

This application note provides a guide to connect public mqtt broker via mqtt bridge.



```
$GPRP,<MAC>,<GW>,<RSSI>,<Payload>
```

...

Configuration on iGS01S/iGS02E

In this tutorial we will configure the iGS01S/iGS02E to publish data to a public mqtt broker

Server: iot.eclipse.org

Port: 1883

Publish topic: test/data

Below shows the screenshot of IGS02E settings:

1. Set Server Host/IP: iot.eclipse.org
2. Set Server Port: 1883
3. Set Publish Topic: test/data
4. Press "Save"
5. Press "Reboot" to apply new settings

After reboot, the device will automatically upload data if the gateway received BLE data.

PS. Make sure there are some beacons around the gateway for test.

Config Panel x +

← → ↻ 不安全 | 192.168.0.101/index.html#/applications

BLE-GW Network Applications Advanced System Reboot

Application

Application MQTT Client ▾

Host/IP

Port

Publish Topic

Content Type plain-text ▾

Client ID

Username

Password

MQTTS Disable ▾

Root CA No Root CA ▾

Use Certificate Disable ▾

Request Interval (in secs)

Drop reports while cache full

Throttle Control (filter out redundant records)

Verify published data

Option 1: Use mosquitto_sub command line tool

Below command subscribe to the specific topic, this should display the published data by iGS01S/iGS02E.

```
$ mosquitto_sub -h iot.eclipse.org -p 1883 -t test/data
```

Mosquitto tool download link: <https://mosquitto.org/download/>

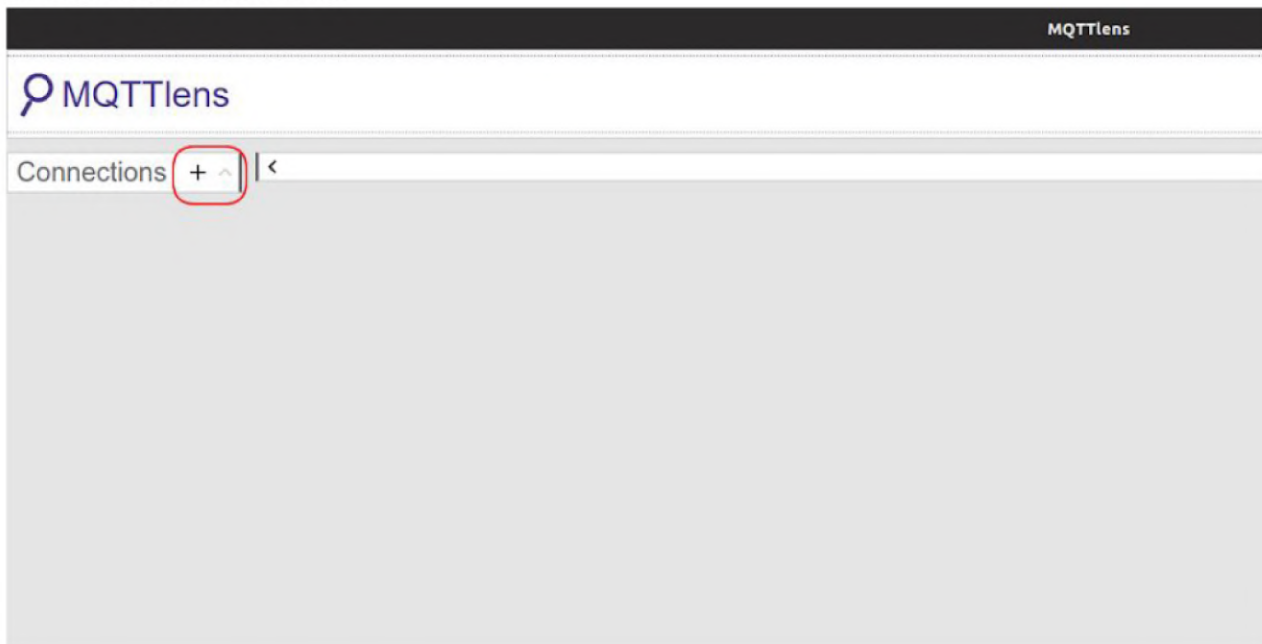
Option 2: Use MqttLens

MqttLens is a Google Chrome Extension, you can install it by below URL

<https://chrome.google.com/webstore/detail/mqttlens/hemojaaeigabkbcookmlgmdigohjobjm>

Below screenshot shows the configurations on MqttLens to check the published data:

Create a new connection:



Set Hostname: iot.eclipse.org

Set Port: 1883

Then click "CREATE CONNECTION"

MQTTlens


Version 0.0.14

Add a new Connection

Connections +

Connection Details

Connection name
ICS02E-DEMO

Connection color scheme


Hostname
tcp:// iot.eclipse.org

Port
1883

Client ID
lens_UuE0eBcDecCMnNyART5qCzmVGKK Generate a random ID

Session
 Clean Session

Automatic Connection
 Automatic Connection

Keep Alive
120 seconds

Credentials

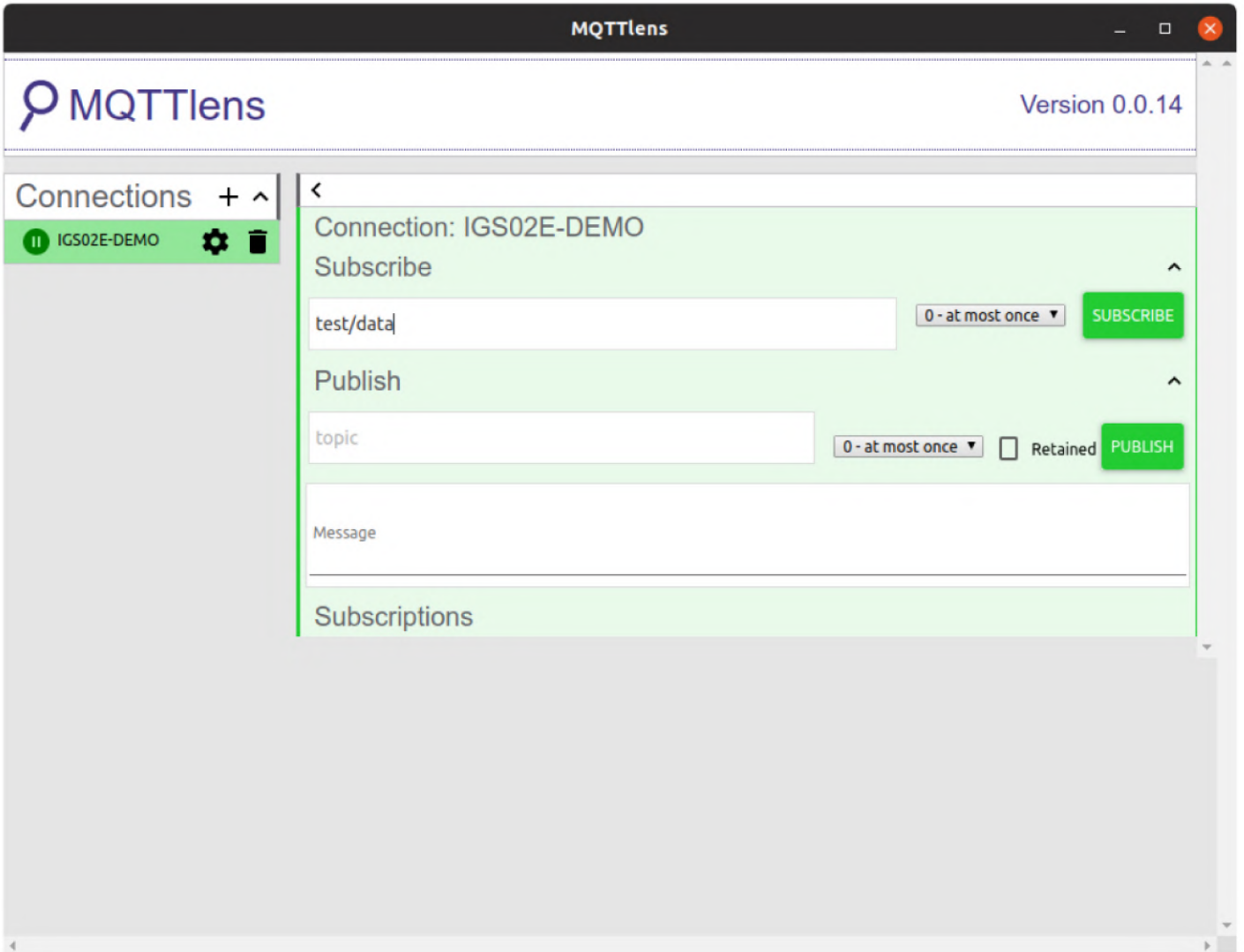
Username
Enter username

Password
Enter password

Last-Will ▼

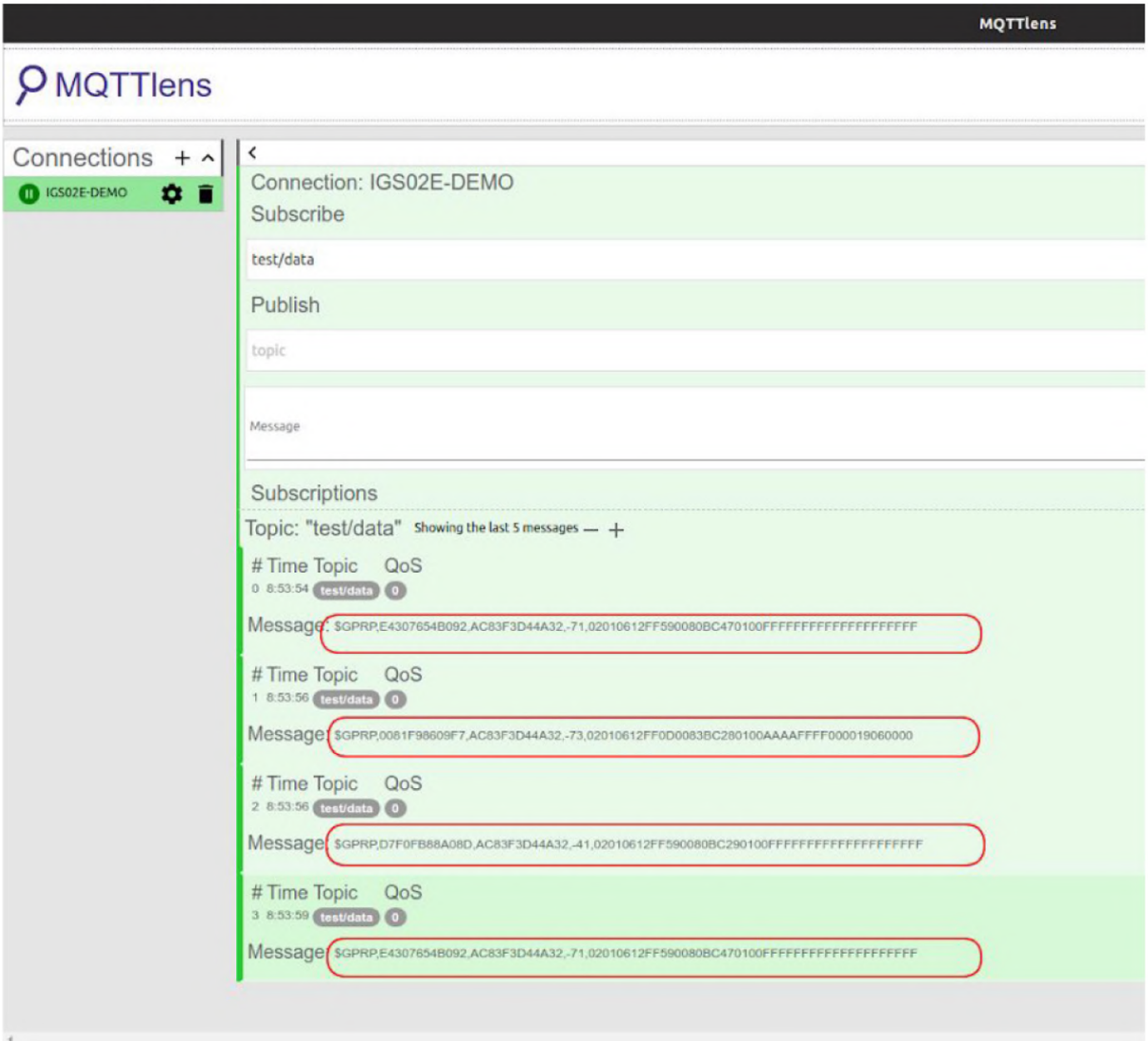
CANCEL CREATE CONNECTION

Set subscribe topic:



The screenshot shows the MQTTlens application window. The title bar reads "MQTTlens". The main header contains the MQTTlens logo and "Version 0.0.14". On the left, a "Connections" sidebar shows a connection named "IGS02E-DEMO". The main area is titled "Connection: IGS02E-DEMO" and is divided into "Subscribe" and "Publish" sections. The "Subscribe" section has a text input field containing "test/data", a dropdown menu set to "0 - at most once", and a green "SUBSCRIBE" button. The "Publish" section has a text input field containing "topic", a dropdown menu set to "0 - at most once", a checkbox for "Retained" which is unchecked, and a green "PUBLISH" button. Below these sections is a "Message" input field and a "Subscriptions" section.

Received the published data:



The screenshot shows the MQTTlens interface for a connection named 'IGS02E-DEMO'. The main area displays the 'test/data' topic with a list of four received messages. Each message is highlighted with a red rounded rectangle. The messages are:

- 0 8:53:54 test/data 0: \$GPRP,E4307654B092,AC83F3D44A32,-71,02010612FF590080BC470100FFFFFFFFFFFFFFFFFFFFFF
- 1 8:53:56 test/data 0: \$GPRP,0061F98609F7,AC83F3D44A32,-73,02010612FF0D0083BC280100AAAAFFFF000019060000
- 2 8:53:56 test/data 0: \$GPRP,D7F0FB88A08D,AC83F3D44A32,-41,02010612FF590080BC290100FFFFFFFFFFFFFFFFFFFFFF
- 3 8:53:59 test/data 0: \$GPRP,E4307654B092,AC83F3D44A32,-71,02010612FF590080BC470100FFFFFFFFFFFFFFFFFFFFFF

Revision History

DATE	REVISION	CHANGES
May 16, 2019	1	Initial release