

# 資料檢測程序書

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## 0. 說明

版本記錄 : v1\_20211215

- 此份文件用於測試資料是否透過 NCHC 民生公共物聯網的 MQTT server , 進入到 DB 的檢測過程
- 帳號密碼請洽管理員 陳威宇 或 孫振凱

## 1. 打資料到 MQTT broker

以下以 mqttbox (Chrome APP) 工具為例

### 1.1 mqttbox installation

<https://chrome.google.com/webstore/detail/mqttbox/kaajoficamnjjhkeomgfljpicifbkaf?hl=zh-TW>

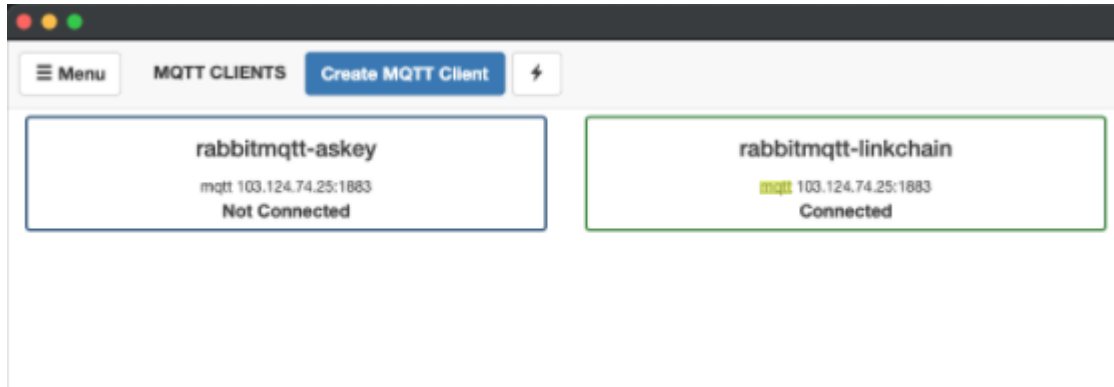
chrome app => apps => mqttbox



The screenshot shows the Chrome Web Store page for the MQTTBox extension. At the top, it says "chrome 線上應用程式商店" and "wauechen@gmail.com". The breadcrumb trail is "首頁 > 應用程式 > MQTTBox". The main content area features the MQTTBox logo (a red diamond with white dots), the name "MQTTBox", and the source website "workswithweb.com". Below this, it shows a 5-star rating with 30 reviews and "40,000+ 位使用者". A blue button labeled "啟動應用程式" is visible on the right side.

### 1.2 測試 mqtt 流程

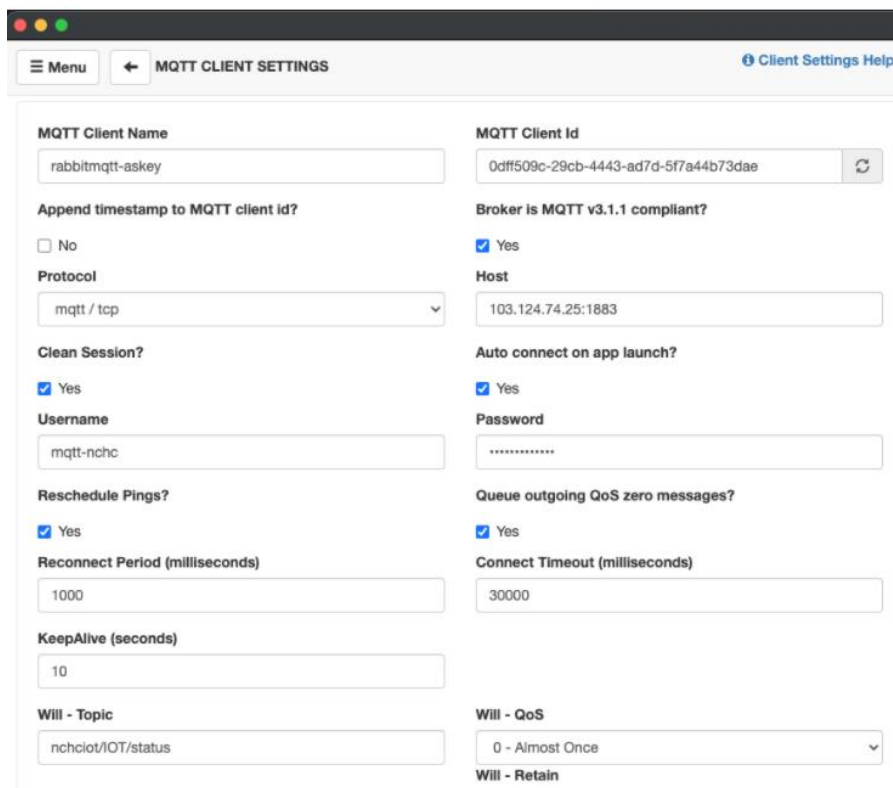
#### 1. create connection



## 2. setup connection

這邊注意必要資訊：

- Host = cimqtt.nchc.org.tw:1883
- Password = ( 洽管理員 )
- Username = (洽管理員 )
- Protocol = mqtt / tcp

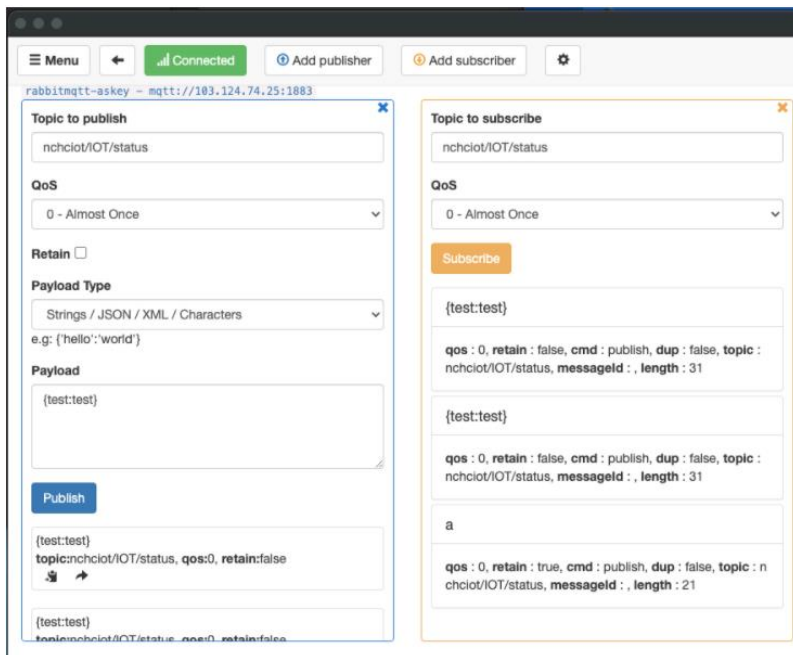


## 3. test subscriber and publisher

這邊的必要資訊：( topic 以 nchciot/IOT/notify 為例 )

- topic to subscribe = nchciot/IOT/notify
- topic to publish = nchciot/IOT/notify

- payload = {"test":"test"}



先點 connected => connected => Subscribe => Publish

## 1.3 檢查

看到 publish 下有資料 代表送出成功

看到 subscribe 下有資料 代表接收成功

## 2. 檢查 db 是否有資料

以下使用 pgadmin4 來測試 DB 內的資料

<http://103.124.74.25:38443/pgadmin4/browser/>

帳號密碼 : 洽管理員

## 2.1 query tool

The screenshot displays the pgAdmin interface with a context menu open over a table in the 'public' schema. The menu options are:

- Create
- Refresh...
- Count Rows
- Delete/Drop
- Drop Cascade
- Reset Statistics
- Import/Export...
- Maintenance...
- Scripts
- Truncate
- Backup...
- Restore...
- View/Edit Data
- Search Objects...
- Query Tool**
- Properties...

The background shows several monitoring charts: 'Database sessions' (Total, Active, Idle), 'Transactions per second', 'Tuples out' (Fetched, Returned), and 'Block I/O'. Below the charts is a table of prepared transactions:

Application	Client	Backend start
pgAdmin 4 - DB:mqtt_ci	103.124.72.116	2021-12-15 17:09:57 CST

## 2.2 execute query

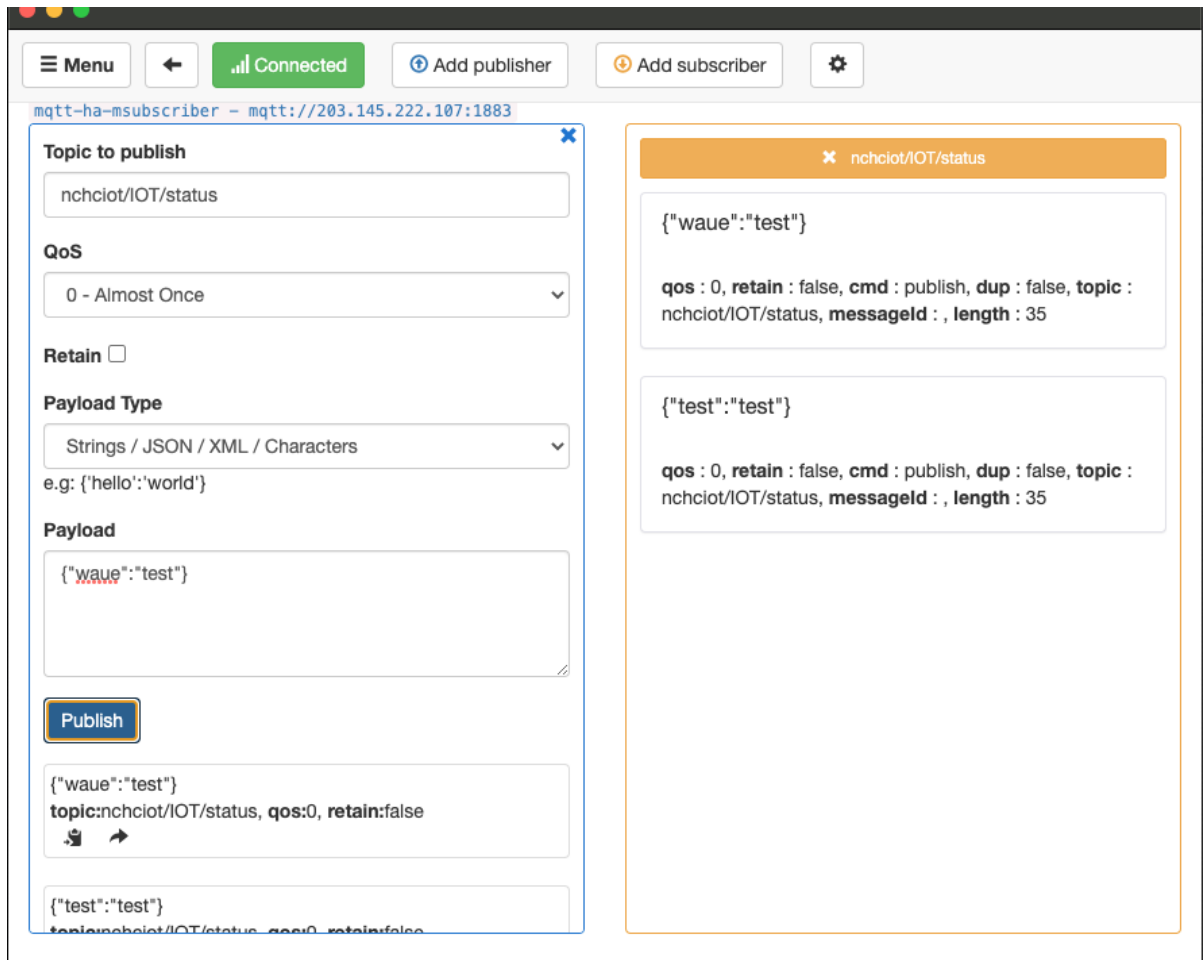
The screenshot shows the pgAdmin interface with a table of IoT status data. The table has columns: id (PK Integer), date (timestamp with time zone), topic (character varying (120)), and message (jsonb). The data rows show various IoT devices reporting 'online' status. Below the table, the Query Editor contains the following SQL query:

```
SELECT * FROM public.status_askey ORDER BY id DESC LIMIT 100
```

SELECT \* FROM public.status\_askey ORDER BY id DESC LIMIT 100

## 2.3 交叉測試

- 先執行 mqttbox 送出訊息



- 再執行 pgadmin4 query tool 進行查看資料是否進庫

Data Output				
	id [PK] integer	date timestamp with time zone	topic character varying (120)	message jsonb
1	107401	2021-12-15 17:12:42.045751+08	nchciot/IOT/status	{"waue": "test"}
2	107400	2021-12-15 17:12:38.296436+08	nchciot/IOT/status	{"test": "test"}
3	107399	2021-12-15 17:12:06.682753+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "hea

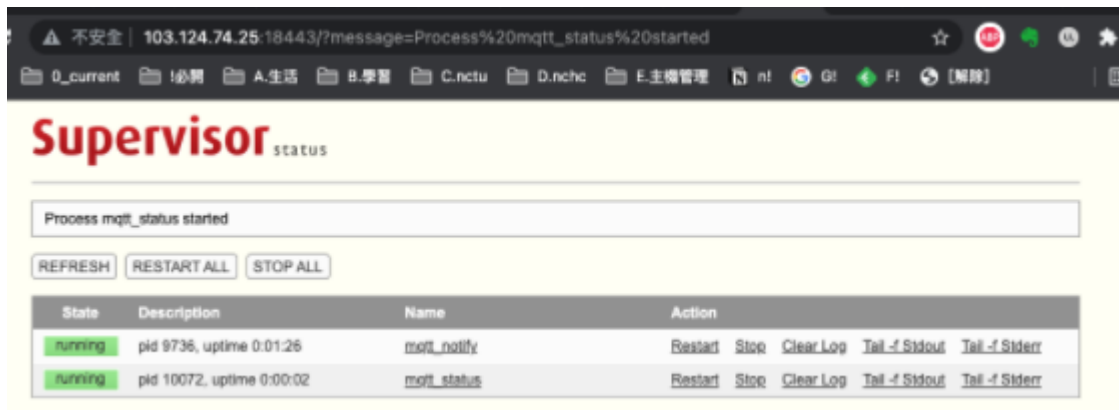
## A. 補充 檢查 msubscriber 程式的狀態

<http://203.145.221.132:18443/>

帳號密碼 : 洽管理員

ID : s07  
v1\_20211215

Author : Weiyu chen



- log :

```
$ ssh cias01  
$ cd /opt/mqtt-nchc/logs  
$ tail -f askey_notify_log.log
```