# 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/kaajoficamnjijhkeomgfljpicifbkaf? hl=zh-TW



### 1.2 測試 mqtt 流程

1. create connection

(					
	≡ Menu	MQTT CLIENTS	Create MQTT Client	4	
		rabbitmot	t-sekov		rabbitmatt-linkchain
	rabbitmqtt-askey				103 124 74 25-1883
	Not Connected				Connected

#### 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

E Menu   MQTT CLIENT SETTINGS	Client Settings He					
MQTT Client Name	MQTT Client Id					
rabbitmqtt-askey	0dff509c-29cb-4443-ad7d-5f7a44b73dae					
Append timestamp to MQTT client id?	Broker is MQTT v3.1.1 compliant?					
🗌 No	Yes					
Protocol	Host					
mqtt / tcp 🗸	103.124.74.25:1883					
Clean Session?	Auto connect on app launch?					
Yes	🗹 Yes					
Username	Password					
mqtt-nchc						
Reschedule Pings?	Queue outgoing QoS zero messages?					
Ves Ves	Ves Yes					
Reconnect Period (milliseconds)	Connect Timeout (milliseconds)					
1000	30000					
KeepAlive (seconds)						
10						
Will - Topic	Will - QoS					
nchciot/IOT/status	0 - Almost Once ~					
	Will - Retain					

#### 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"}

Menu     Add publisher	Add subscriber					
abbitmqtt-askey - mqtt://103.124.74.25:1883						
Topic to publish X	Topic to subscribe					
nchciot/IOT/status	nchciot/IOT/status					
QoS	QoS					
0 - Almost Once 🗸	0 - Almost Once					
Retain 🗆 Payload Type	Subscribe					
Strings / JSON / XML / Characters ~	{test:test}					
e.g: {'hello':'world'} Payload	<pre>qos : 0, retain : faise, cmd : publish, dup : faise, topic : nchciot/IOT/status, messageld : , length : 31</pre>					
{test:test}	{test:test}					
	<pre>qos : 0, retain : false, cmd : publish, dup : false, topic : nchciot/IOT/status, messageld : , length : 31</pre>					
Publish						
{test:test} topic:nchciot/iOT/status, qos:0, retain:false ▲	a qos : 0, retain : true, cmd : publish, dup : false, topic : n chclot/IOT/status, messageld : , length : 21					
{test:test}						

先點 connected => connected => <mark>Subscribe</mark> => 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

<b>Pg Admin</b> File ~ Object ~	🖌 Tools 🗸	Help 🗸							🕌 wau
Browser 🗊 🏗 🔍	Dashboard	Properties	S	QL Statis	stics Depe	ndencies	Depen	dents	
<ul> <li>Servers (1)</li> <li>\$\overline\$ mqtt-nchc@ceasar_pdb_ha</li> <li>\$\overline\$ Databases (5)</li> </ul>	Database s	essions			Total 📕 Activ	ve 📕 Idle	Trans secor	sactions per nd	Transac
<ul> <li>&gt; ceasar</li> <li>&gt; mqtt_ci</li> <li>&gt; @Casts</li> <li>&gt; % Catalogs</li> </ul>	1					_			
<ul> <li>&gt; ⊕ Event Triggers</li> <li>&gt; ⊕ Extensions</li> <li>&gt; ● Foreign Data Wra</li> </ul>	Refresh	,					0—		
> CLanguages	Count Rows	s		-	Tuples o	out 📕 F	etched	Returned	Block I/O
✓ ⊗ Schemas (1)	Drop Casca	ide	dates	s Delete	1				3
> A Collations > A Domains	Reset Statis Import/Exp	stics ort							2
<ul> <li>FTS Confi</li> <li>TS Dictic</li> </ul>	Maintenano Scripts								1
> Aa FTS Parse	Truncate	>			0				0
> @ Foreign Ta	Backup Restore								
<ul> <li>&gt; (c) Principlinis</li> <li>&gt; (c) Procedure</li> </ul>	View/Edit D	ata >	epar	red Transac	tions				
<ul> <li>13 Sequence</li> <li>Tables (5)</li> </ul>	Query Tool	2013	Ē	Applicatio	n	Client		Backend start	
>	V I V	 	chc			103.124.2	72.116	2021-12-15 1	1:22:02 CST
> == status_a:	😣 🔳 🕨 9	94060 mqttr	nchc	pgAdmin 4	4 - DB:mqtt_c	i 103.124.7	72.116	2021-12-15 17	7:09:57 CST
> 📑 status_lir									
> 🛅 test_noti > 🄃 Trigger Func									
> 🛅 Types									
> III Views									
> mqtt_testbed									
> 📑 pgbench									

### 2.2 execute query

<b>Pg/Admin</b> File ~ Object ~	т	ools 🗸 Helj	· •		👗 wauechen@gmail.com (internal) 💙
File       Object       Tools       Help         Browser       Image: Construction of the second of the s					
<ul> <li>Servers (1)</li> <li>Image: Image: Image:</li></ul>	<b>60 40</b>		✓ ♣ Q ✓ ₱ ✓ ₱ ▲ ₱		▼         No limit         ▼         ►         ▼         ►         ▼
> 📑 ceasar	Dat	a Output			
✓ ♥ mqtt_ci > ፼ Casts		id [PK] integer	date timestamp with time zone	topic character varying (120)	message jsonb
> 💖 Catalogs	1	107397	2021-12-15 17:10:58.413892+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
Event Triggers	2	107396	2021-12-15 17:10:43.41362+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> TExtensions	3	107395	2021-12-15 17:10:39.491581+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> Foreign Data wrapp	4	107394	2021-12-15 17:09:42.251188+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> Publications	5	107393	2021-12-15 17:09:23.395413+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
✓ Schemas (1)	6	107392	2021-12-15 17:05:39.450781+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
✓ ♦ public	7	107391	2021-12-15 17:04:42.231244+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> <sup>A</sup> <sub>B</sub> ↓ Collations	8	107390	2021-12-15 17:02:03.153636+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> 🏠 Domains	9	107389	2021-12-15 17:01:47.152185+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> 🔓 FTS Configu	10	107388	2021-12-15 17:00:39.499745+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> IN FIS Dictiona	11	107387	2021-12-15 17:00:23.226692+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> FIS Parsers	12	107386	2021-12-15 16:59:42.176532+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> III Foreign Tabl	13	107385	2021-12-15 16:57:08.936607+08	nchciot/IOT/status	{"body": {"request": {"event": {"eventNames": ["online"]}}}, "header
> (@) Functions	Dat	a Output E	xplain Messages Notificat	ions Query History	
<ul> <li>&gt; I Materialized</li> <li>&gt; () Procedures</li> </ul>	Que	ery Editor			
> 13 Sequences	1	SELECT *	FROM public.status_ask	ey ORDER BY id DE	SC LIMIT 100
✓  ☐ Tables (5)					
> 🖿 notify_as					
>					

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

<pre>qtt-ha-msubscriber - mqtt://203.145.222.10/:1883</pre>		
lopic to publish	*	nchciot/IOT/status
nchciot/IOT/status		
QoS		{"waue":"test"}
0 - Almost Once	~	<b>qos</b> : 0, <b>retain</b> : false, <b>cmd</b> : publish, <b>dup</b> : false, <b>topic</b> : nchciot/IOT/status, <b>messageId</b> : , <b>length</b> : 35
Retain 🗆		
Payload Type		{"test":"test"}
Strings / JSON / XML / Characters	~	
e.g: {'hello':'world'}	_	qos : 0, retain : false, cmd : publish, dup : false, topic : nchciot/IOT/status, messageId : , length : 35
Payload		
{"waue":"test"}		
	_1;	
Publish		
{"waue":"test"}		
topic:nchciot/IOT/status, qos:0, retain:false		

#### ● 再執行 pgadmin4 querry tool 進行查看資料是否進庫

	Data (	Dutput			
id         date           1         107401         2021-12-15 17:12:42.04575*           2         107400         2021-12-15 17:12:38.296434			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"]}}}, "head
rapp		107000	0001-10-15-17-11-50-20100-00		(III

### 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

▲ 不安全	103.124.74.25:1844	3/?message	=Process%	20mqtt_stat	us%20started			ŕ	8 💿		0	1
0_current	🗎 16月 🗎 A.生活	8.98	🗎 C.nctu	🗎 D.nchc	□ E.主機管理	🕅 n!	🌀 G!	🚯 FI 😒	(MIB)			
Supe	ervisor	:us										
Process mqt	_status started											
REFRESH	RESTART ALL STOP A	LL										
State	Description		Name		Action							
running	pid 9736, uptime 0:01:26		matt_natify		Restart	Stop	Clear Log	Tail -f Stdou	Tail -1 S	Iderr		
running	pid 10072, uptime 0:00:00	2	mott_status		Restart	Stop	Clear Log	Tail -f Stdou	Tail -f S	lderr		

• log :

\$ ssh cias01
\$ cd /opt/mqtt-nchc/logs
\$ tail -f askey\_notify\_log.log