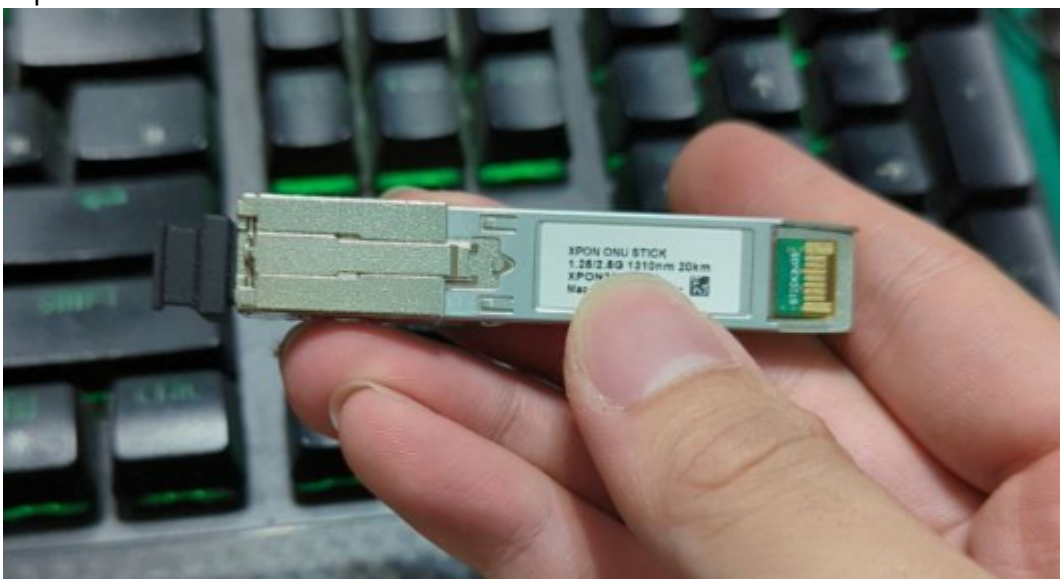
更換 SFP GPON ONU (Hinet)

設備

1. CCR1009-7G-1C-1S+ (https://mikrotik.com/product/CCR1009-7G-1C-1Splus)
2. dfp-34x-2c2

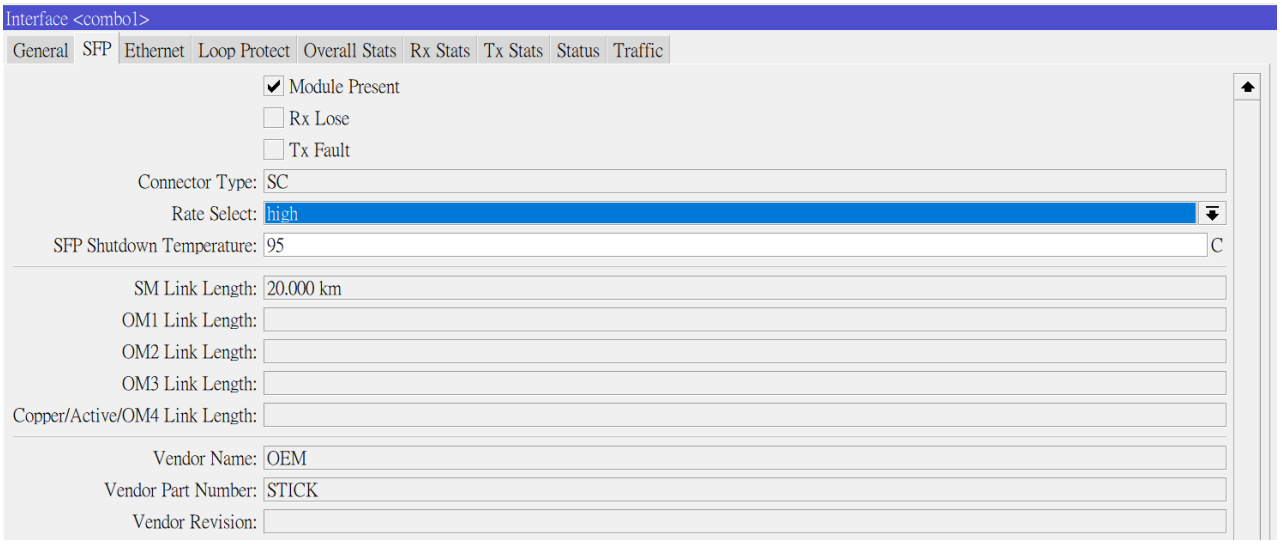


參考資料

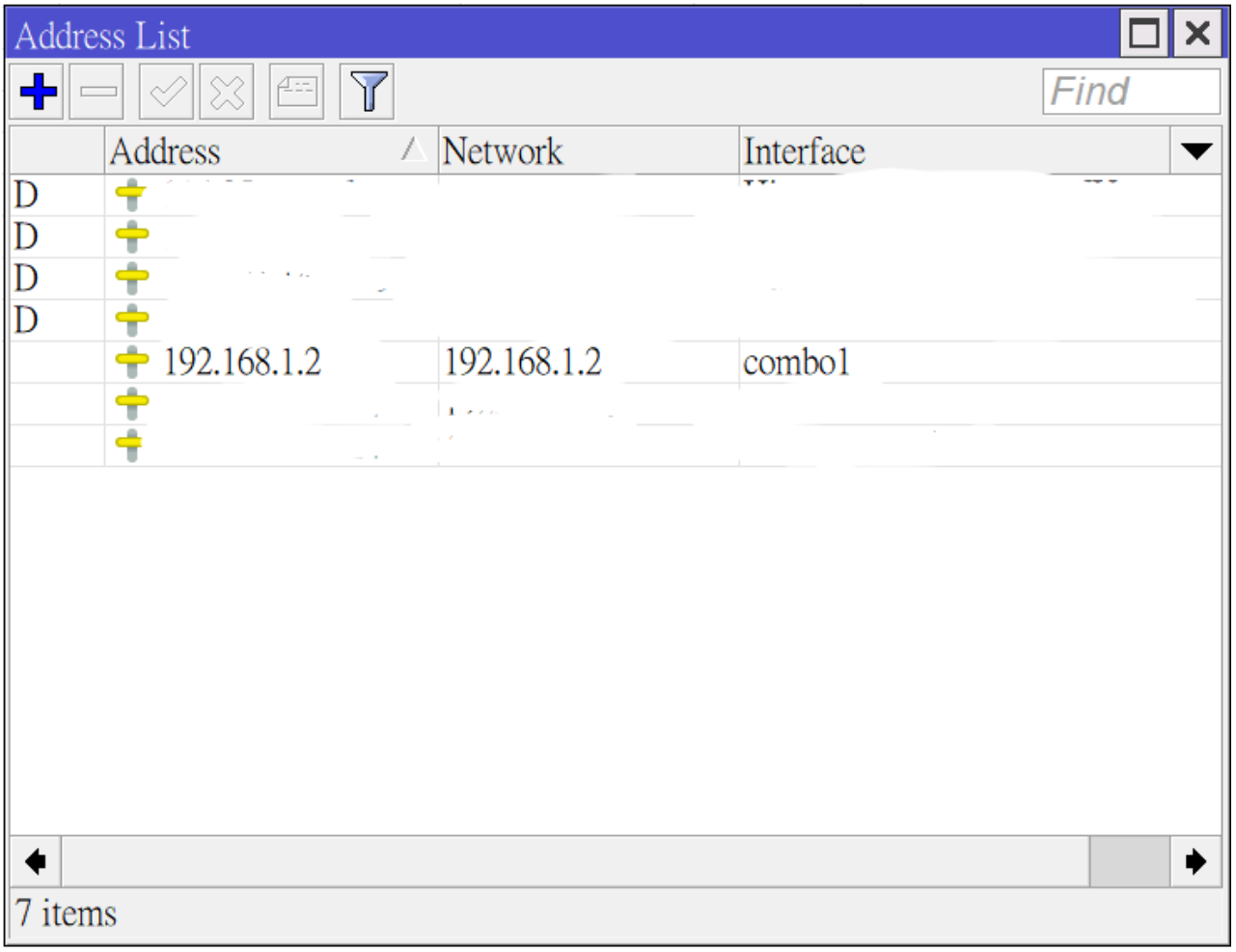
Hacking RTL960x (https://github.com/Anime4000/RTL960x)

步驟

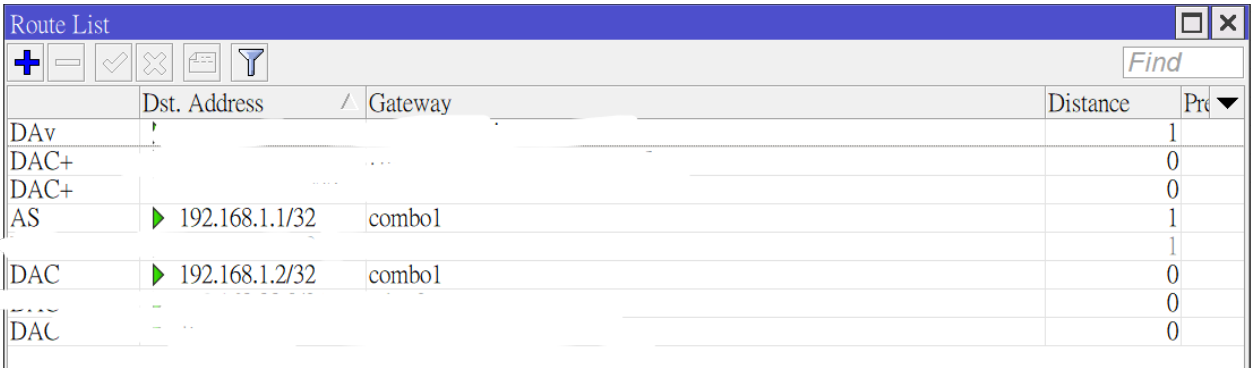
1. 插入 SFP ONU



2. 設定 IP

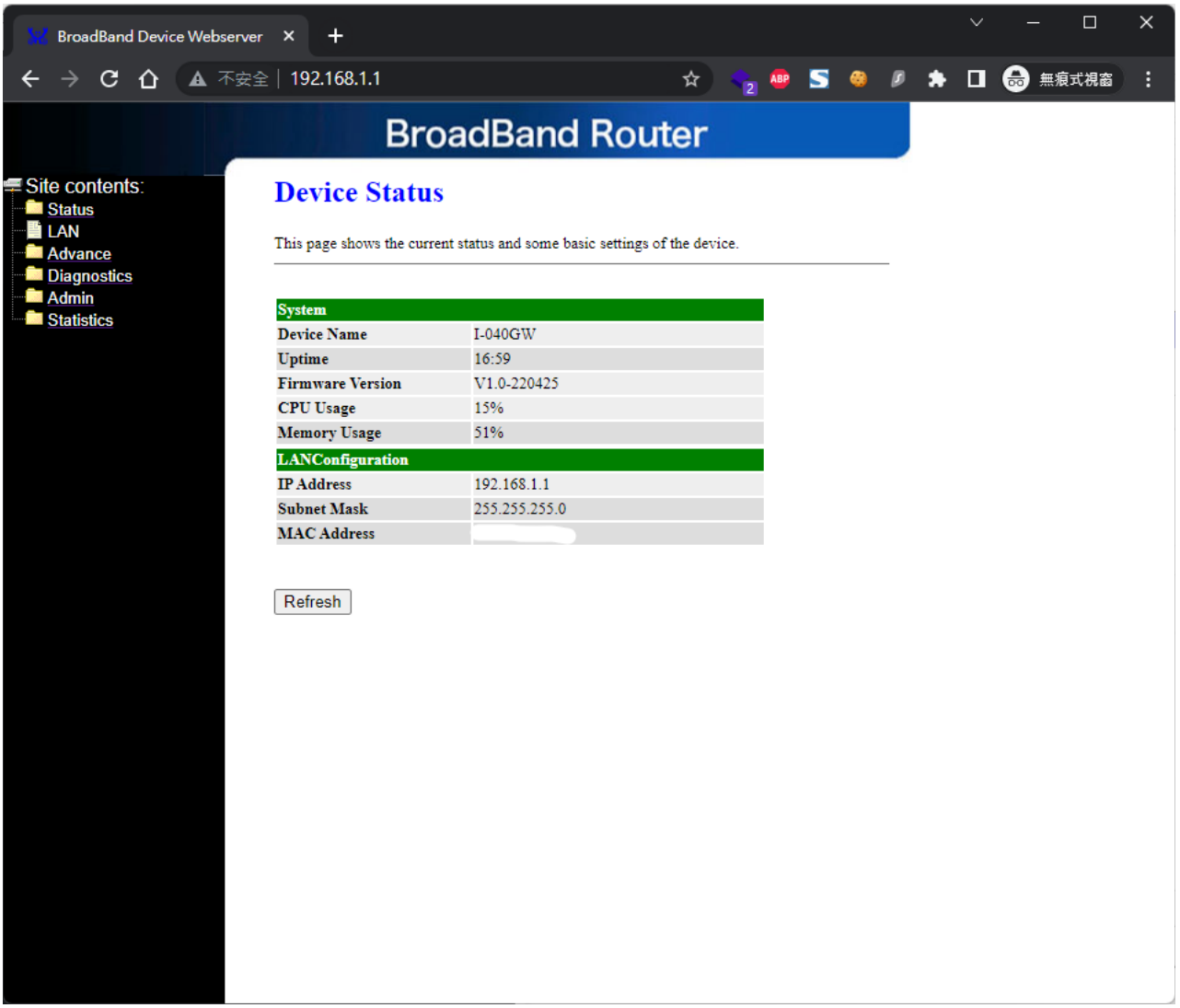


3. 設定路由



4. 即可開啟 ONU 管理介面

http://192.168.1.1 (http://192.168.1.1)



5. 備份初始設定

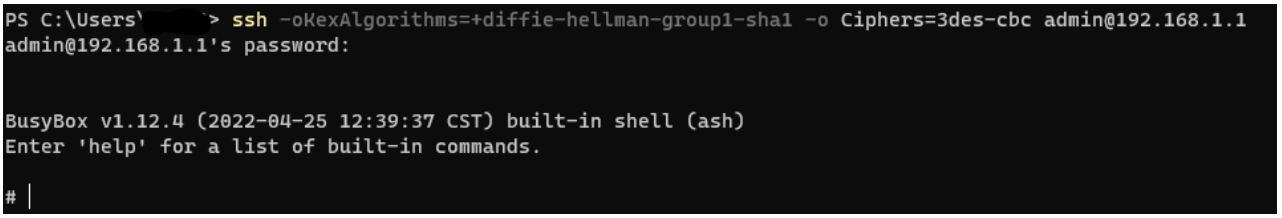
6. ssh 連上 ONU 更改設定

直接 ssh admin@192.168.1.1 (mailto:admin@192.168.1.1) 可能會遇到

```
Unable to negotiate with 192.168.1.1 port 22: no matching key exchange metho
```

ssh 要加上

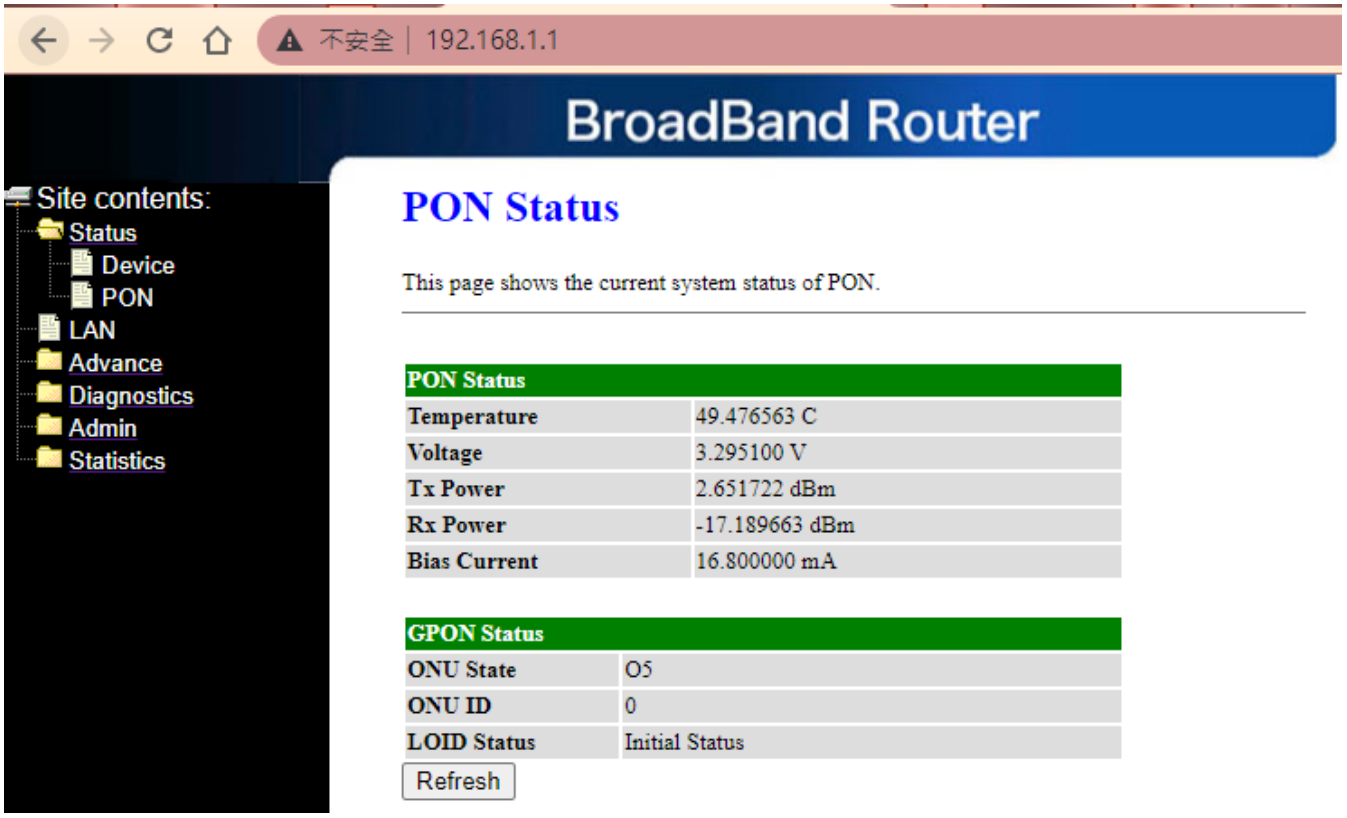
```
-oKexAlgorithms=+diffie-hellman-group1-sha1 -o Ciphers=3des-cbc
```



7. 修改設定
   填入資訊可參考Stock_ONU.md (https://github.com/Anime4000/RTL960x/blob/main/Docs/Stock_ONU.md)

```
flash set GPON_PLOAM_FORMAT 1
flash set GPON_PLOAM_PASSWD DEFAULT012(Hinet專線號碼即SLID)
flash set GPON_ONU_MODEL I-040GW(Hinet設備型號)
flash set GPON_SN GTHG12345678(Hinet設備Serial Number)
flash set PON_VENDOR_ID GTHG
flash set HW_HWVER 3FE99997HGW001(Hinet設備硬體版本)
flash set OMCI_SW_VER1 I040GWR200110(Hinet設備韌體版本)
flash set OMCI_SW_VER2 I040GWR200110(Hinet設備韌體版本)
flash set OMCC_VER 128
flash set OMCI_TM_OPT 0
flash set OMCI_FAKE_OK 1
flash set OMCI_OLT_MODE 21
reboot
```

重開機後在 PON Status 可能會看到 LOID Status 在 Initial Status， 這是正常的因為 Hinet 沒用到 LOID



8. 查看 vlan

```
1 omcicli mib get 84
```

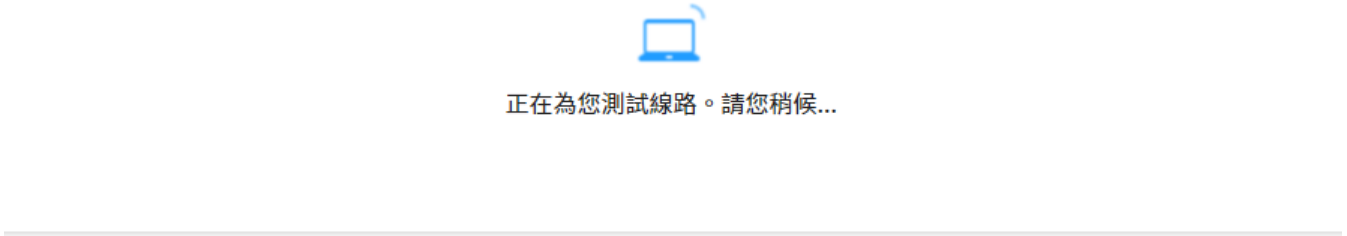
```
BusyBox v1.12.4 (2022-04-25 12:39:37 CST) built-in shell (ash)
Enter 'help' for a list of built-in commands.

# omcicli mib get 84
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
VlanTagFilterData
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
================================
EntityID: 0x02
FilterTbl[0]: PRI 0,CFI 0, VID 1446
FwdOp:  0x10
NumOfEntries: 1
================================
================================
EntityID: 0x03
FilterTbl[0]: PRI 0,CFI 0, VID 1445
FwdOp:  0x10
NumOfEntries: 1
================================
#
```

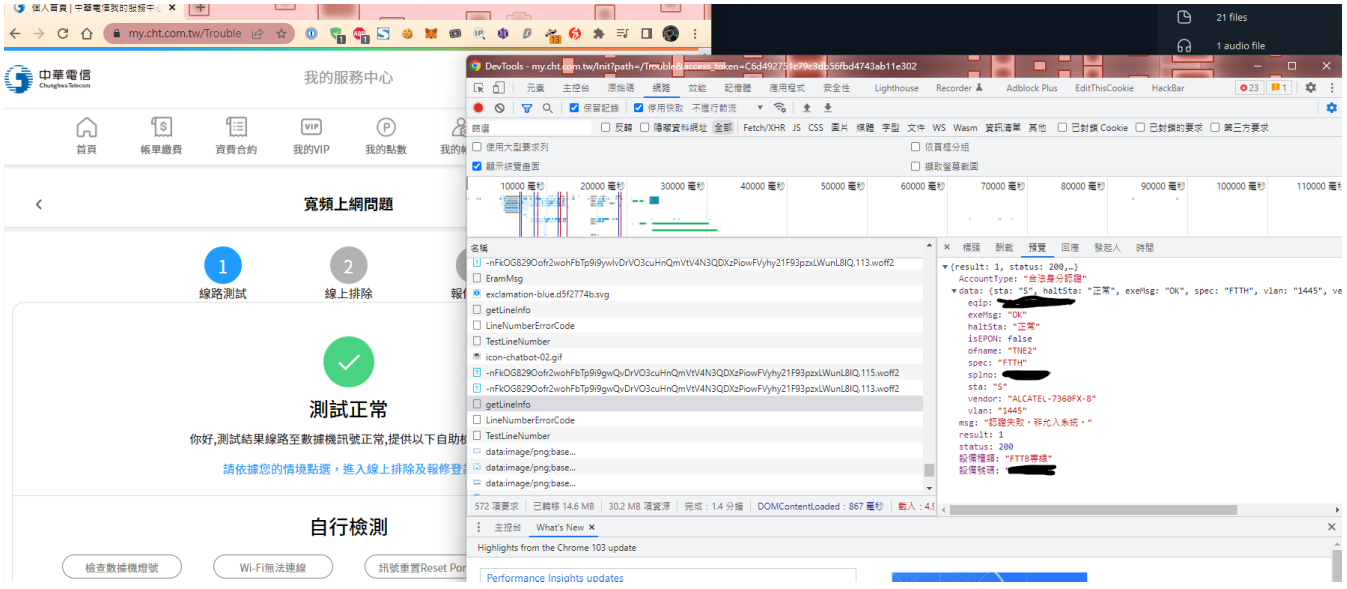
開啟Hinet故障報修 (https://my.cht.com.tw/Trouble)

- 可以兩個 Vlan 都分別先試看看

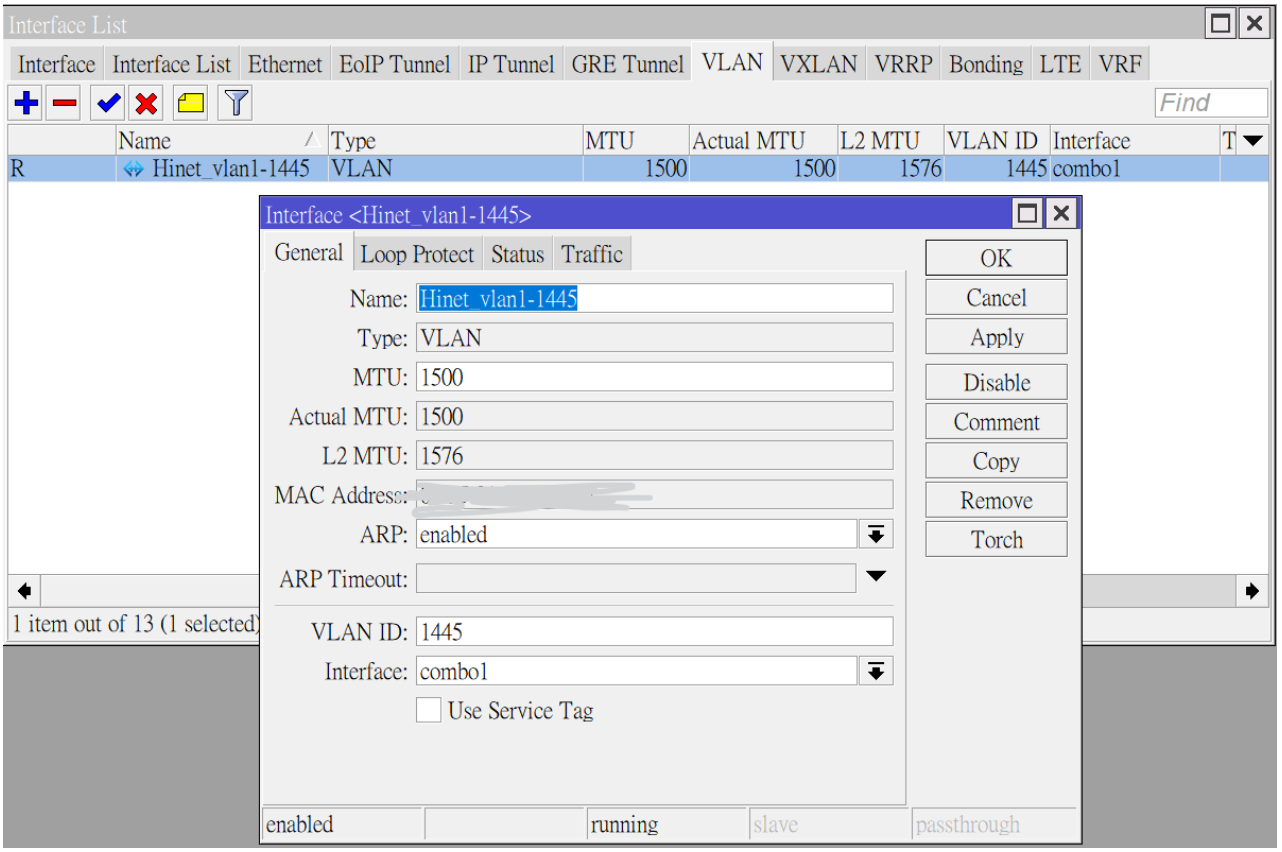
需先開啟瀏覽器開發人員工具(F12)
回到網頁選取所使用線路



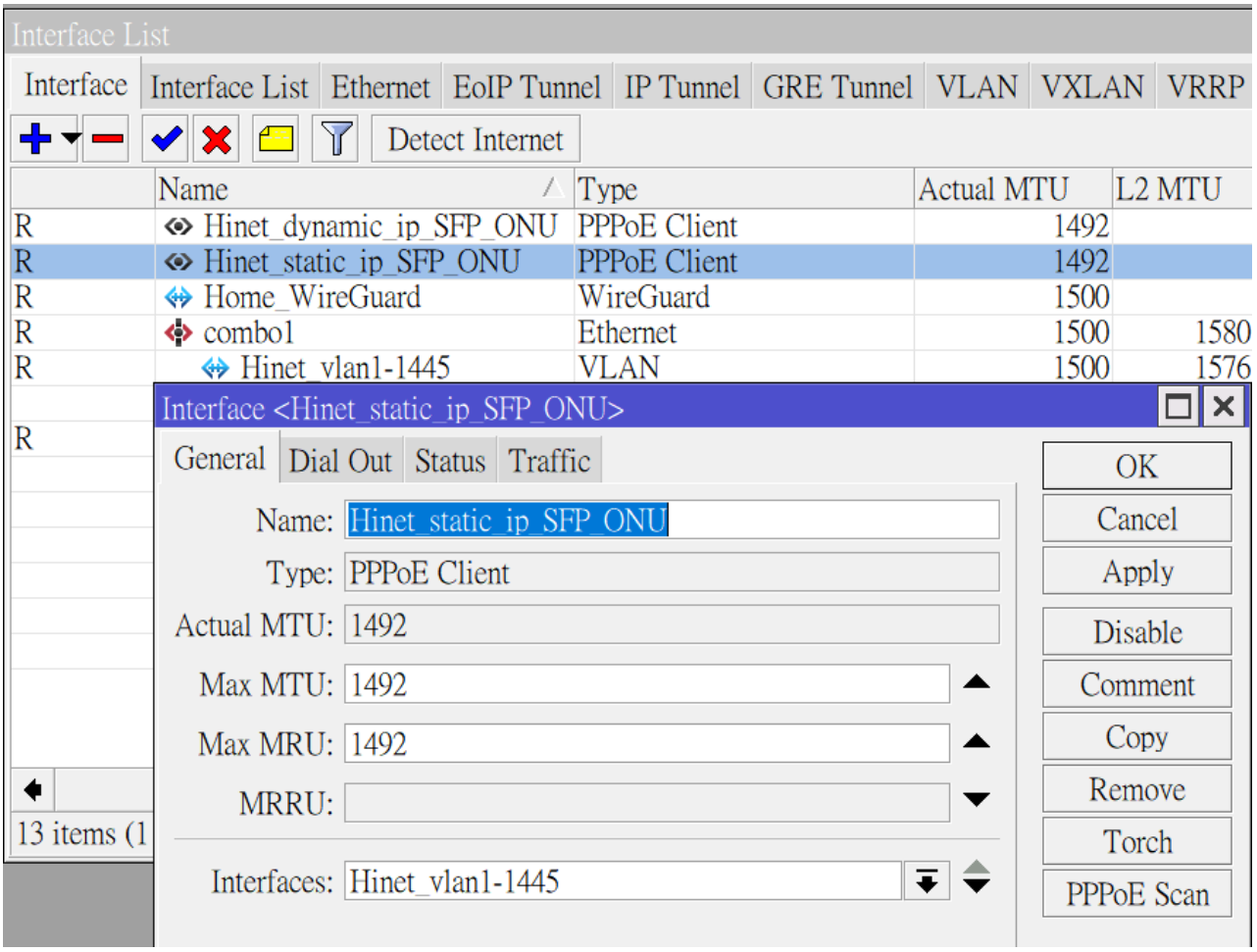
待測試完成後找尋 getLineInfo
裡面的 vlan 即是所需 vlan



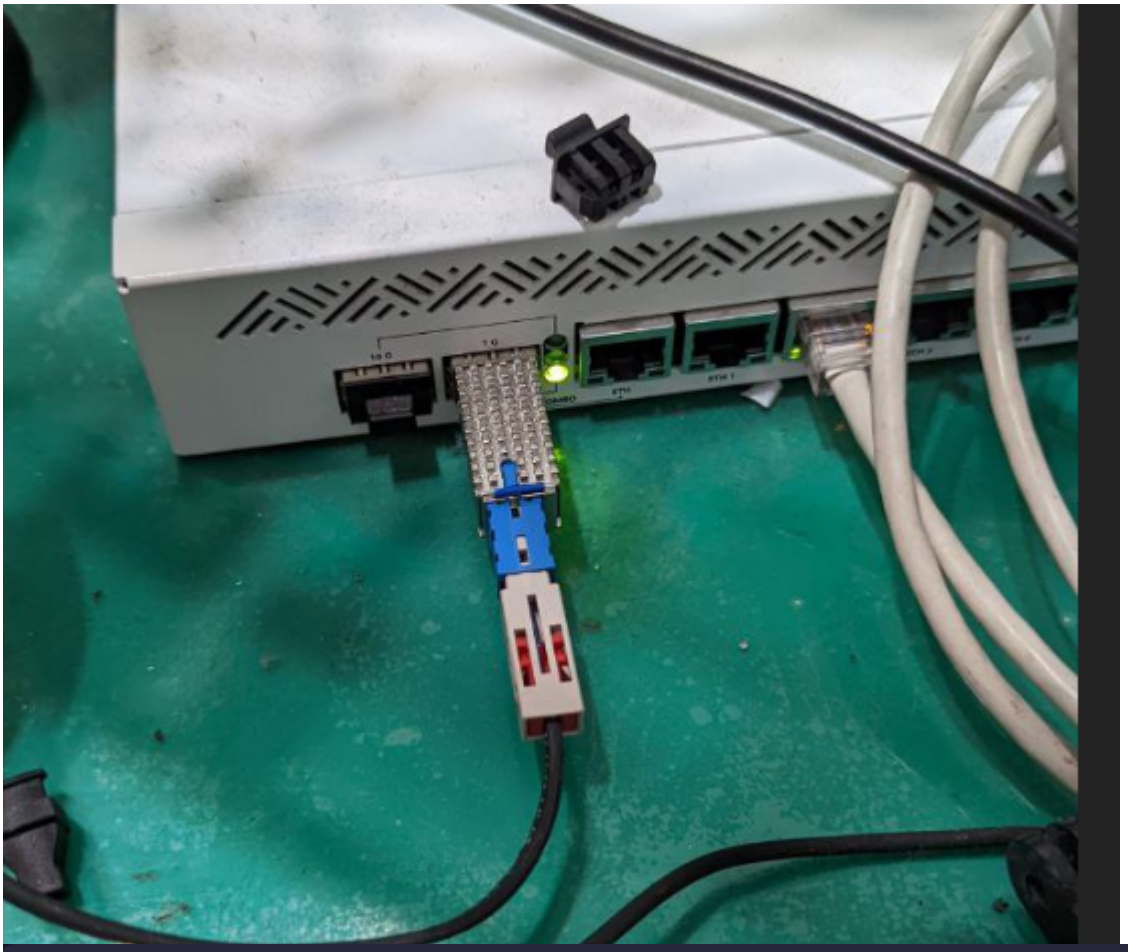
9. 設定 vlan



10. 設定 PPPOE 使用上步驟 vlan



11. Enjoy!!



DOWNLOAD Mbps
503.50

UPLOAD Mbps
254.88

Ping ms 3 8 26

GO

Connections
Multi

Chief Telecom
Hsinying
Change Server

HiNet

HOW DOES YOUR DOWNLOAD SPEED COMPARE WITH YOUR EXPECTATIONS?

1	2	3	4	5

Much worse As expected Much better