已經安裝過的軟體: (ubuntu 20.04)

**sudo apt-get install -y screen expect xinetd telnetd mz unoconv curl tshark**

**sudo apt-get install -y wireshark vlan tftpd-hpa openssh-server links vsftpd**

** For snmp**

**sudo apt-get install -y libgmp3-dev**

**sudo apt-get install -y snmpd snmp snmp-mibs-downloader**

** For jq**

**wget** [**https://github.com/stedolan/jq/releases/download/jq-1.6/jq-1.6.tar.gz**](https://github.com/stedolan/jq/releases/download/jq-1.6/jq-1.6.tar.gz)

**tar xfvz jq-1.6.tar.gz**

**cd jq-1.6**

**sudo apt-get install -y automake**

**sudo apt-get install -y libtool bison flex valgrind gawk**

**./configure**

**autoreconf -fvi**

**make**

**sudo make install**

1. screen RS232 (screen /dev/ttyS0 115200)

2. wireshark 抓封包

3. shc 轉換 shell 成執行檔, (shc –rvT –f xxx.sh)

<http://www.datsi.fi.upm.es/~frosal/sources/>

<https://github.com/neurobin/shc>

wget http://www.datsi.fi.upm.es/~frosal/sources/shc-3.8.9b.tgz

tar xzvf shc-3.8.9b.tgz

wget https://github.com/neurobin/shc/archive/4.0.3.tar.gz

mv 4.0.3.tar.gz shc-4.0.3.tar.gz

tar xzvf shc-4.0.3.tar.gz

cd shc-4.0.3

$ sudo add-apt-repository ppa:neurobin/ppa

$ ./configure

$ make

$ sudo make install

使用 shc 編譯 shell script，**shc -r -f test.sh**

test.sh.x 是執行檔，test.sh.x.c 則是編譯使用的 C source code，部屬給 End-User 時，將 \*.x 複製過去就可以執行！

另外一個相當不錯的功能，可以指定到期日，超過某一天之後就不能執行

$ shc -e 31/1/2000 -m ‘Out of date, No money, No running’ -r -f test.sh

如果要將 \*.x 帶到別台 Linux 執行，則目的端主機也要安裝 shc

來源端主機，編譯時要加上 -T -v

$ shc -e 31/1/2000 -m ‘Out of date, No money, No running’ -r -T -v -f test.sh

4. vlan vconfig (vconfig add eth1 100)

5. bittwist 文字模式的建立封包軟體(bittwist, bittwiste), -r 有 bug

<http://bittwist.sourceforge.net/>

$ sudo apt-get install libpcap-dev

然後進 bittwist-linux-2.0 資料夾內

$ sudo make

$ cd src

$ sudo cp bittwist /usr/bin

$ sudo cp bittwiste /usr/bin

6. expect 使用 expect 來建立 Shell 文字輸入自動化

7. iperf

8. tftpd server

$ sudo apt-get install tftpd-hpa xinetd

$ sudo nano /etc/xinetd.d/tftp 加入以下內容(需要在 /home內建立 tftproot資料夾)

service tftp

{

socket\_type = dgram

protocol = udp

wait = yes

user = root

server = /usr/sbin/in.tftpd

server\_args = -s /home/tftproot

disable = no

per\_source = 11

cps = 100 2

flags = IPv4

}

確認 tftp 是否有啟動, 若無請將電腦重開機:

$ netstat -al | grep tftp

udp 0 0 \*:tftp \*:\*

test@ubuntu:~$

9. pppoe

新增加帳號:

$ sudo nano /etc/ppp/pap-secrets (在最後貼上“test1” \* “123456”)

$ sudo nano /etc/ppp/chap-secrets (在最後貼上“test1” \* “123456”)

增加 forward, 否則要到 IP, 也不能傳送 traffic, 如下: (每次開機就必須重新跑一次!!)

$ sudo nano /etc/sysctl.conf modify as below:

net.ipv4.ip\_forward=1

or

$ sudo sysctl -w net.ipv4.ip\_forward=1

啟動 pppoe server: (從 10.10.10.100 開始分配 IP)

$ nano ~/my-service/my-pppoe.sh 加入以下的內容(需要)

sudo pppoe-server -I eth1 -L 10.0.0.1 -R 10.0.0.100 -N 10 -T 30000

下達以下的指令, 讓系統開機時候就可直接載入啟動:

$ sudo ln -s ~/my-service/my-pppoe.sh /etc/init.d/my-pppoe.sh

$ chmod 755 ~/my-service/my-pppoe.sh

$ sudo update-rc.d -f my-pppoe.sh defaults (讓 pppoe server 在一開機時候自動載入)

如果要移除一開機就載入的話, 請下達以下指令:

$ sudo update-rc.d -f my-pppoe.sh remove

10. openssh-server (http://blog.udn.com/nigerchen/2262865)

11. mz packet generator!!!

<http://www.perihel.at/sec/mz/#download>

<http://www.digipedia.pl/man/doc/view/mz.1/>

<http://www.darknet.org.uk/2011/01/mausezahn-fast-traffic-generatorpacket-crafting-tool/>

<http://manpages.ubuntu.com/manpages/lucid/man1/mz.1.html>

12. unoconv 轉 excel/word 到 pdf

13. ftp server vsftpd

$ sudo nano /etc/vsftpd.conf 修改下內容:

local\_enable=YES

write\_enable=YES

$ sudo /etc/init.d/vsftpd restart

14. telnet server telnetd ( 讓Ubuntu Linux作業系統開啟Telnet服務 )

$ sudo apt-get install xinetd telnetd

$ sudo nano /etc/xinetd.conf並加入以下內容：

defaults

{

# Please note that you need a log\_type line to be able to use log\_on\_success

# and log\_on\_failure. The default is the following :

# log\_type = SYSLOG daemon info

instances = 60

log\_type = SYSLOG authpriv

log\_on\_success = HOST PID

log\_on\_failure = HOST

cps = 25 30

}

includedir /etc/xinetd.d

**$ sudo nano /etc/xinetd.d/telnet並加入以下內容：**

# default: on

# description: The telnet server serves telnet sessions; it uses \

# unencrypted username/password pairs for authentication.

service telnet

{

disable = no

flags = REUSE

socket\_type = stream

wait = no

user = root

server = /usr/sbin/in.telnetd

log\_on\_failure += USERID

}

**重啟機器或重啟網路服務sudo /etc/init.d/xinetd restart**

15. snmp

**sudo apt-get install -y libgmp3-dev**

**sudo apt-get install -y snmpd snmp snmp-mibs-downloader**

sudo net-snmp-config --create-snmpv3-user -ro -a MD5 -A 12345678 public

Apparently at least one snmpd demon is already running.

You must stop them in order to use this command.

**先關閉 snmpd 服務 (建立 snmpv3 加密, 需要先關閉 snmpd 才能建立成功)**

test@Pi3BPlus:~$ **service snmpd stop**

==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ===

Authentication is required to stop 'snmpd.service'.

Authenticating as: test,,, (test)

Password:

==== AUTHENTICATION COMPLETE ===

sudo net-snmp-config --create-snmpv3-user -ro -a MD5 -A 12345678 public

adding the following line to /var/lib/snmp/snmpd.conf:

createUser public MD5 "12345678" DES

adding the following line to /usr/share/snmp/snmpd.conf:

rouser public

test@Pi3BPlus:~$

**啟動snmpd v3**

**# service snmpd start**

**系統要載入一個MIB文 件，net-snmp必須知道從哪裡載入。預設情況下是下邊兩個目錄:**

**1. $HOME/.snmp/mibs**

**2. /usr/local/share/snmp/mibs**

For snmp trap:

borchen@pi3bp:~/src/github/cellular-router/m300/cfg$ cat snmptrapd.conf

authCommunity log,execute,net public

borchen@pi3bp:~/src/github/cellular-router/m300/cfg$

16. http browser links

17. web server apache2

將 \*.sh 放在 /usr/lib/cgi-bin/ 內, 呼叫方式: **http://localhost/cgi-bin/\*.sh**

請參考 my\_func/web/web-1.sh ~ web-5.sh

$ sudo service apache2 restart

$ sudo nano /etc/apache2/ports.conf

18. curl 可判定網頁的相關資訊

請參考 my\_func/web/web-6.sh

19. strongSwan IPSec Client

sudo apt-get install -y libgmp3-dev

wget <https://download.strongswan.org/strongswan-5.8.4.tar.bz2>

tar xjvf strongswan-5.8.4.tar.bz2; cd strongswan-5.8.4

./configure --prefix=/usr --sysconfdir=/etc

make

sudo make install

20. 新版的iperf3

以下皆為同一人提供

https://www.neowin.net/forum/topic/1234695-iperf-37-windows-build/page/2/

https://github.com/esnet/iperf

https://downloads.es.net/pub/iperf/

在此有個已知問題

https://github.com/esnet/iperf/issues/348

解決方法是照下面流程

wget <https://github.com/esnet/iperf/archive/3.9.tar.gz>

mv 3.9.tar.gz iperf-3.9.tar.gz

tar xzvf iperf-3.9.tar.gz

cd iperf-3.9

make uninstall

make clean

./configure

make -j20

sudo make install

sudo rm /usr/lib/x86\_64-linux-gnu/\*iperf\*

sudo ldconfig

21. SimpleHttpServer.py

wget https://github.com/oreillymedia/atlas-jsrepl-skeleton/blob/master/theme/html/javascripts/jsrepl/extern/python/closured/lib/python2.7/SimpleHTTPServer.py

python -m SimpleHTTPServer 8080

附註:

1. tshark 文字模式的抓封包 sudo apt-get install tshark

2. netperf

3. nc (netcat) ubuntu 內建的 tcp, udp server client command

<http://www.tutorialspoint.com/unix_commands/nc.htm>

<http://www.g-loaded.eu/2006/11/06/netcat-a-couple-of-useful-examples/>

4. cu cu -l /dev/ttyS0 -s 9600 (離開狀態 “~.”, 看 help “~?” )

5. catdoc xls 轉 csv (xls2csv) need ????

catdoc套裝軟體有個xls2csv的命令的，我是用apt-cache search xls csv搜索出來的，ubuntu就是好。