

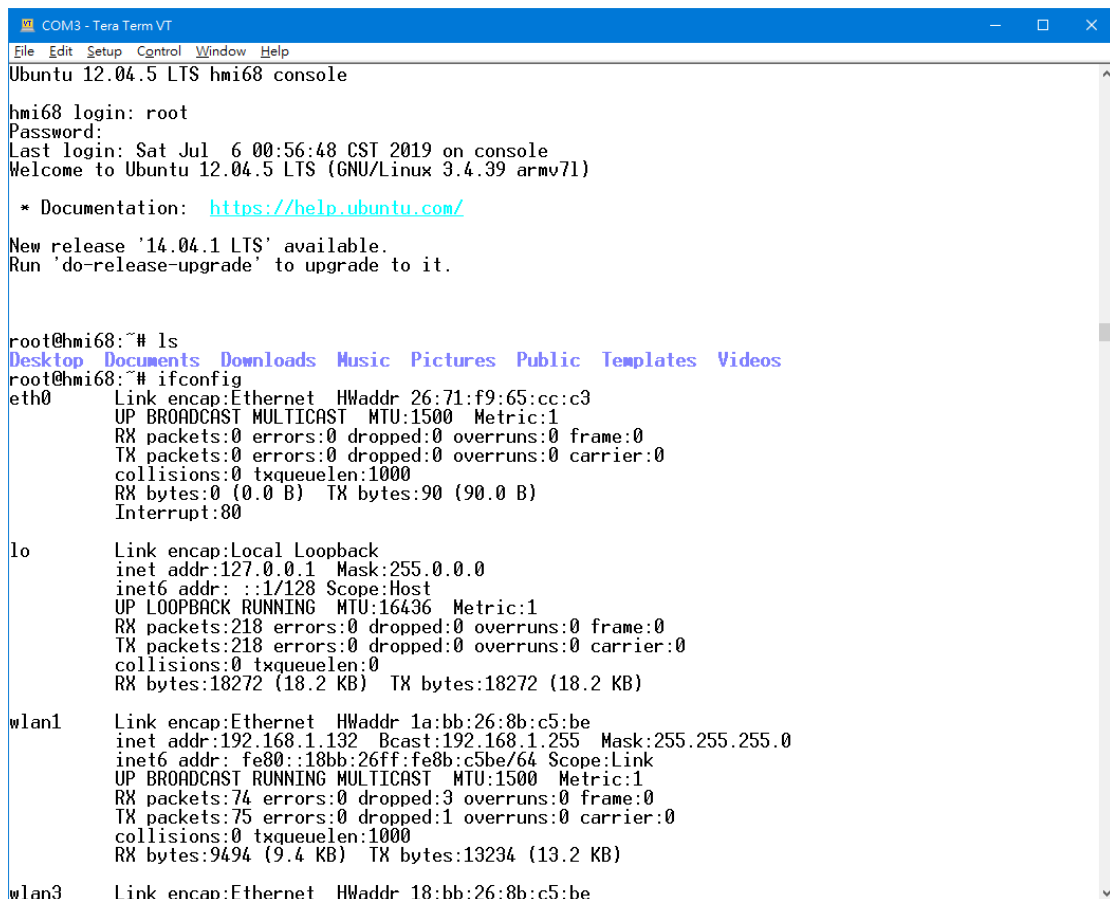
1. HMI Linux – UBUNTU 版本

開發須知

- (1) 桌面環境，包括桌面本身、功能表、面板、文件管理、窗口管理以及一些其他的應用程式。屬於於一個完整格圖形化程示集
- (2) 長映桌面版本使用 **ubuntu 12.04/14.04**，無桌面版 14.04
- (3) 由於 Arm 設備需要與相關硬體調校，因此不能自行進行桌面版本升級。
- (4) Ubuntu 桌面環境含有大量的應用函式庫，也有大量開發者對舊有函式庫更新改善，或是新增各種新類型函式庫。在開發上很便利
- (5) 因為桌面環境含有大量子集函式庫，將耗費更多設備的容量與效能，即需要耗費更多的成本在設備上

設備內容

(1) 命令介面-登入系統與一般 linux 指令



```
COM3 - Tera Term VT
File Edit Setup Control Window Help
Ubuntu 12.04.5 LTS hmi68 console

hmi68 login: root
Password:
Last login: Sat Jul 6 00:56:48 CST 2019 on console
Welcome to Ubuntu 12.04.5 LTS (GNU/Linux 3.4.39 armv7l)

 * Documentation:  https://help.ubuntu.com/

New release '14.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

root@hmi68:~# ls
Desktop Documents Downloads Music Pictures Public Templates Videos
root@hmi68:~# ifconfig
eth0      Link encap:Ethernet  HWaddr 26:71:f9:65:cc:c3
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 B)  TX bytes:90 (90.0 B)
          Interrupt:80

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:218 errors:0 dropped:0 overruns:0 frame:0
          TX packets:218 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:18272 (18.2 KB)  TX bytes:18272 (18.2 KB)

wlan1     Link encap:Ethernet  HWaddr 1a:bb:26:8b:c5:be
          inet addr:192.168.1.132  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::18bb:26ff:fe8b:c5be/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:74 errors:0 dropped:3 overruns:0 frame:0
          TX packets:75 errors:0 dropped:1 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:9494 (9.4 KB)  TX bytes:13234 (13.2 KB)

wlan3     Link encap:Ethernet  HWaddr 18:bb:26:8b:c5:be
```

(2) 命令介面-使用指令來安裝及更新套件

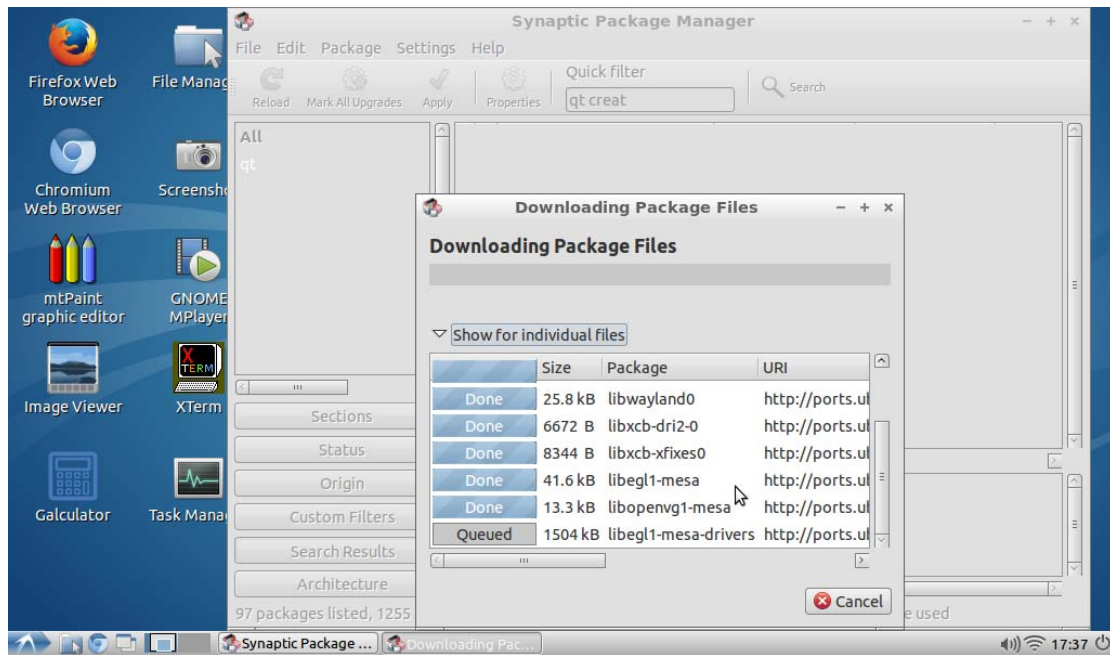
```
COM3 - Tera Term VT
File Edit Setup Control Window Help
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:48 errors:0 dropped:13 overruns:0 frame:0
TX packets:43 errors:0 dropped:1 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:6160 (6.1 KB) TX bytes:9917 (9.9 KB)

root@hmi68:~#
root@hmi68:~# apt-get update
Err http://ports.ubuntu.com precise Release.gpg
  Something wicked happened resolving 'ports.ubuntu.com:http' (-5 - No address associated with hostname
)
Err http://ports.ubuntu.com precise-updates Release.gpg
  Something wicked happened resolving 'ports.ubuntu.com:http' (-5 - No address associated with hostname
)
Err http://ports.ubuntu.com precise-backports Release.gpg
  Something wicked happened resolving 'ports.ubuntu.com:http' (-5 - No address associated with hostname
)
Err http://ports.ubuntu.com precise-security Release.gpg
  Something wicked happened resolving 'ports.ubuntu.com:http' (-5 - No address associated with hostname
)
Ign http://ports.ubuntu.com precise Release
Ign http://ports.ubuntu.com precise-updates Release
Hit http://ports.ubuntu.com precise-backports Release
Hit http://ports.ubuntu.com precise-security Release
Ign http://ports.ubuntu.com precise/main Sources/DiffIndex
Ign http://ports.ubuntu.com precise/restricted Sources/DiffIndex
Ign http://ports.ubuntu.com precise/universe Sources/DiffIndex
Ign http://ports.ubuntu.com precise/main armhf Packages/DiffIndex
Ign http://ports.ubuntu.com precise/restricted armhf Packages/DiffIndex
Ign http://ports.ubuntu.com precise/universe armhf Packages/DiffIndex
Hit http://ports.ubuntu.com precise/main TranslationIndex
Hit http://ports.ubuntu.com precise/restricted TranslationIndex
Hit http://ports.ubuntu.com precise/universe TranslationIndex
Ign http://ports.ubuntu.com precise-updates/main Sources/DiffIndex
Ign http://ports.ubuntu.com precise-updates/restricted Sources/DiffIndex
Ign http://ports.ubuntu.com precise-updates/universe Sources/DiffIndex
Ign http://ports.ubuntu.com precise-updates/main armhf Packages/DiffIndex
Ign http://ports.ubuntu.com precise-updates/restricted armhf Packages/DiffIndex
Ign http://ports.ubuntu.com precise-updates/universe armhf Packages/DiffIndex
Hit http://ports.ubuntu.com precise-updates/main TranslationIndex
Hit http://ports.ubuntu.com precise-updates/restricted TranslationIndex
Hit http://ports.ubuntu.com precise-updates/universe TranslationIndex
Ign http://ports.ubuntu.com precise-backports/main Sources/DiffIndex
Ign http://ports.ubuntu.com precise-backports/restricted Sources/DiffIndex
```

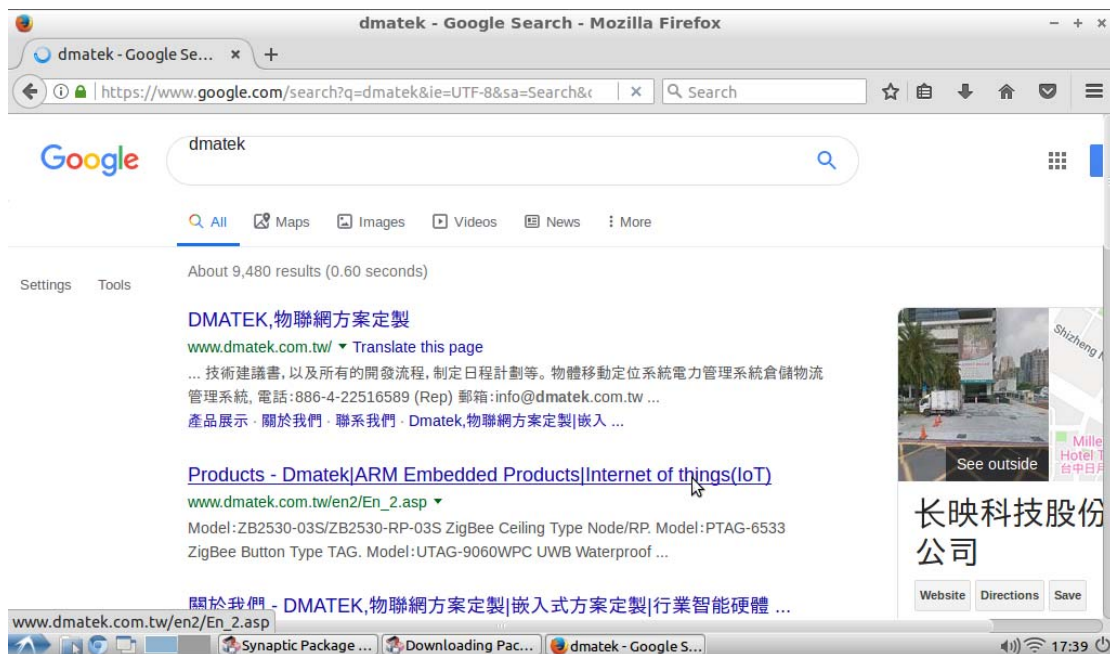
(3) 桌面環境-Ubuntu 12.04 介面圖



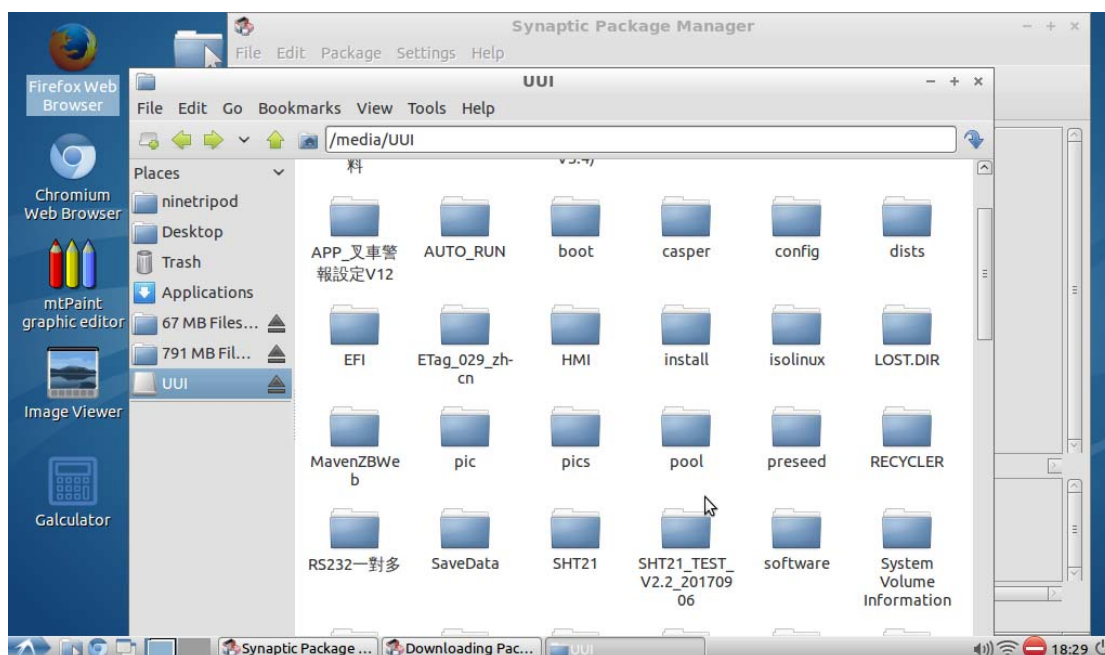
(4) 桌面環境-套件安裝與更新



(5) 桌面環境-瀏覽器



(6)桌面環境-檔案系統及外接儲存裝置(隨身碟)



(7)桌面環境-開發環境，例如以下所示自行安裝的 QT Creator

