

連線至 <http://www.virtualbox.org/wiki/Downloads>  
下載 VirtualBox 虛擬化工具



# VirtualBox

Settings Register  Help/Guide

## Download VirtualBox

Here, you will find links to VirtualBox binaries and its source code.

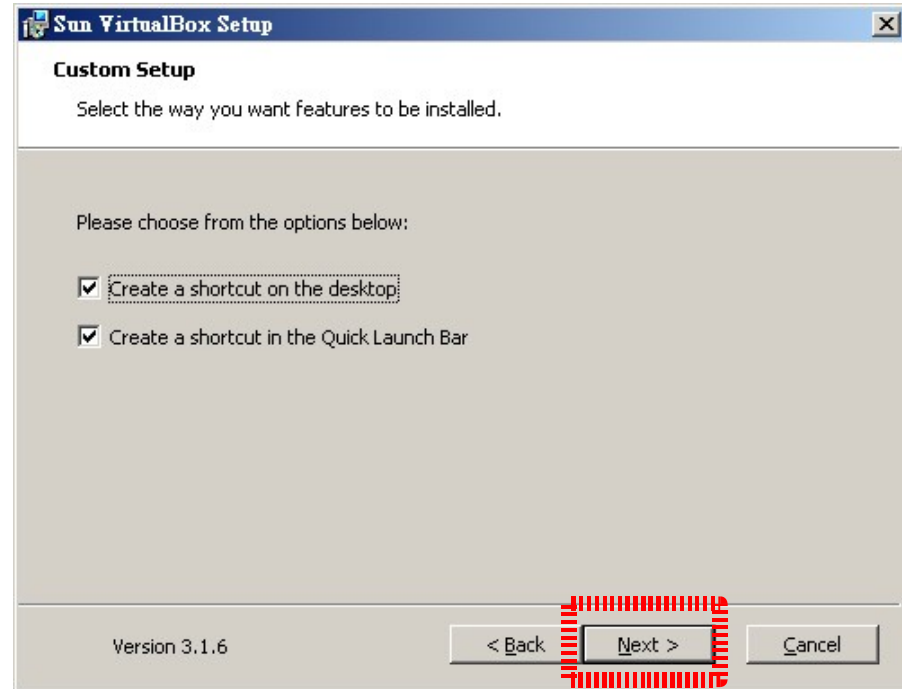
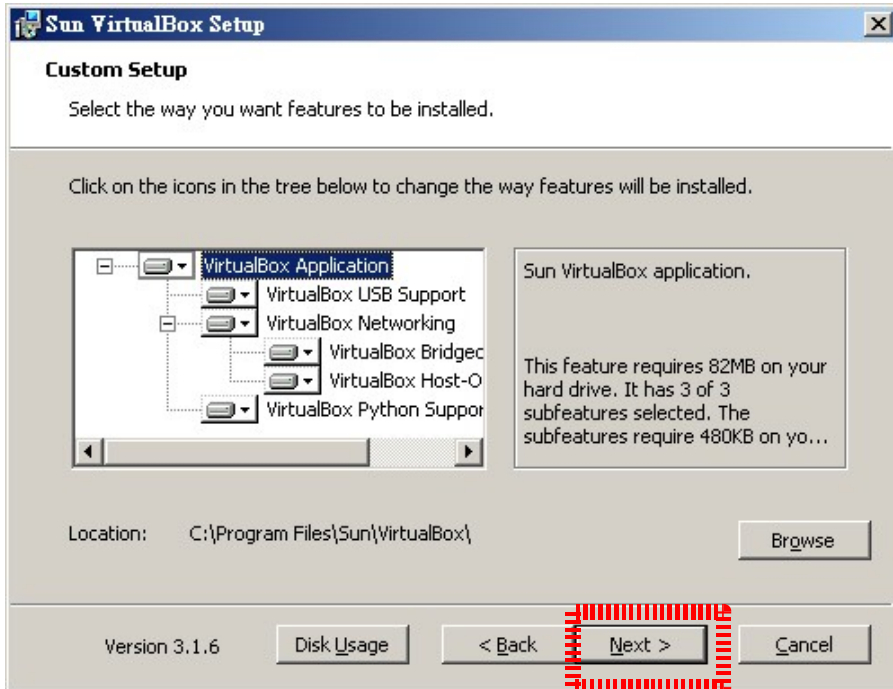
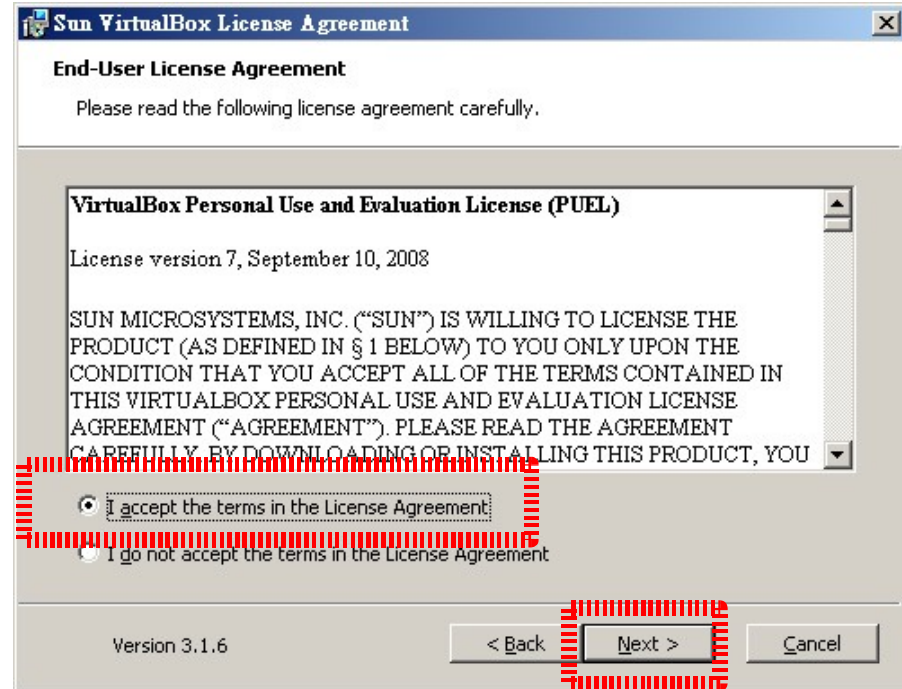
### VirtualBox binaries

The binaries in this section are all released under the [VirtualBox Personal Use and Evaluation License \(PUEL\)](#). By downloading, you agree to the terms and conditions of that license.

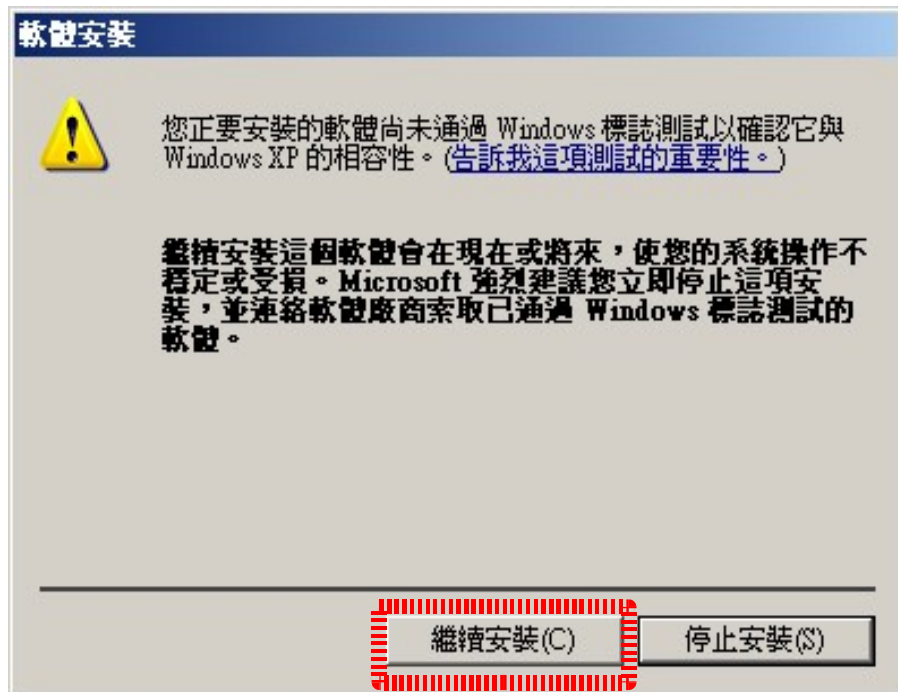
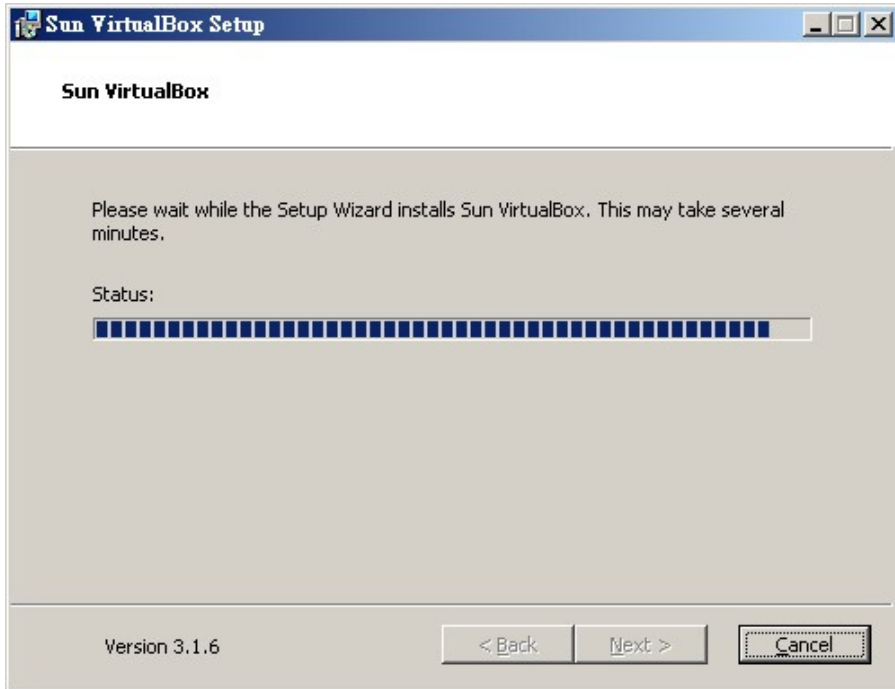
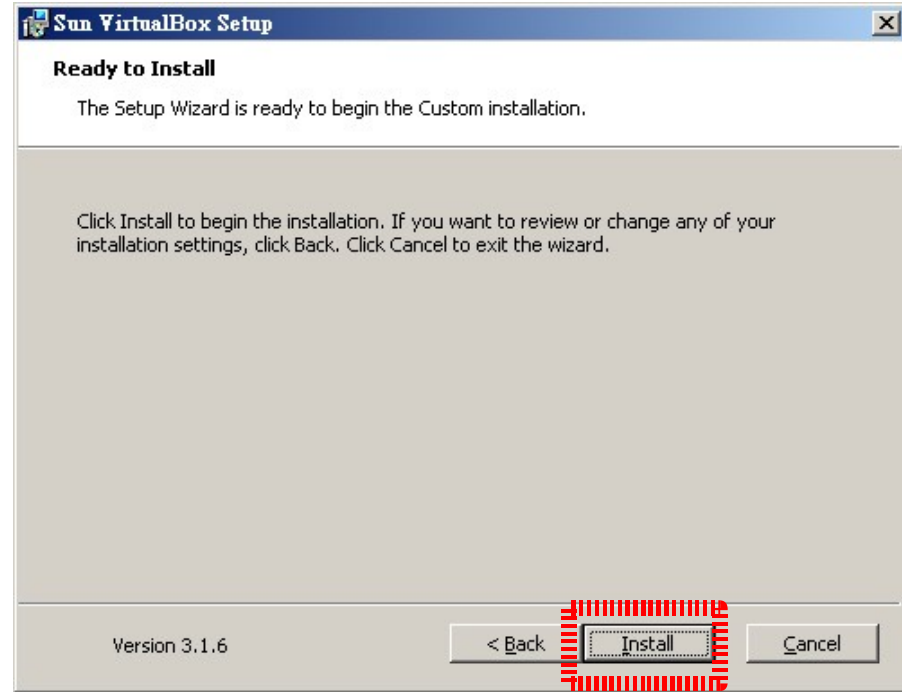
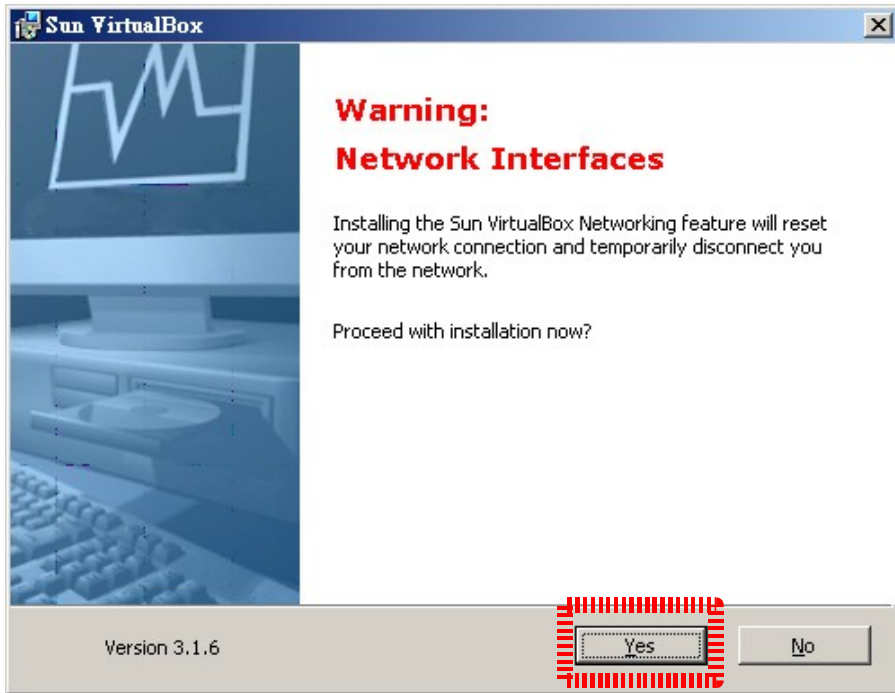
- **VirtualBox 3.1.6 for Windows hosts** ⇨ [x86/amd64](#)
- **VirtualBox 3.1.6 for OS X hosts** ⇨ [Intel Macs](#)  
*Due to an accident the original 3.1.6 Mac OS X package (build 59338) was broken. Please install the fixed package if you installed the broken package. Sorry for the inconveniences!*
- **VirtualBox 3.1.6 for Linux hosts**
- **VirtualBox 3.1.6 for Solaris and OpenSolaris hosts** ⇨ [x86/amd64](#)
- **VirtualBox 3.1.6 Software Developer Kit (SDK)** ⇨ [All platforms](#) (registration required)

[About](#)  
[Screenshots](#)  
[Downloads](#)  
[Documentation](#)  
    [End-user docs](#)  
    [Technical docs](#)  
[Contribute](#)  
[Community](#)

# 安裝 VirtualBox (1)



# 安裝 VirtualBox (2)



# 安裝 VirtualBox (3)

**硬體安裝**


 您正要為這個硬體安裝的軟體:  
VirtualBox Bridged Networking Driver Miniport

尚未通過 Windows 標誌測試以確認它與 Windows XP 的相容性。(告訴我這項測試的重要性。)

**繼續安裝這個軟體會在現在或將來，使您的系統操作不穩定或受損。Microsoft 強烈建議您立即停止這項安裝，並連絡硬體廠商索取已通過 Windows 標誌測試的軟體。**

**繼續安裝(C)**   **停止安裝(S)**

**硬體安裝**

 您正要為這個硬體安裝的軟體:  
VirtualBox Host-Only Ethernet Adapter

尚未通過 Windows 標誌測試以確認它與 Windows XP 的相容性。(告訴我這項測試的重要性。)

**繼續安裝這個軟體會在現在或將來，使您的系統操作不穩定或受損。Microsoft 強烈建議您立即停止這項安裝，並連絡硬體廠商索取已通過 Windows 標誌測試的軟體。**

**繼續安裝(C)**   **停止安裝(S)**

**Sun VirtualBox Setup**

**Sun VirtualBox installation is complete.**

Click the Finish button to exit the Setup Wizard.

Start Sun VirtualBox after installation

Version 3.1.6

**Finish**

**Sun VirtualBox**

檔案(F) 機器(M) 說明(H)

新增(N) 設定值(S) 啟動(T) 捨棄(L)

詳細資料(D) 快取(S) 描述(E)

**歡迎使用 VirtualBox !**

這個視窗的左側部分是在您電腦中的所有虛擬機器清單。清單現在是空的因為您尚未建立任何虛擬機器。

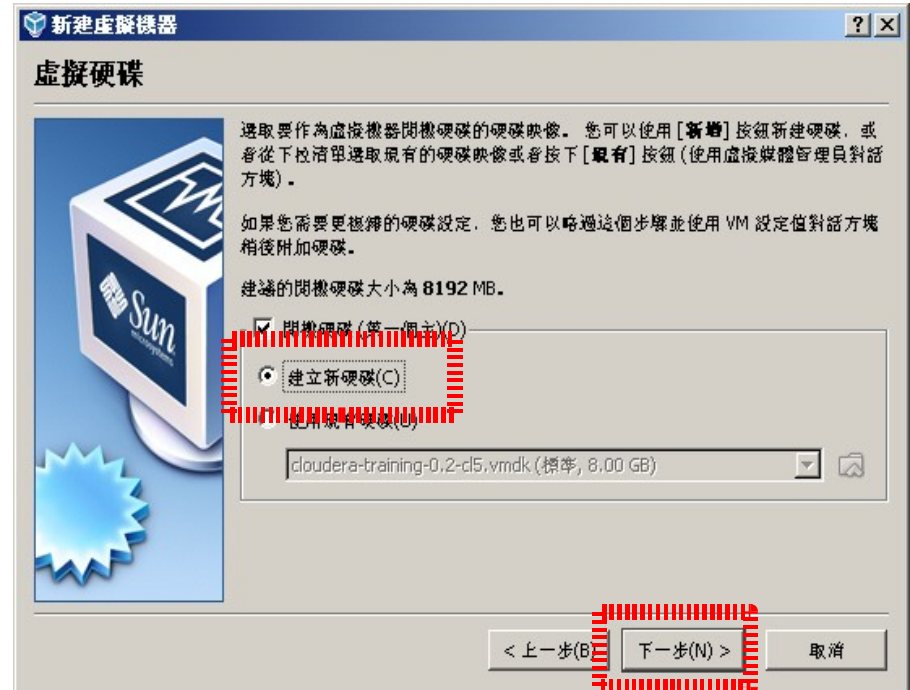
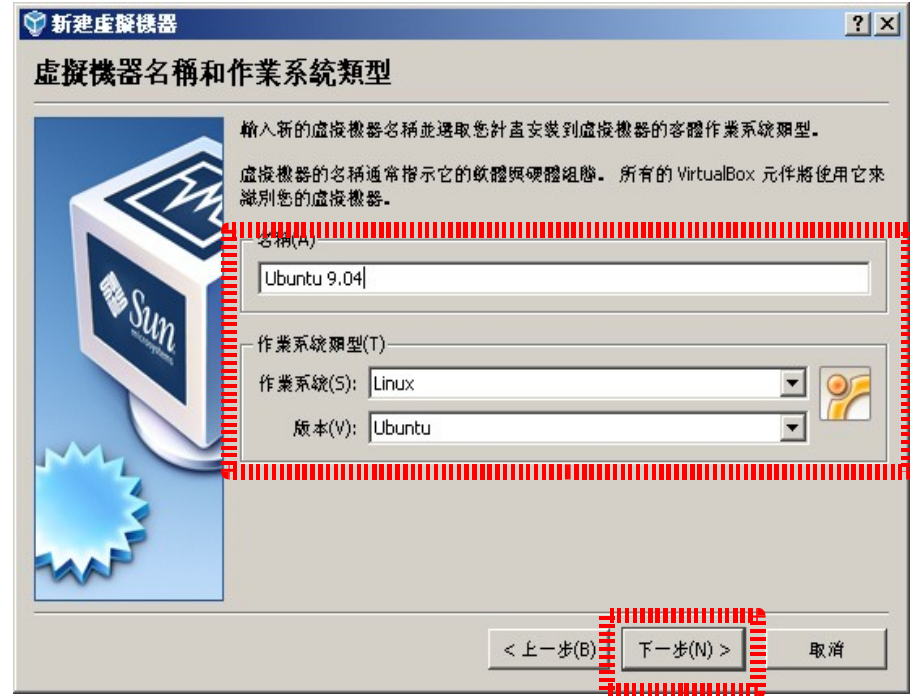
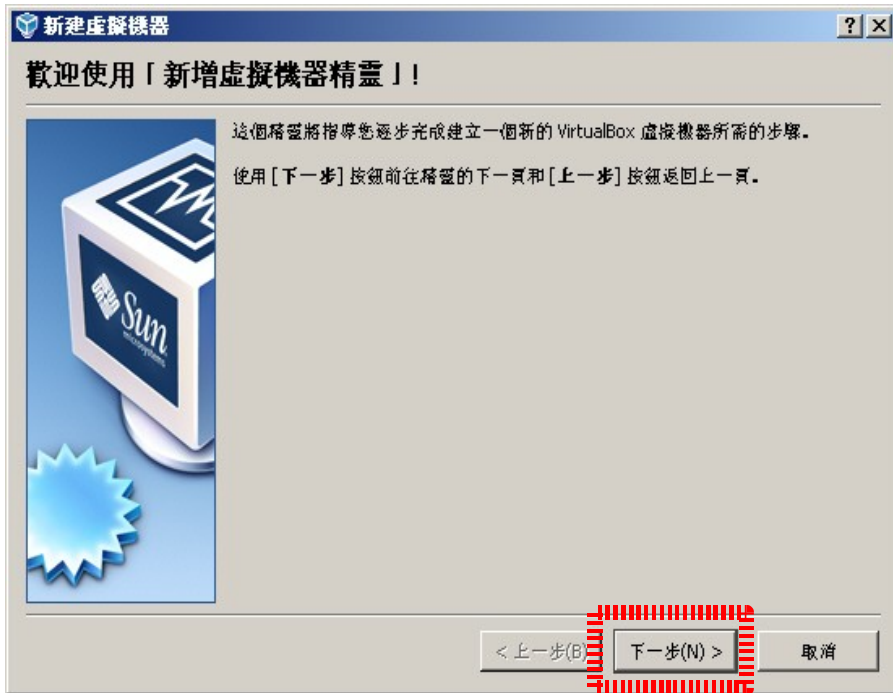
為了新建虛擬機器，在視窗上方位置的主工具列按下 **[新增]** 按鈕。

您可以按下 **[F1]** 按鍵取得即時說明，或訪問 [www.virtualbox.org](http://www.virtualbox.org) 取得最新資訊與新聞。

刪除選取的虛擬機器

# Lab 1 : 安裝 Ubuntu 9.10 GNU/Linux

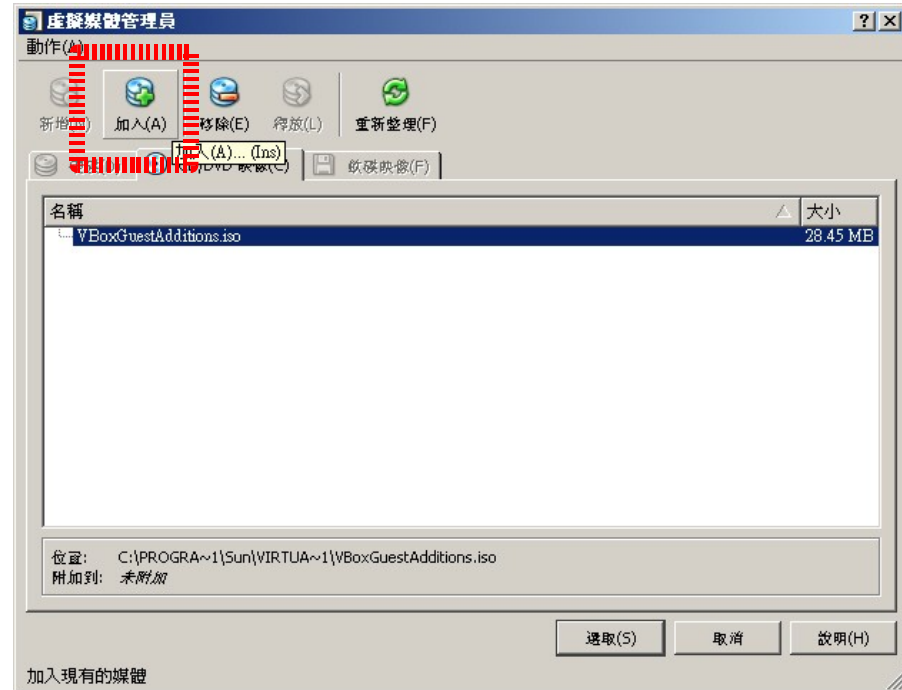
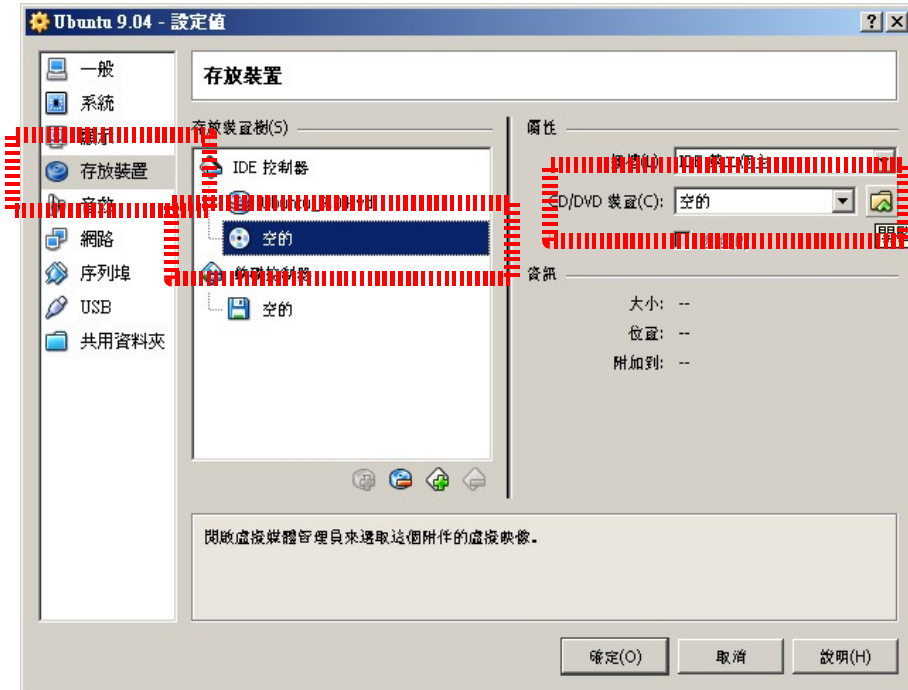
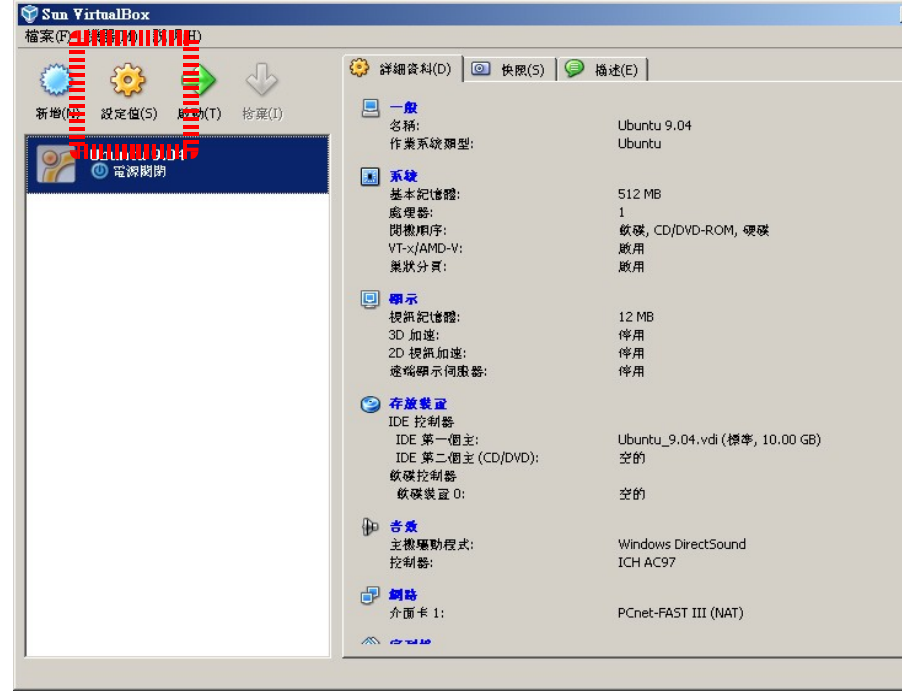
# 安裝 Ubuntu 9.10 (1)



# 安裝 Ubuntu 9.10 (2)

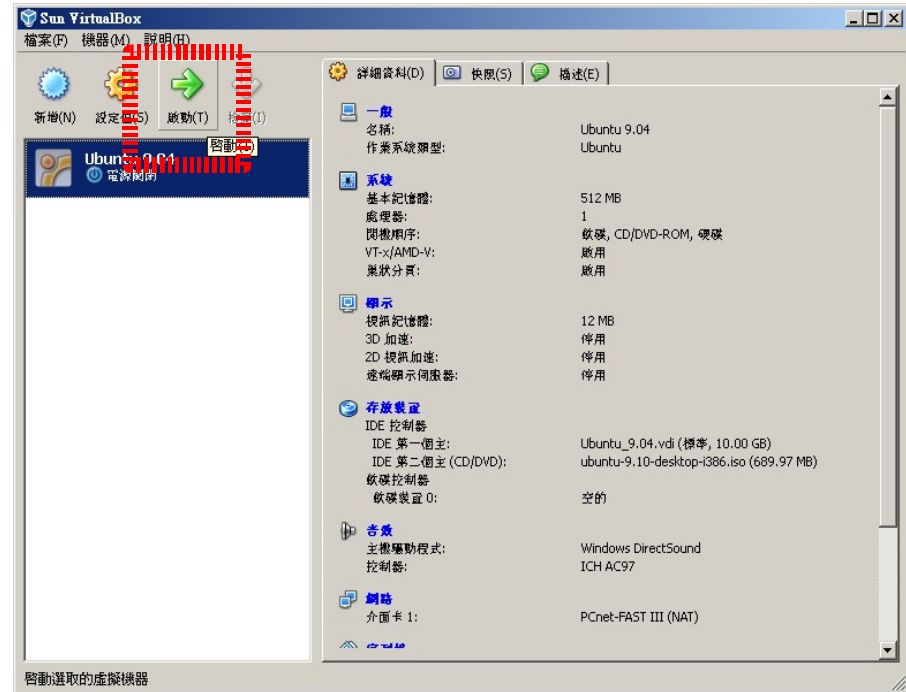
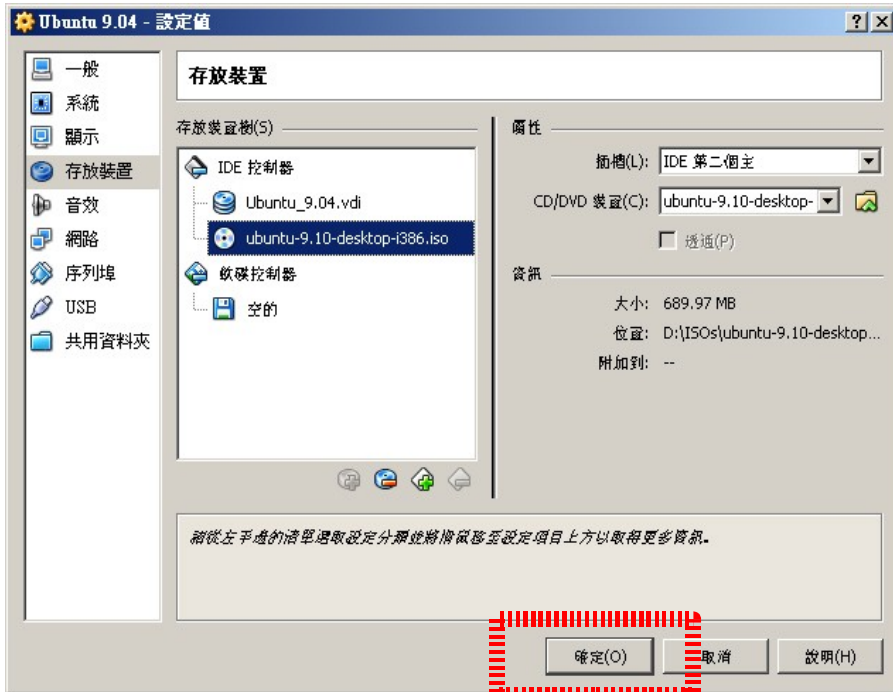
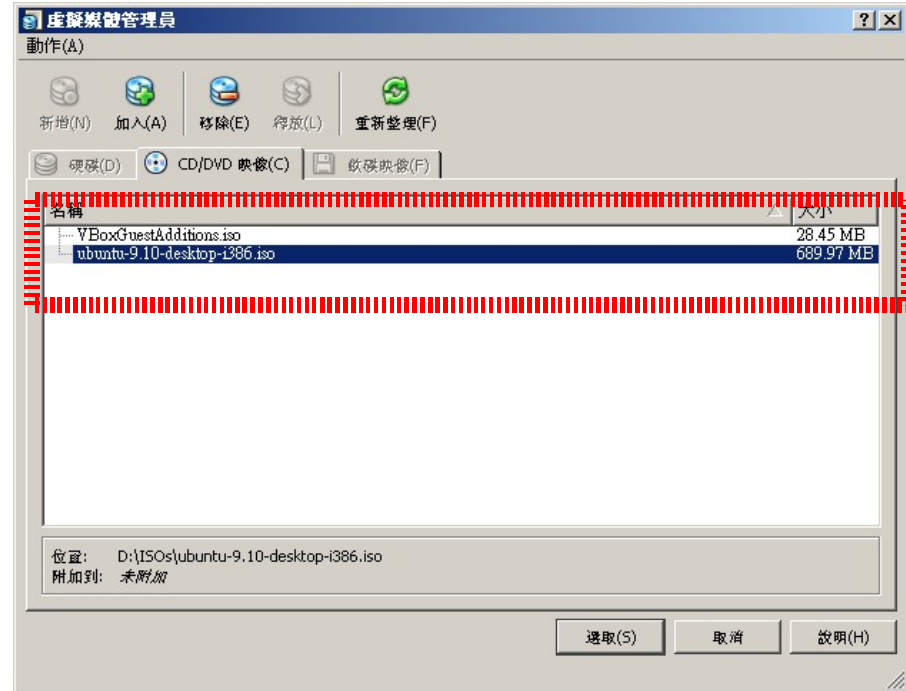
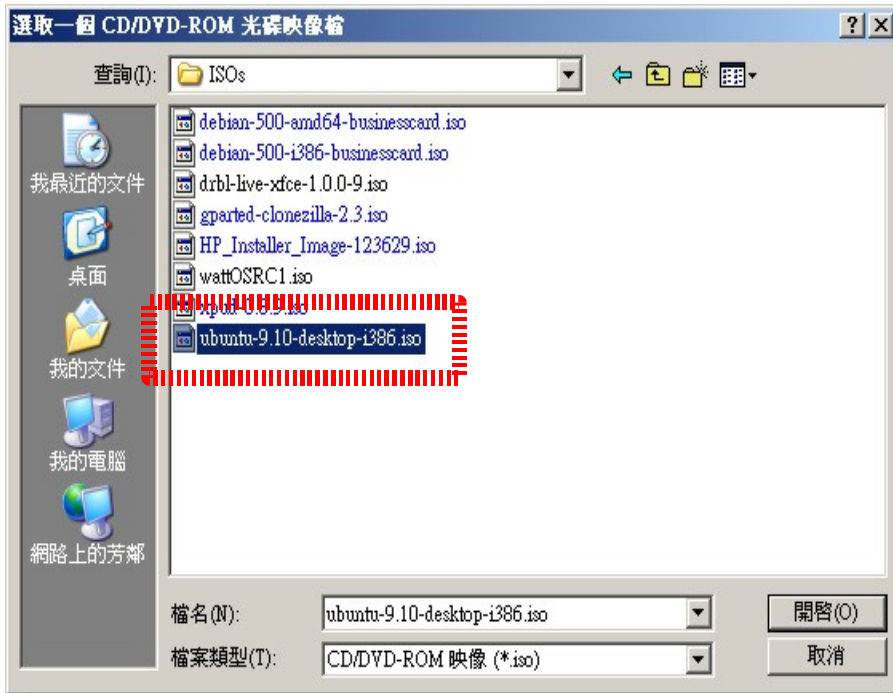


# 安裝 Ubuntu 9.10 (3)

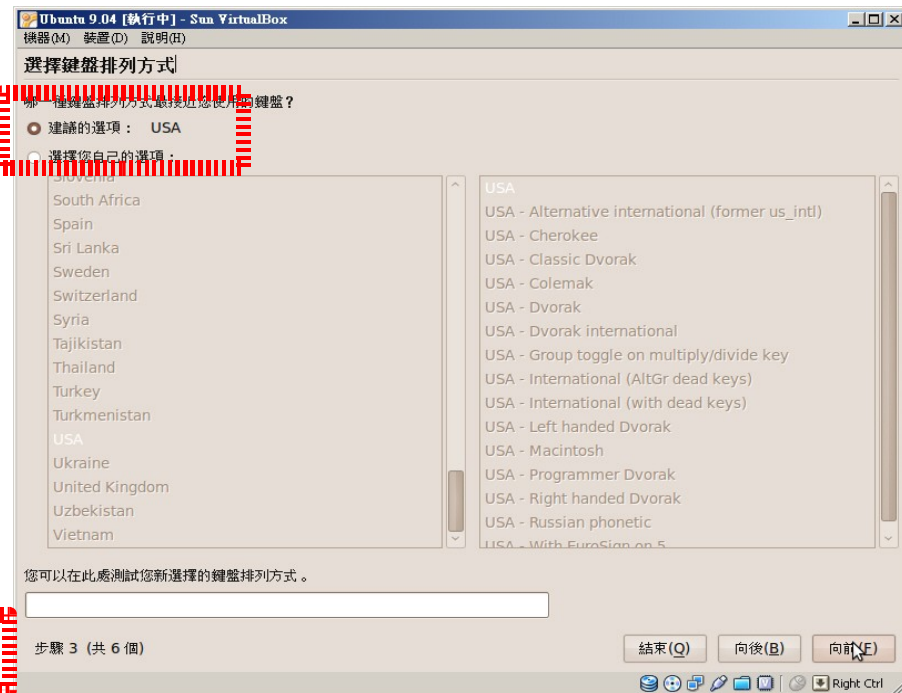
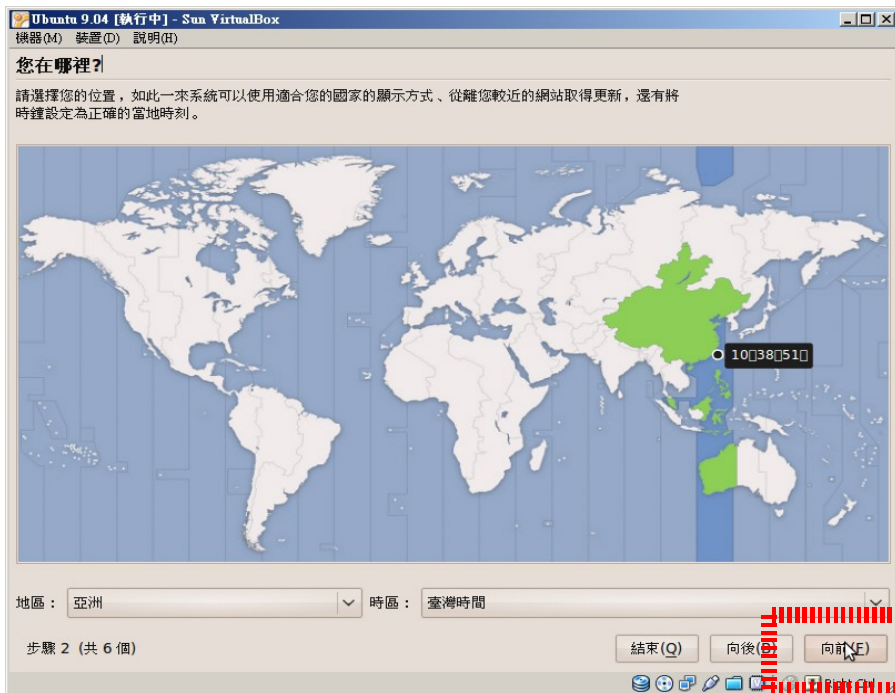
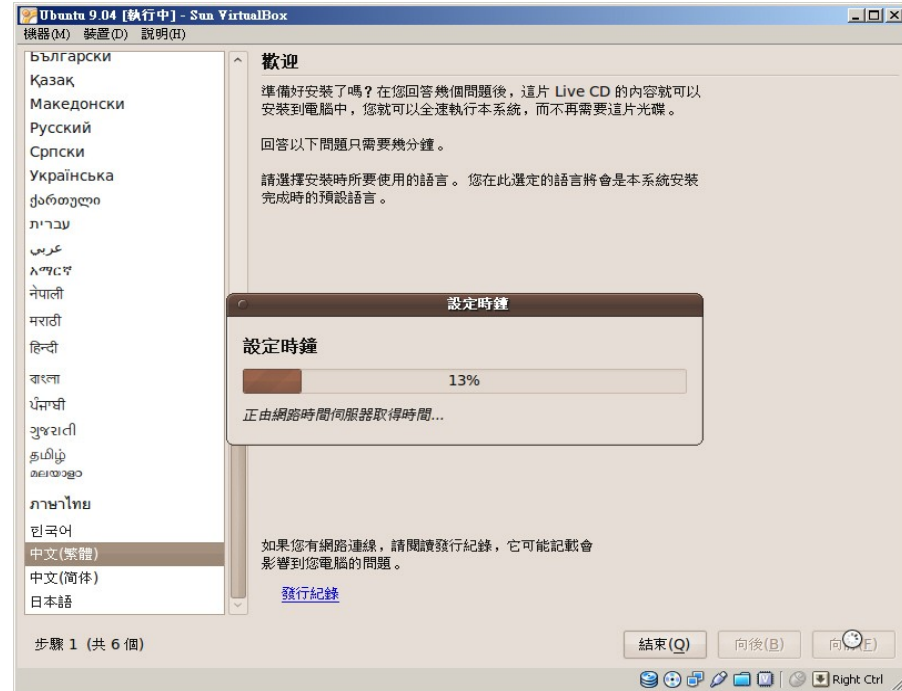
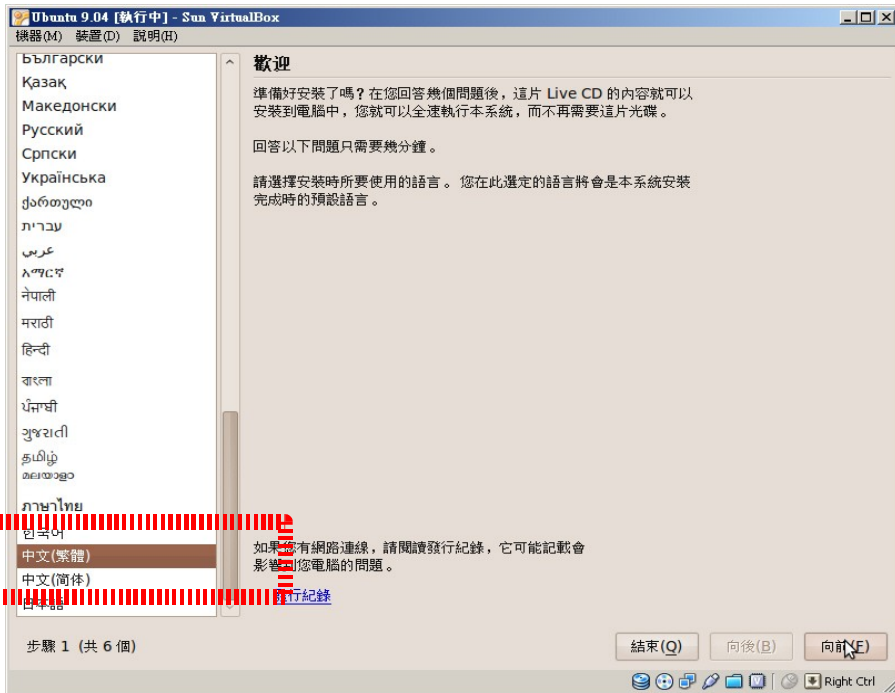




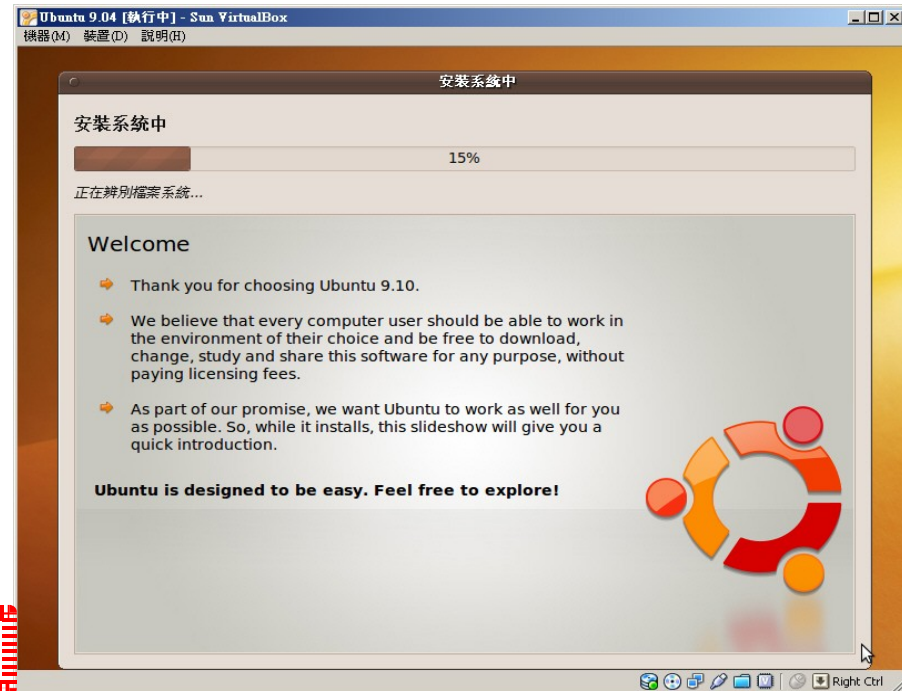
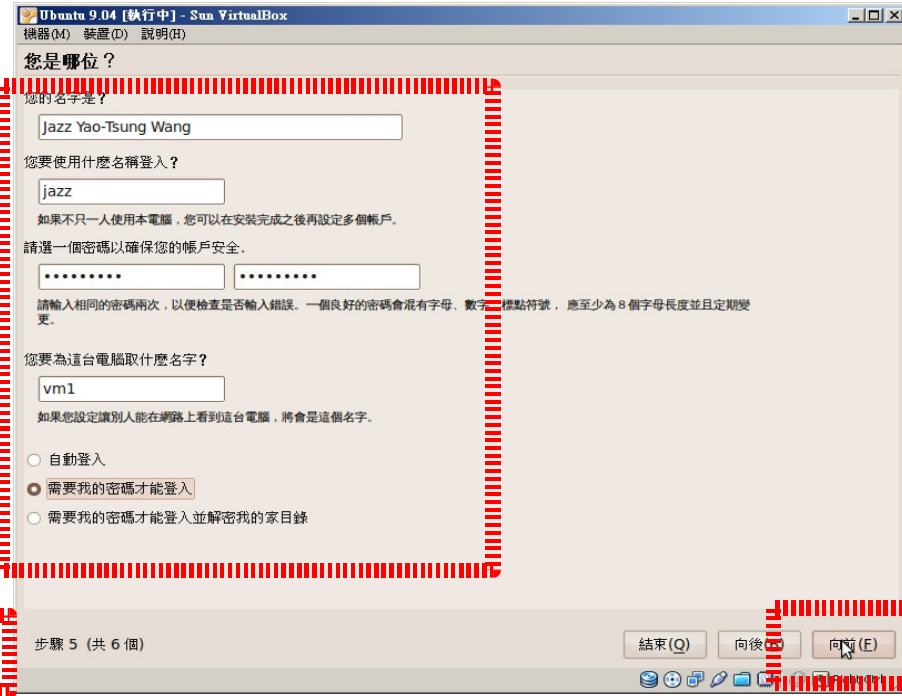
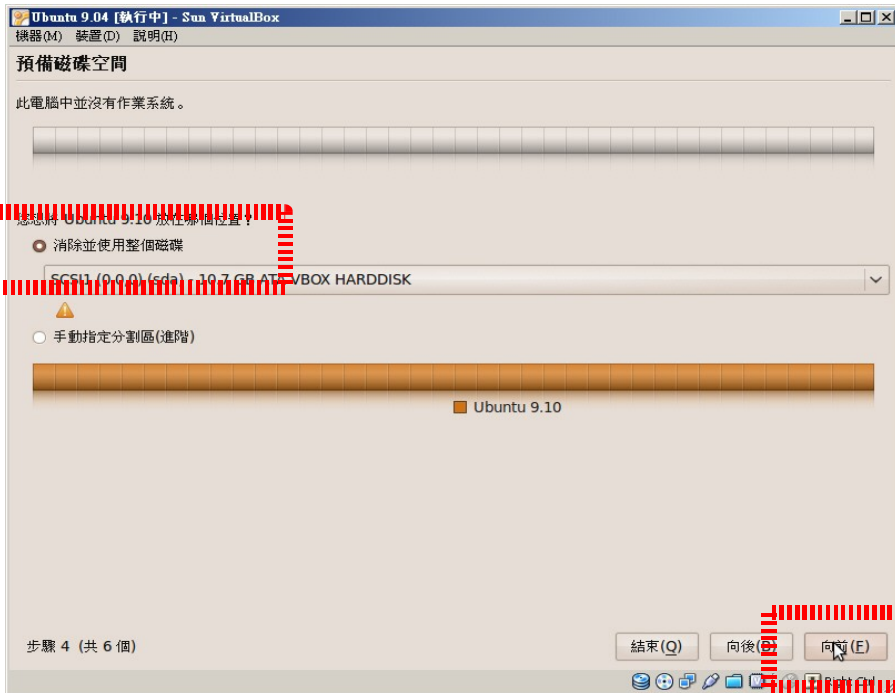
# 安裝 Ubuntu 9.10 (4)



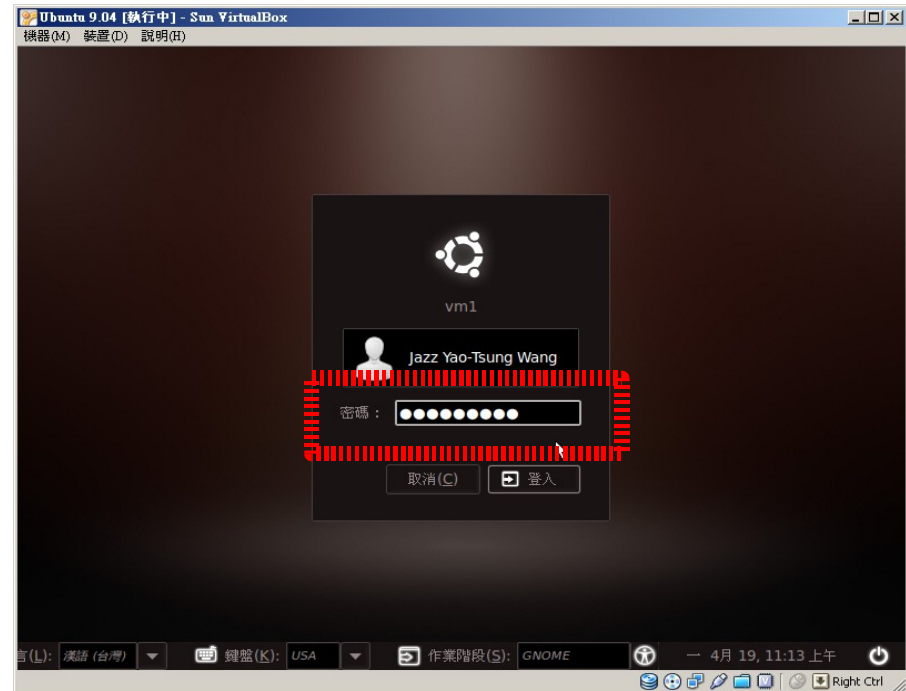
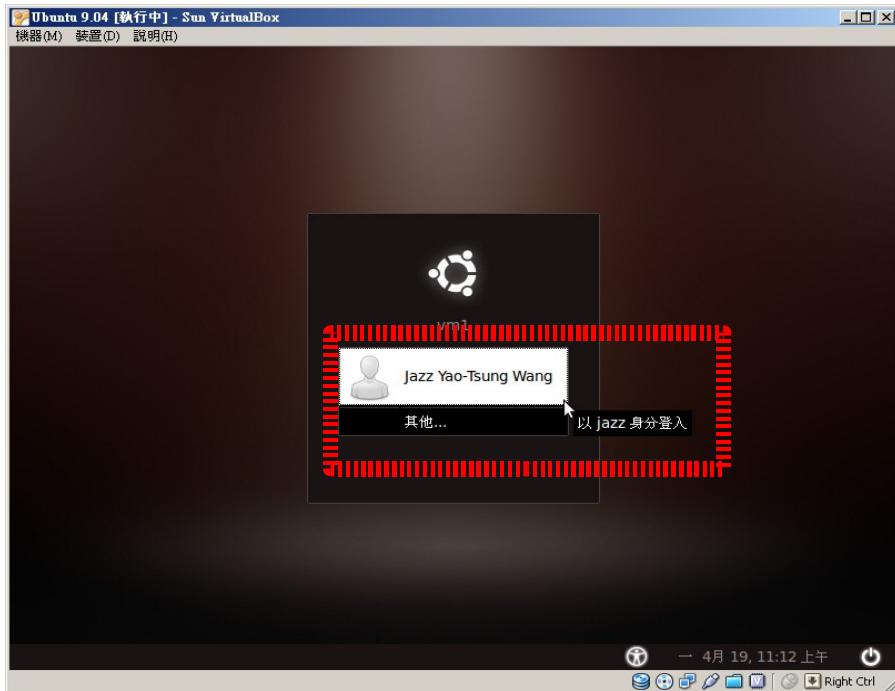
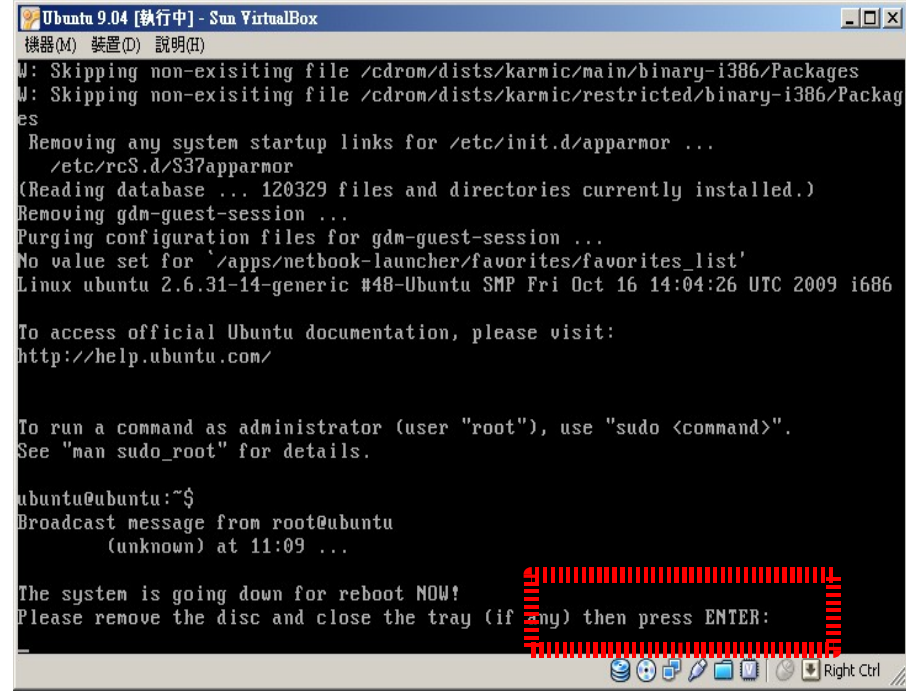
# 安裝 Ubuntu 9.10 (5)



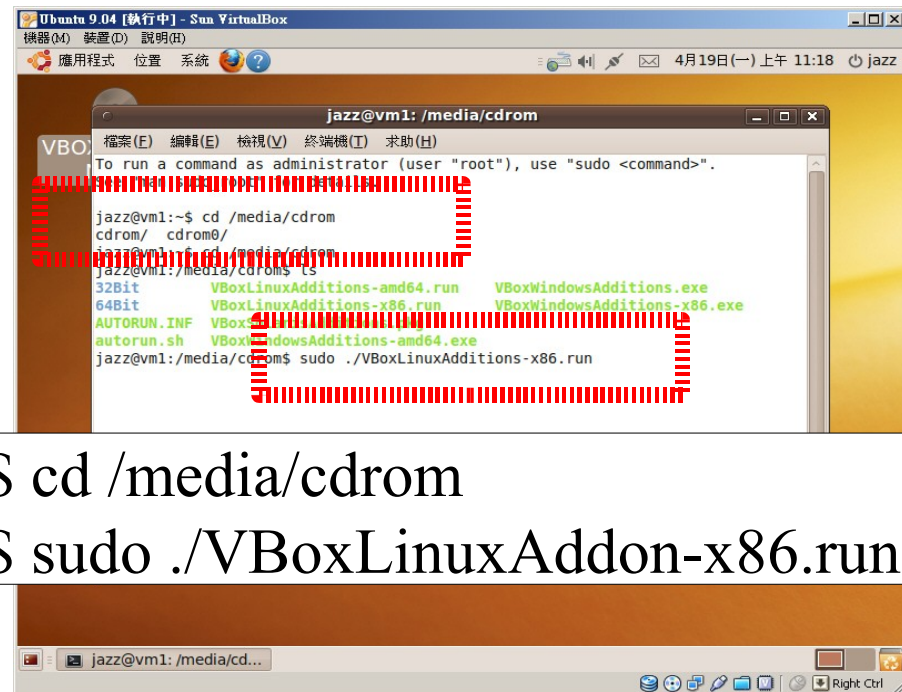
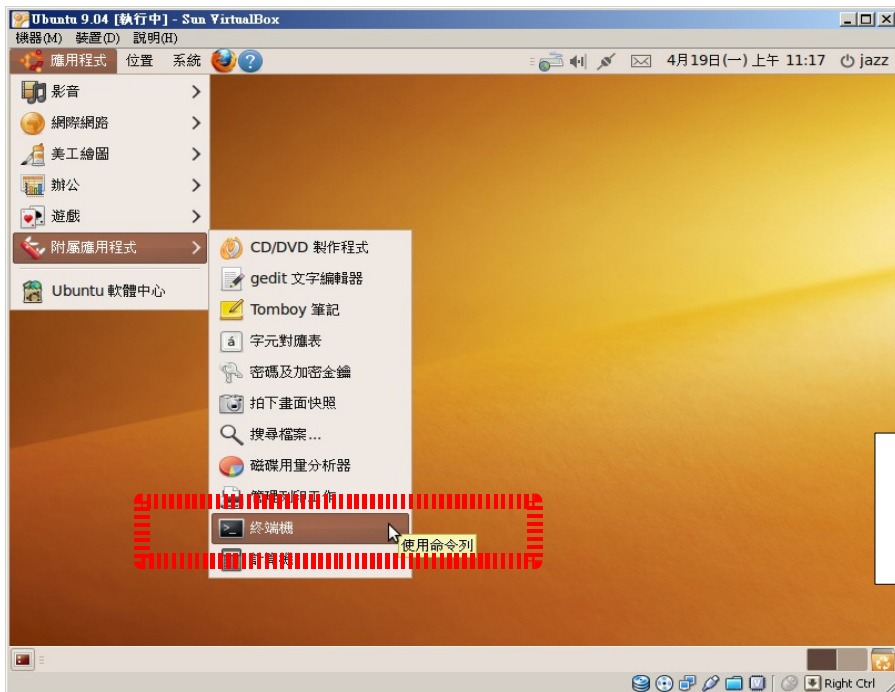
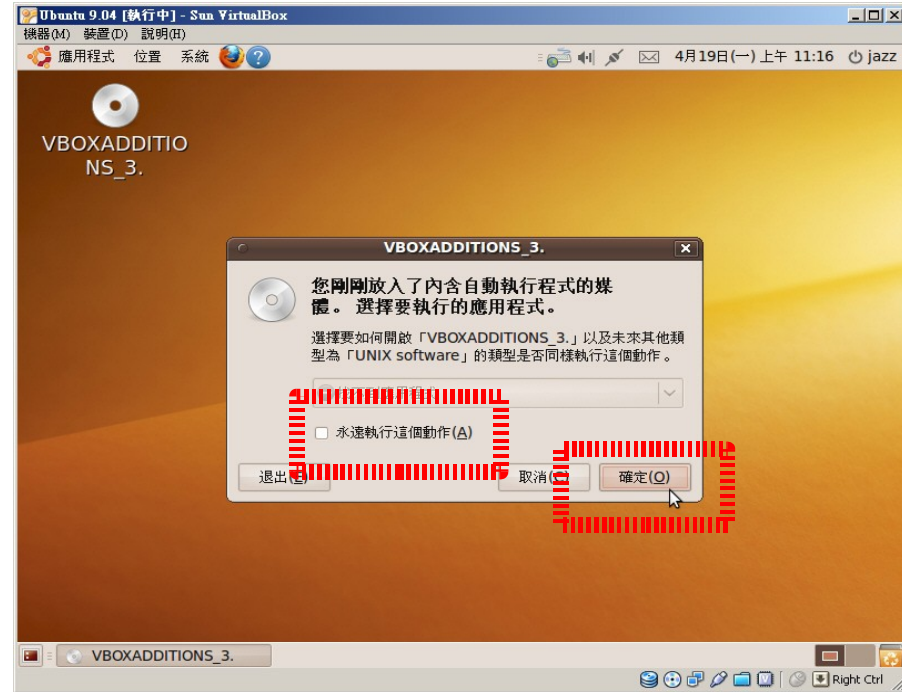
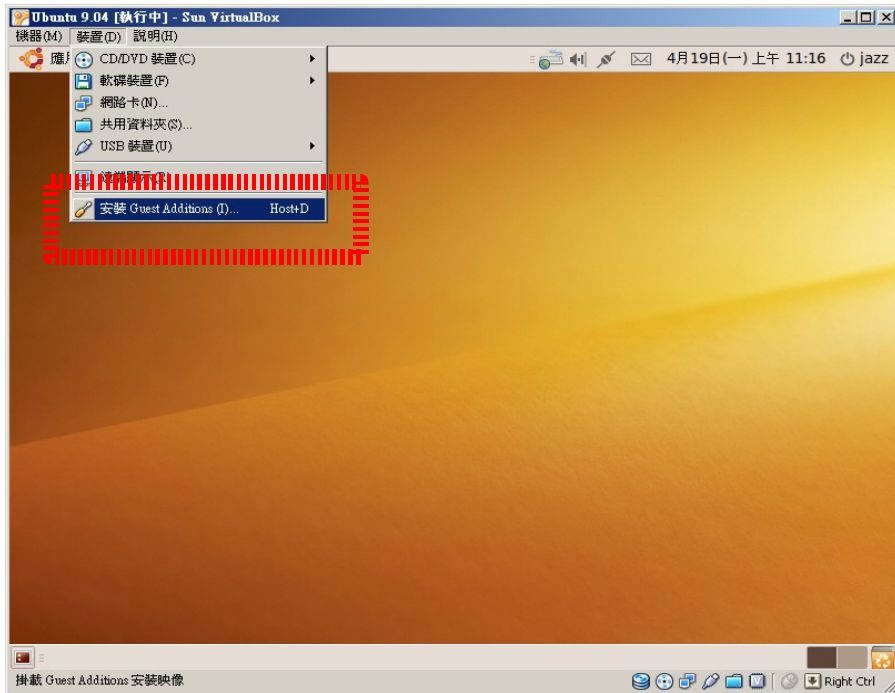
# 安裝 Ubuntu 9.10 (6)



# 安裝 Ubuntu 9.10 (7)

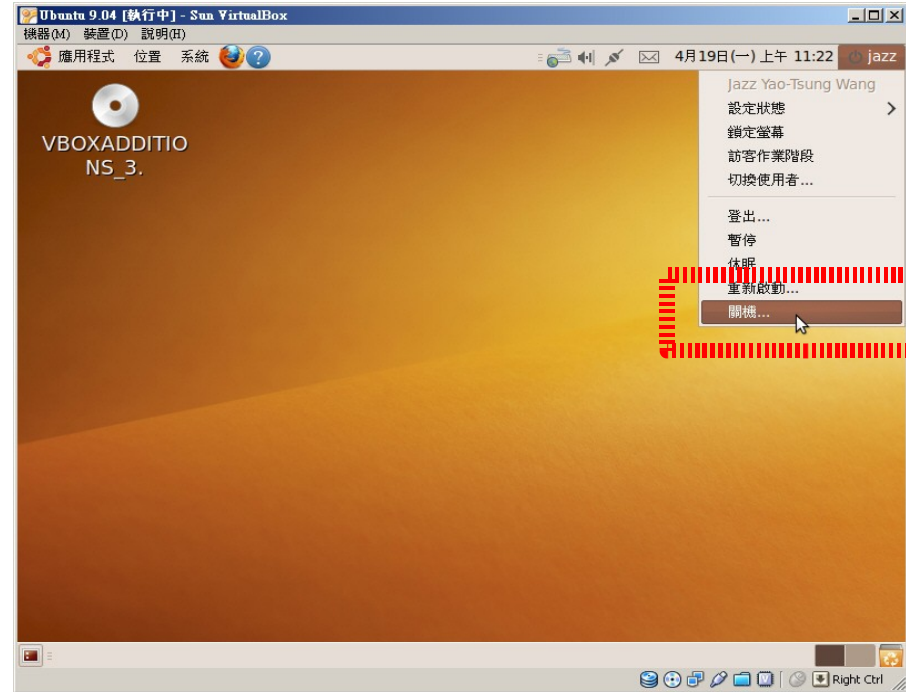
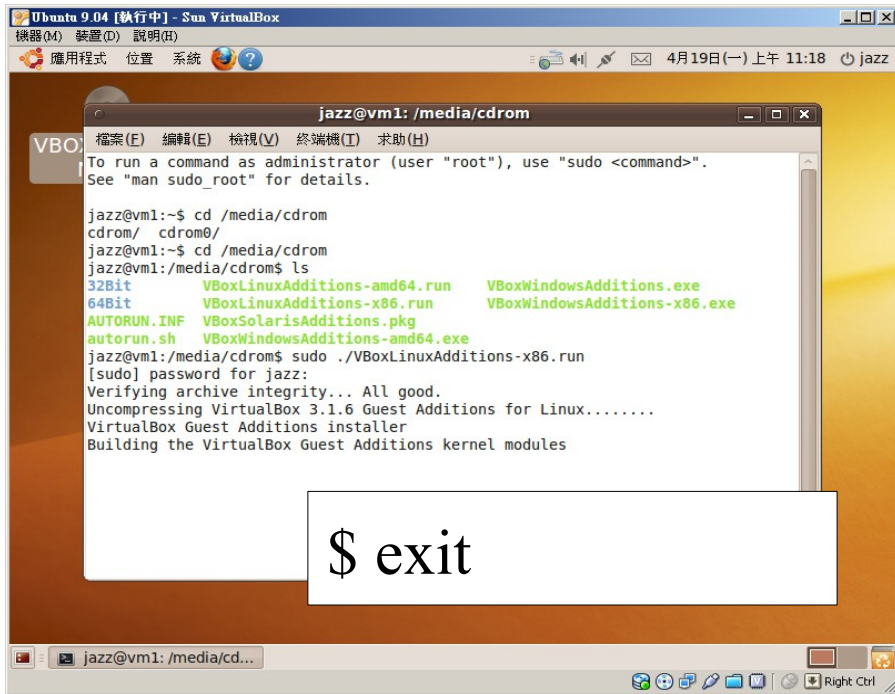


# 安裝 Ubuntu 9.10 (8)



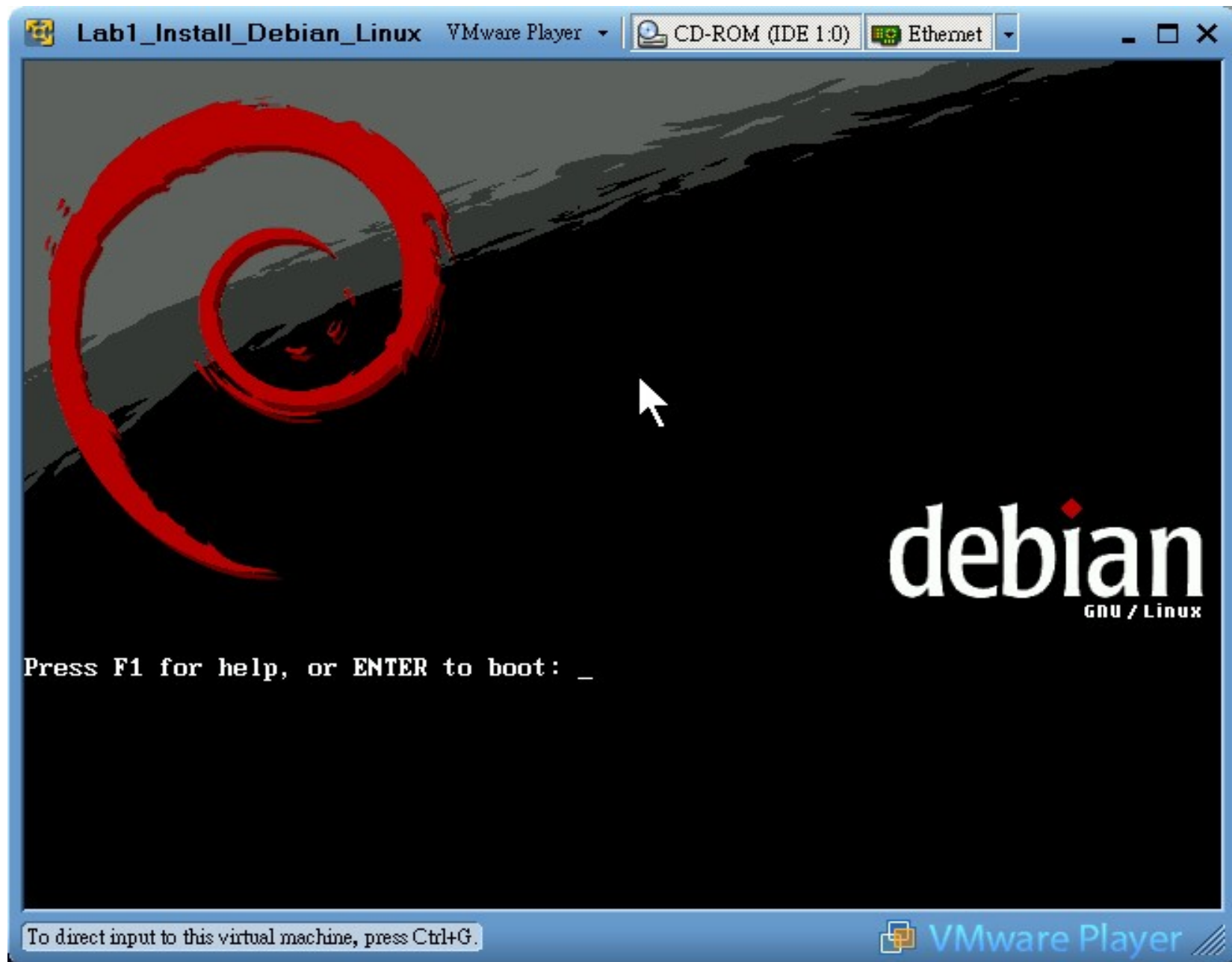
\$ cd /media/cdrom  
\$ sudo ./VBoxLinuxAddon-x86.run

# 安裝 Ubuntu 9.10 (9)



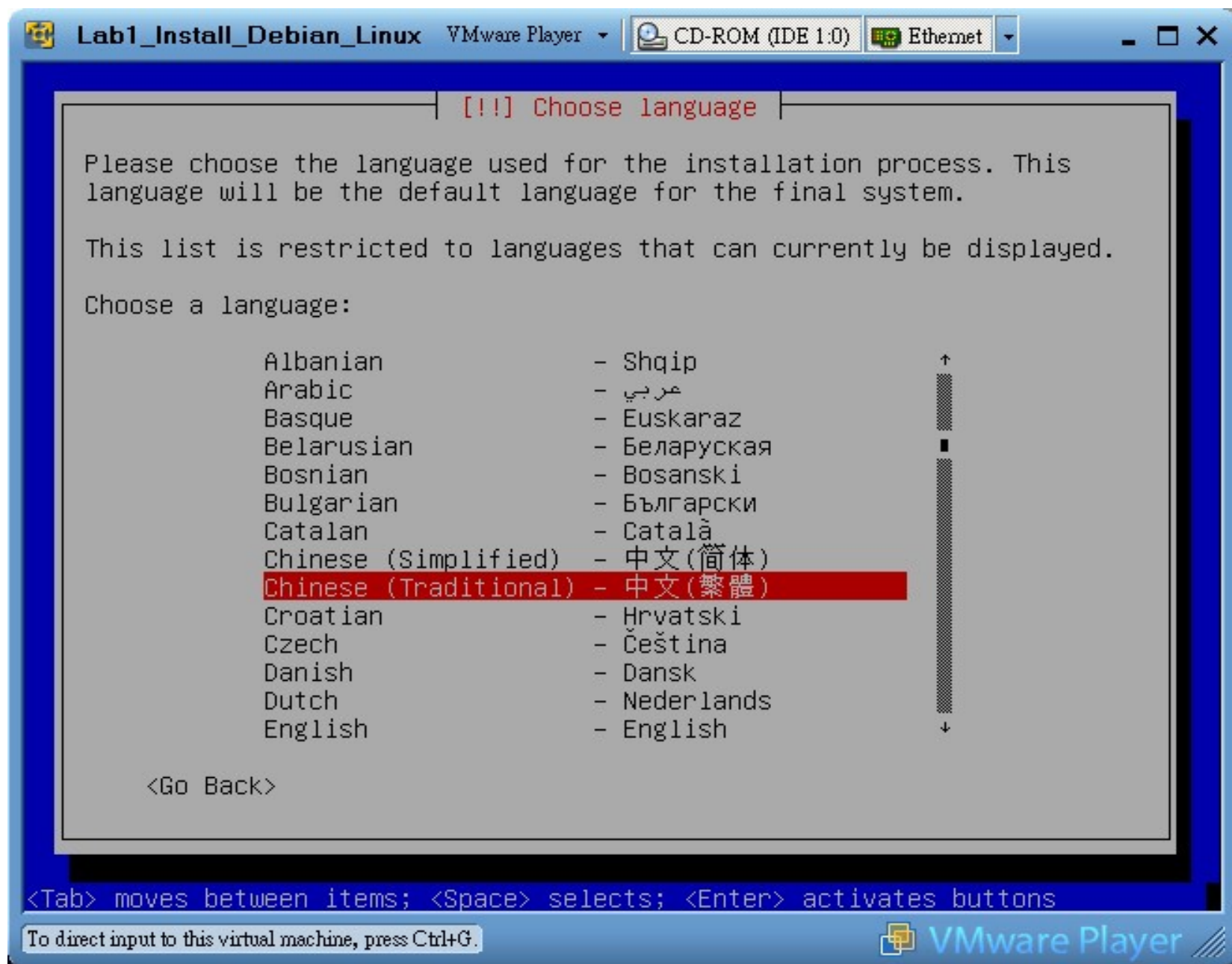
Appendex A :  
安裝 Debian 4.0r3 GNU/Linux

# 開始模擬從光碟安裝

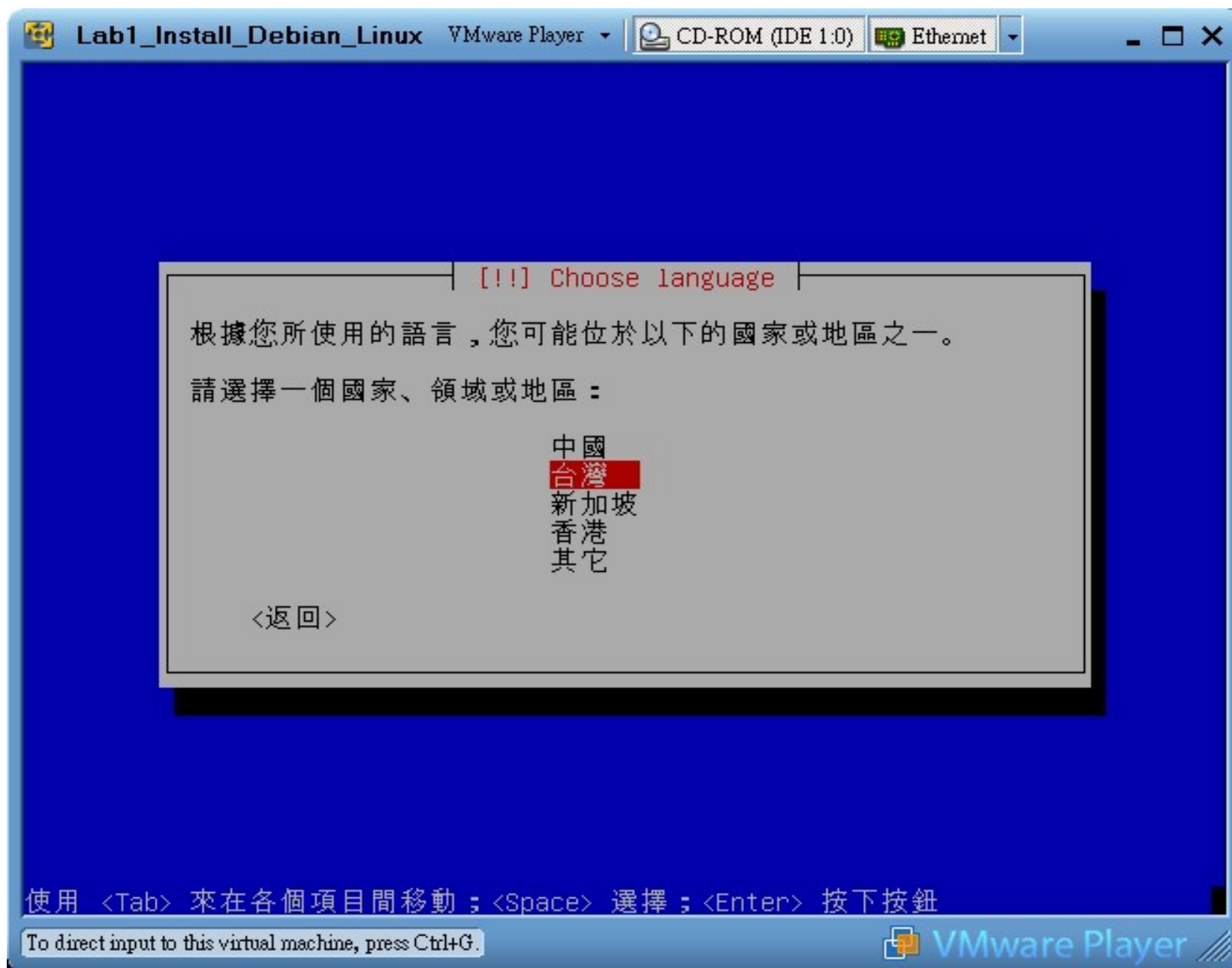




# 選擇中文(繁體)語系



# 選擇『台灣』



# 選擇『美語鍵盤』



輸入『主機名稱』 = drbl-srv



輸入『網域名稱』 = ym.edu.tw

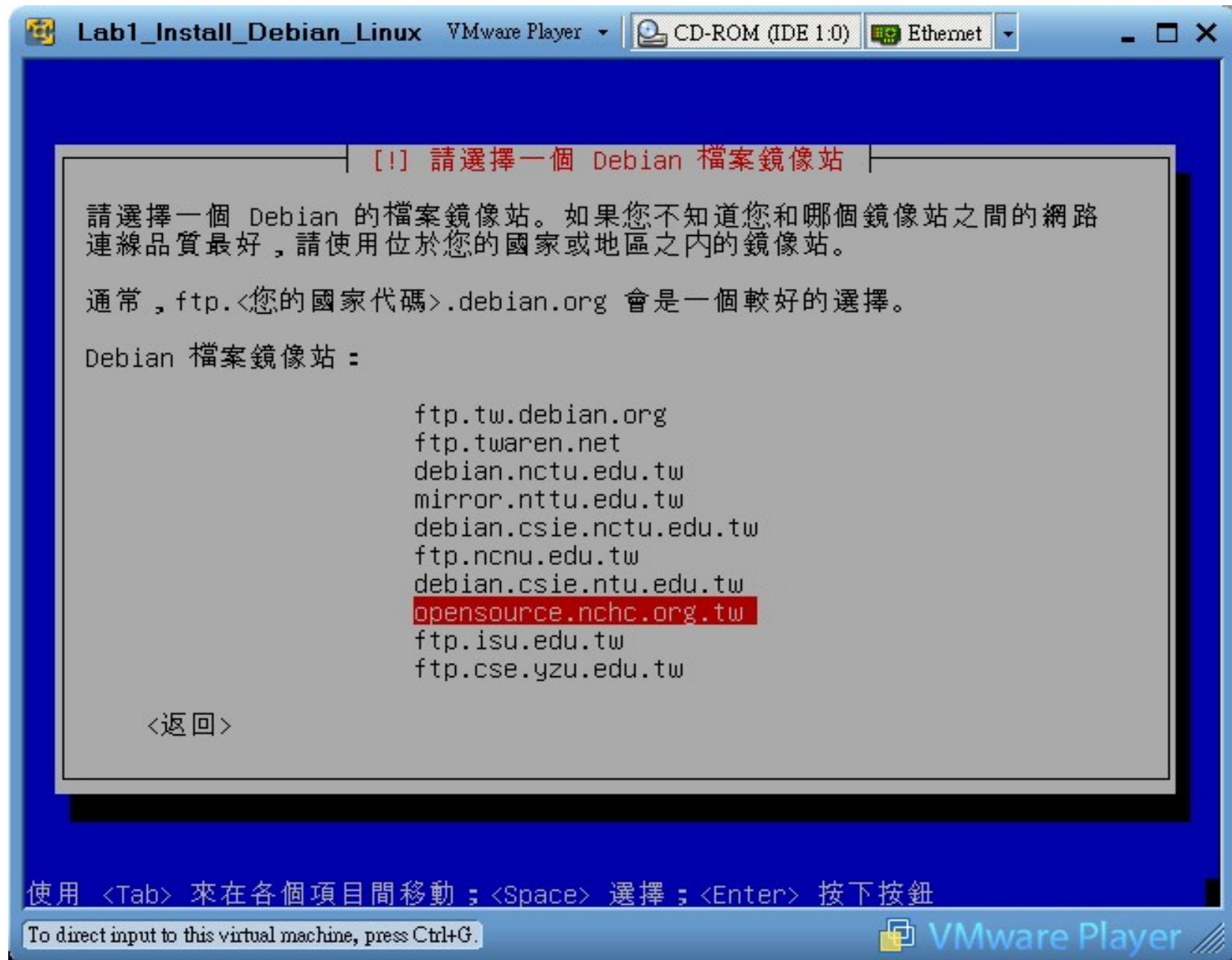


# 選擇『Debian 檔案映像站』(1) 台灣區



# 選擇『Debian 檔案映像站』(2)

## 推薦 [ftp.twaren.net](http://ftp.twaren.net) 或 [free.nchc.org.tw](http://free.nchc.org.tw)



## 選擇『Debian 檔案映象站』(3)

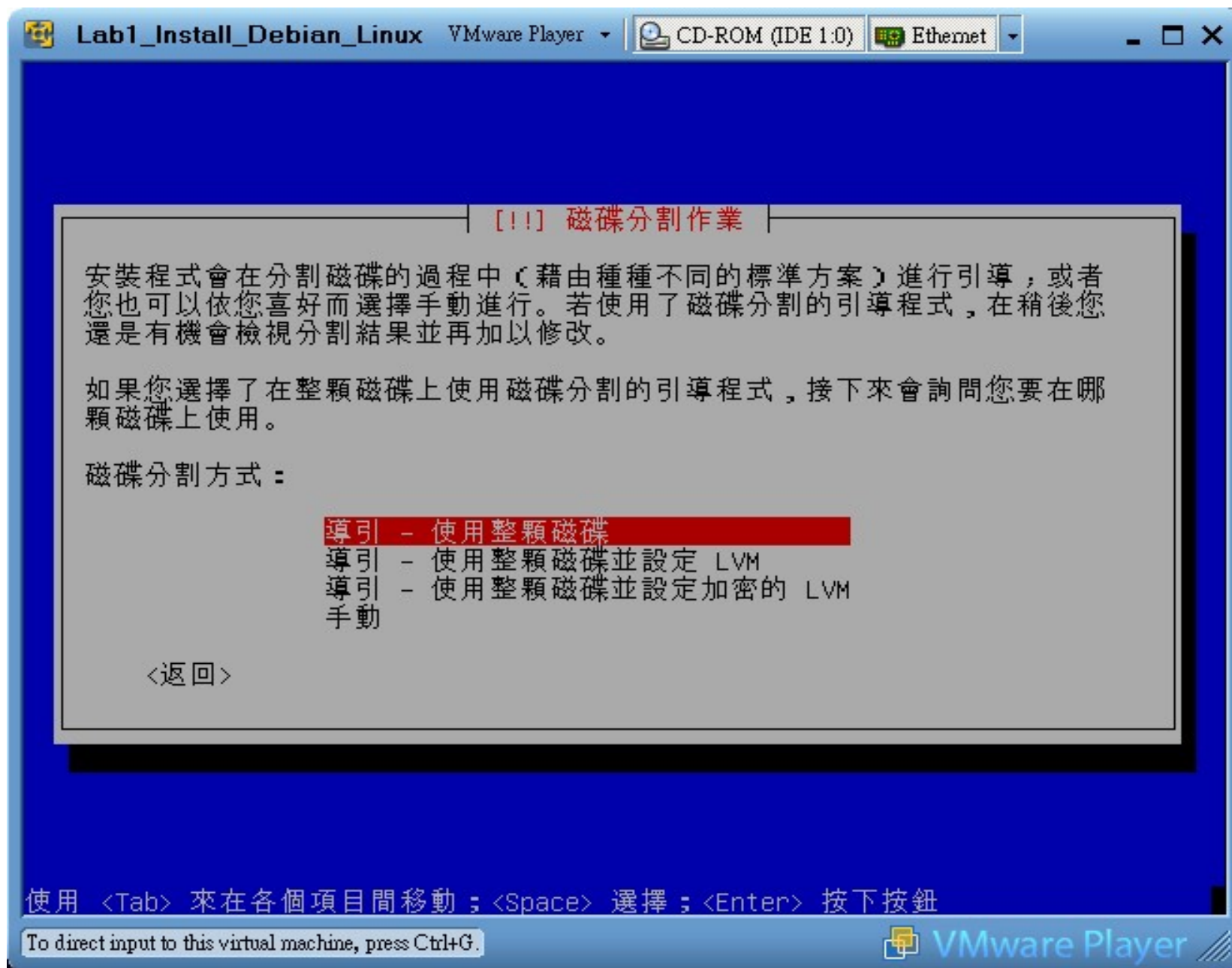
通常不需要輸入 Proxy，除非網路環境有限制





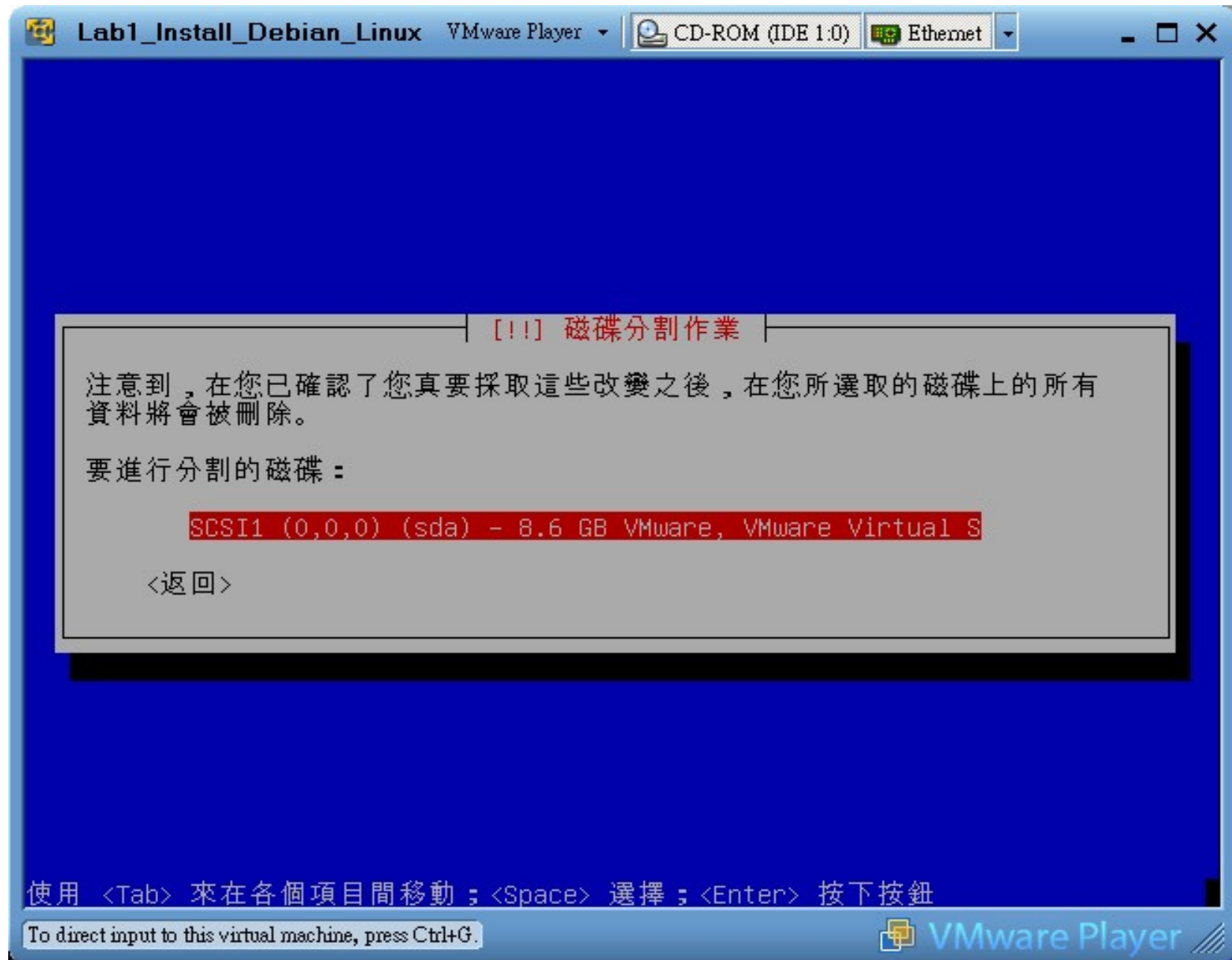
# 選擇『磁碟分割方式』

初學者建議採用第一種『引導 - 整顆硬碟』

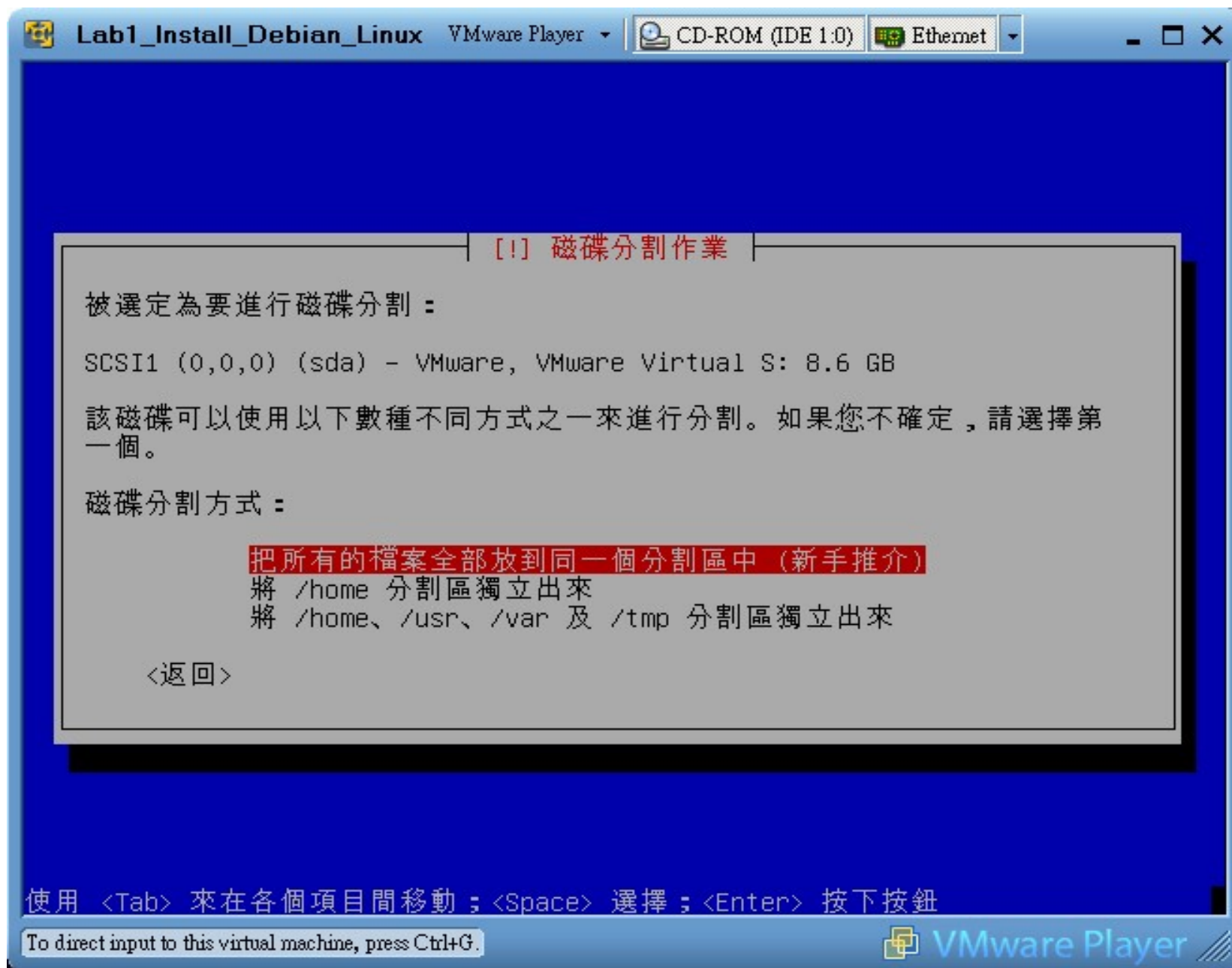


## 選擇『欲分割磁碟』

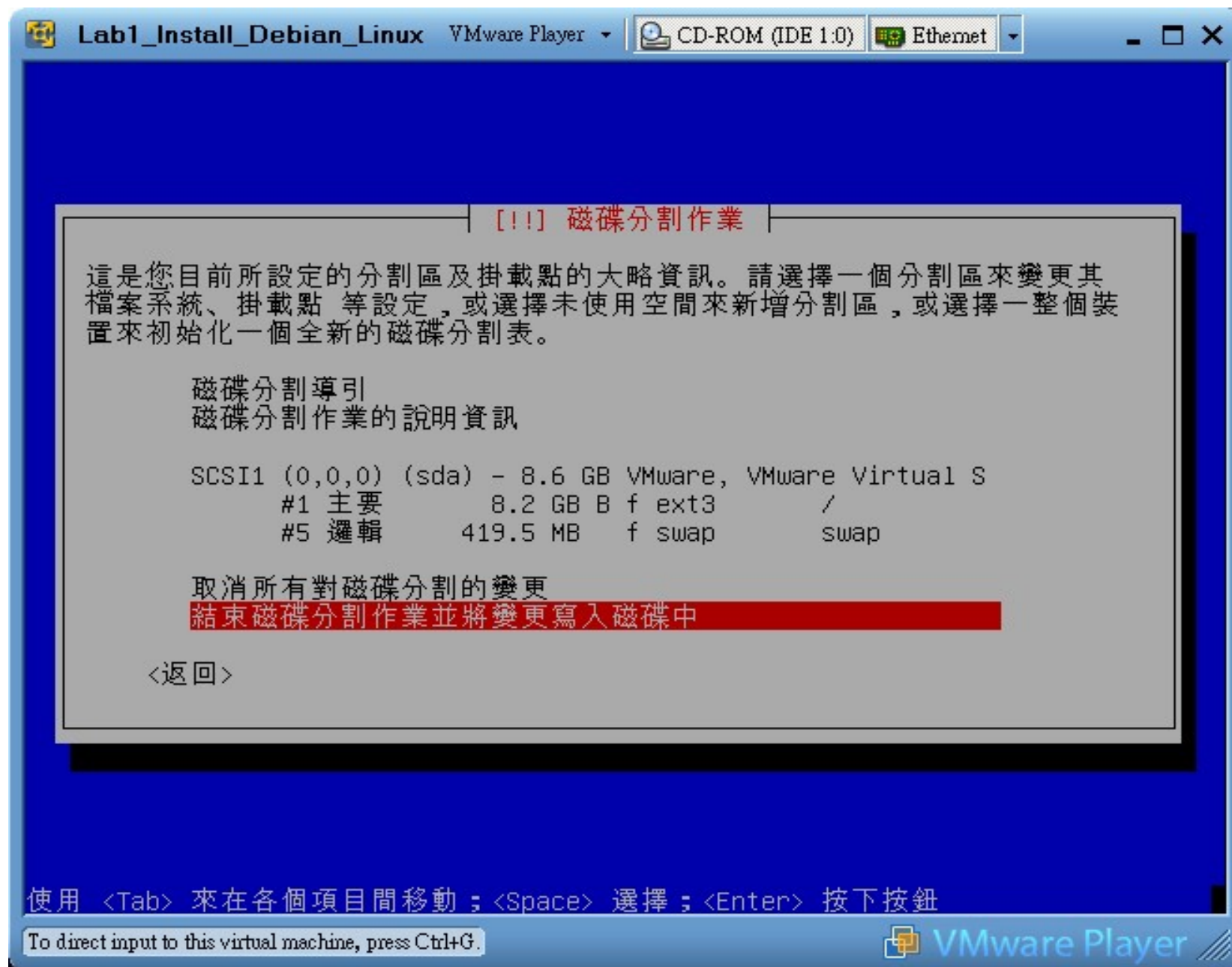
目前只有虛擬一顆硬碟，若實機有兩顆請小心！



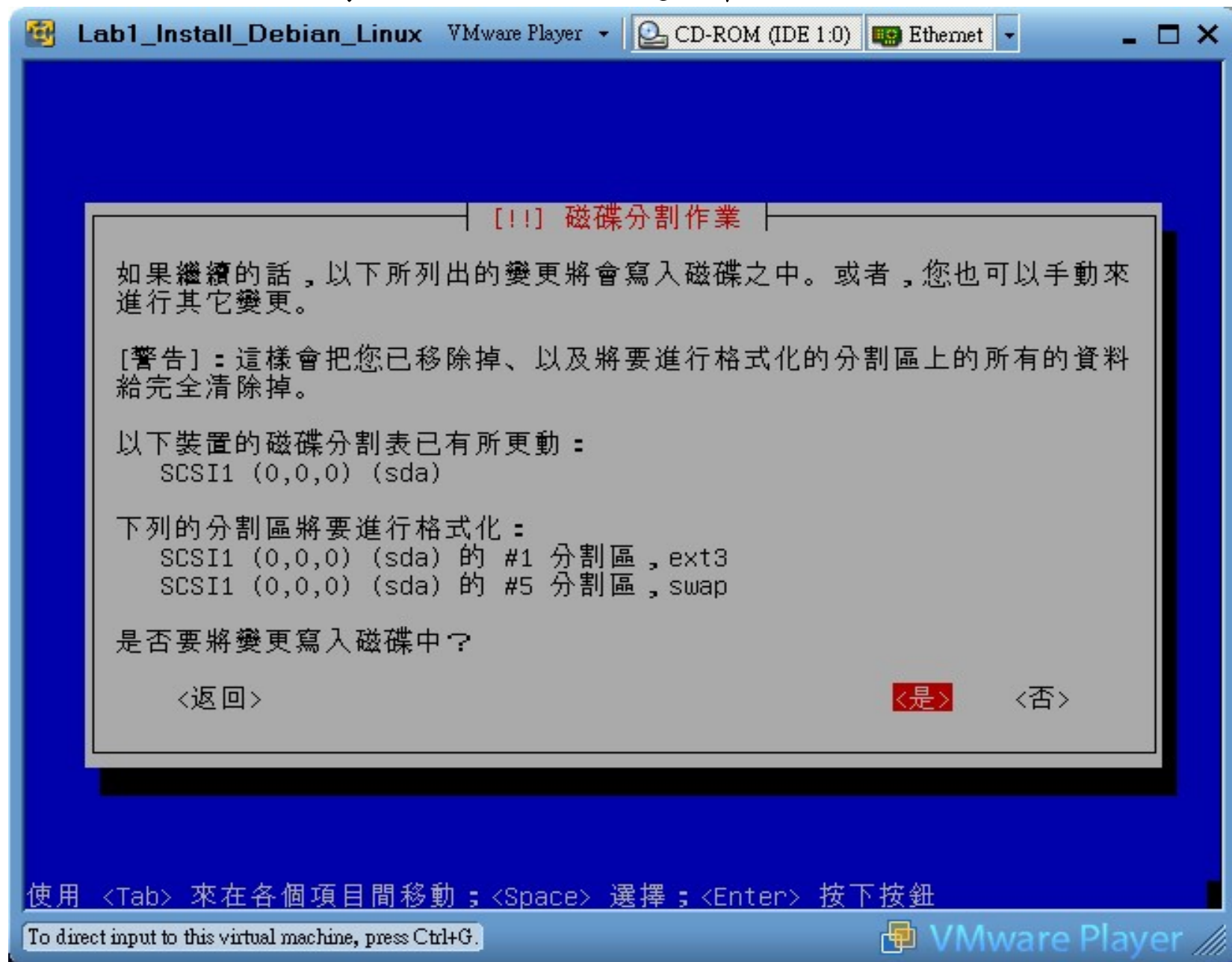
練習時可用同一個分割區，  
服務用系統請至少獨立出 /home 分割區



導引模式會切割兩個磁區，一個根目錄 (root)  
一個 swap (拿硬碟當記憶體空間用)



# 確認將目前的磁區分割表寫入硬碟 請用 TAB 選擇 <是>



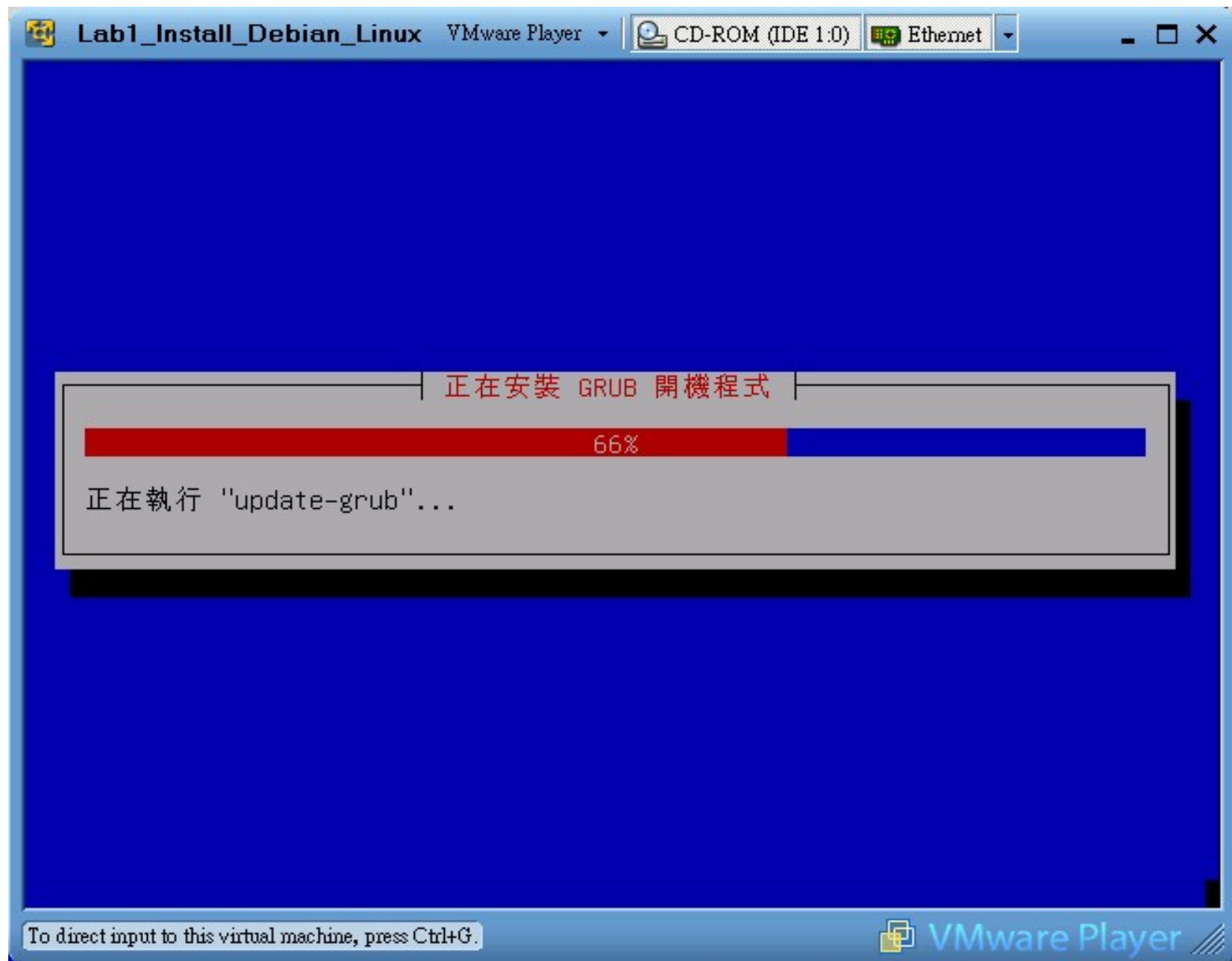
# 設定最高權限 root 管理者密碼



# 建立自己的帳號，習慣上不用 root 登入

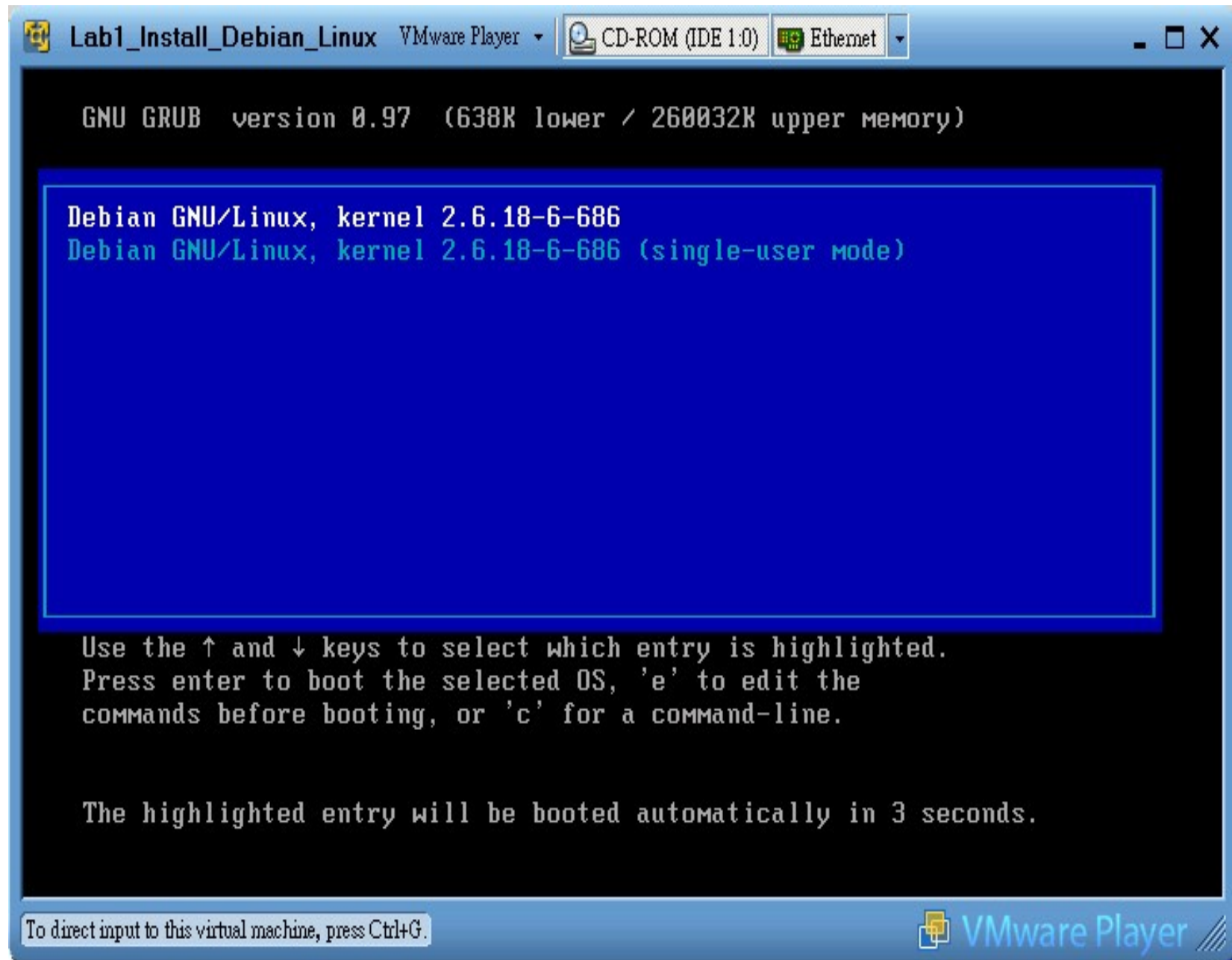


# 確認安裝 Grub Boot Loader

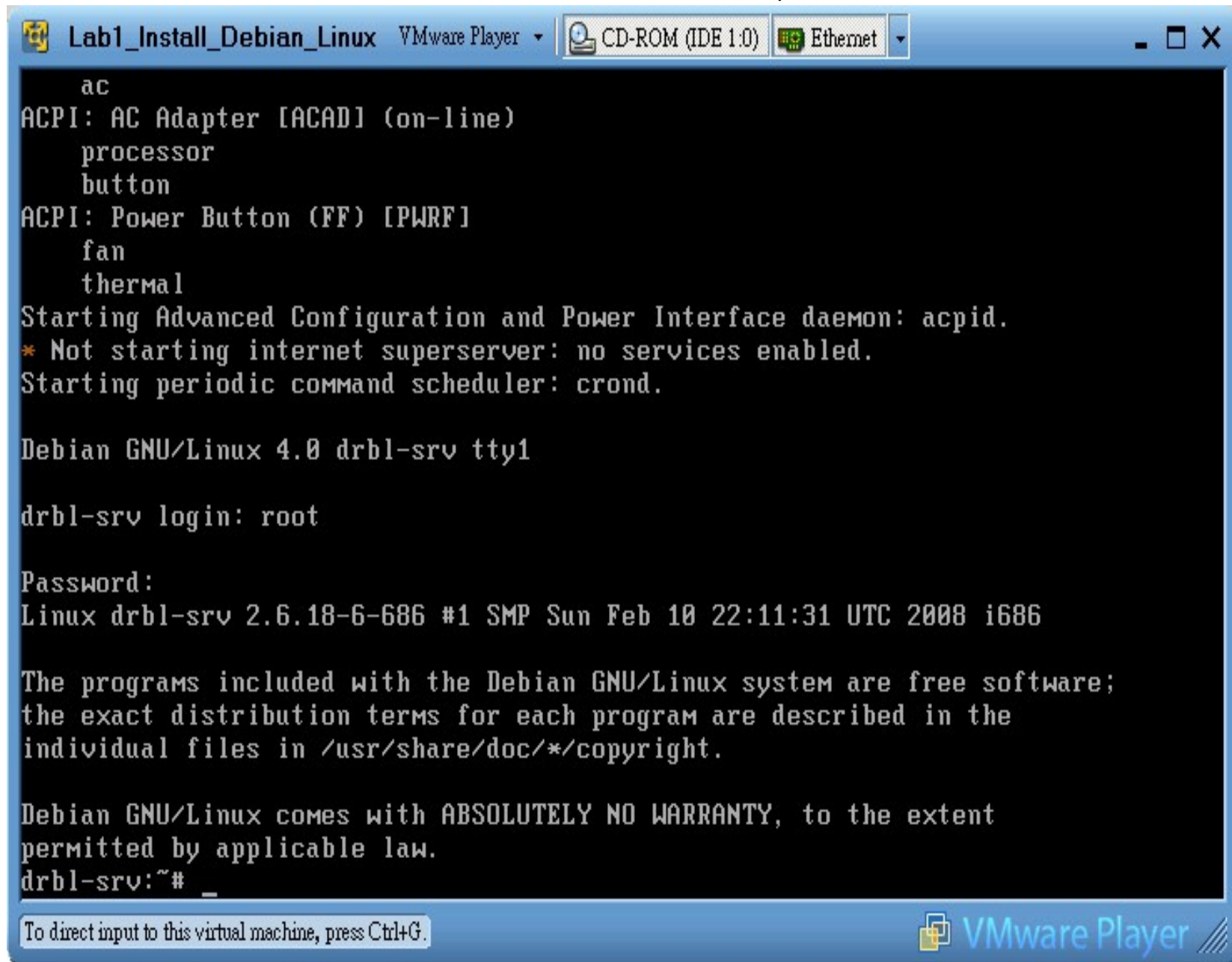




# 第一次系統開機



# 首次可使用 root 登入， 日後建議用一般身分登入



```
Lab1_Install_Debian_Linux VMware Player | CD-ROM (IDE 1:0) Ethernet |
ac
ACPI: AC Adapter [ACAD] (on-line)
processor
button
ACPI: Power Button (FF) [PWRF]
fan
thermal
Starting Advanced Configuration and Power Interface daemon: acpid.
* Not starting internet superserver: no services enabled.
Starting periodic command scheduler: crond.

Debian GNU/Linux 4.0 drbl-srv tty1

drbl-srv login: root

Password:
Linux drbl-srv 2.6.18-6-686 #1 SMP Sun Feb 10 22:11:31 UTC 2008 i686

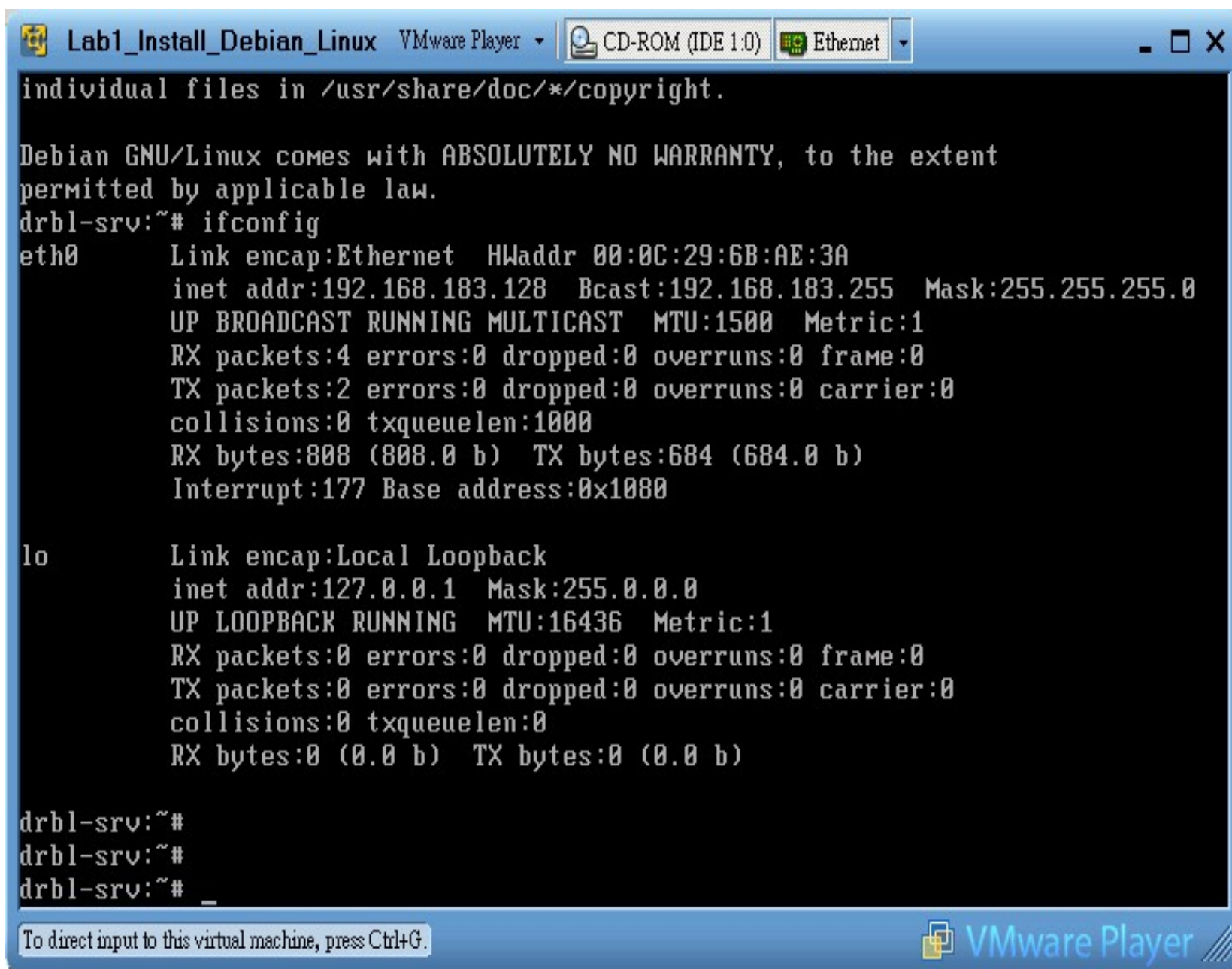
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
drbl-srv:~# _
```

To direct input to this virtual machine, press Ctrl+G.

VMware Player

# 基本管理篇 [1] 用 ifconfig 確認網路連線



```
Lab1_Install_Debian_Linux VMware Player | CD-ROM (IDE 1:0) | Ethernet | - □ X
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
drbl-srv:~# ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0C:29:6B:AE:3A
          inet addr:192.168.183.128  Bcast:192.168.183.255  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:4 errors:0 dropped:0 overruns:0 frame:0
          TX packets:2 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:808 (808.0 b)  TX bytes:684 (684.0 b)
          Interrupt:177 Base address:0x1080

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:16436  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:0
          RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)

drbl-srv:~#
drbl-srv:~#
drbl-srv:~# _
```

To direct input to this virtual machine, press Ctrl+G.

VMware Player

# 基本管理篇 [2] 用 apt-get update 更新套件

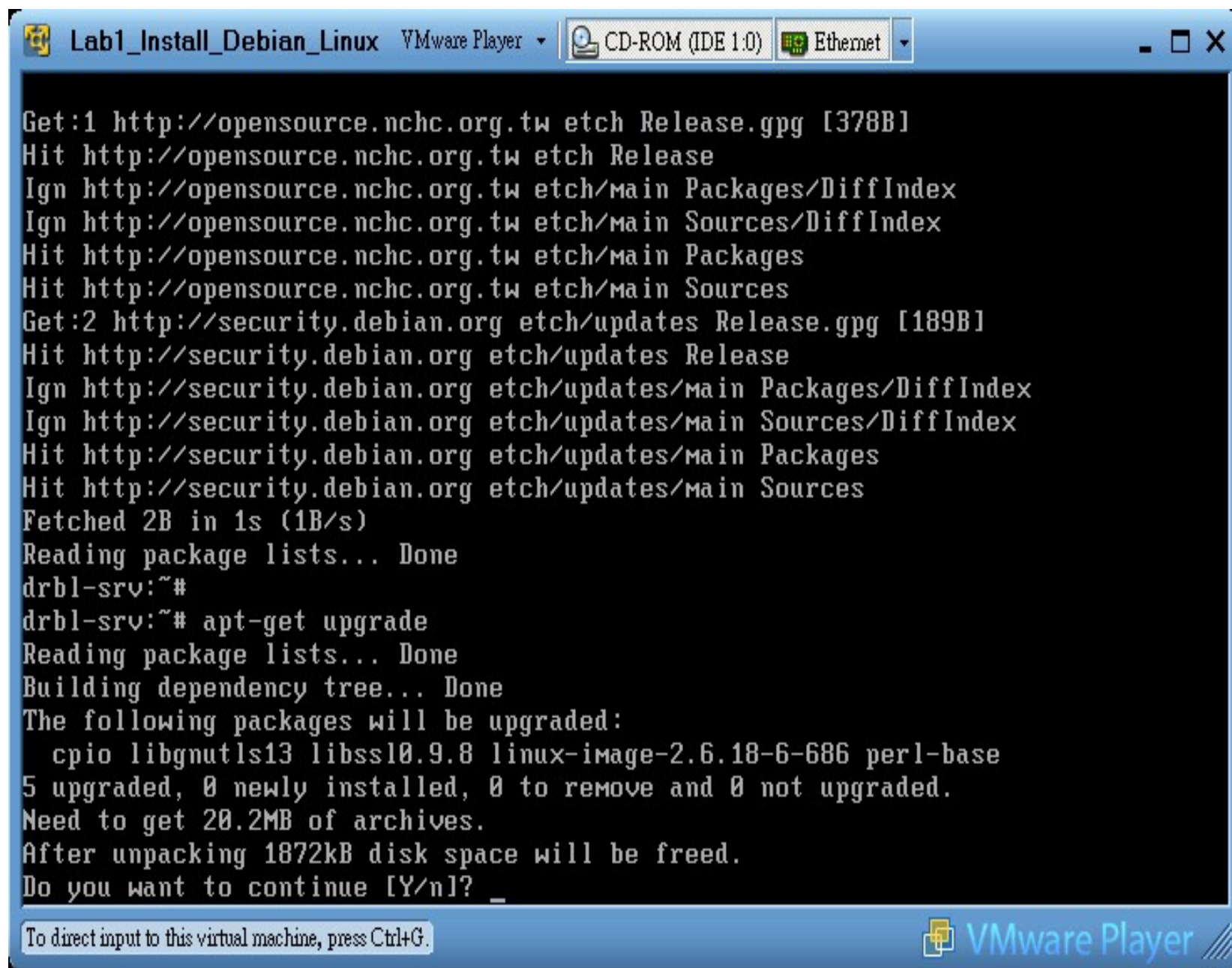
```
Lab1_Install_Debian_Linux VMware Player | CD-ROM (IDE 1:0) | Ethernet | . □ X
inet addr:127.0.0.1  Mask:255.0.0.0
UP LOOPBACK RUNNING  MTU:16436  Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)

drbl-srv:~#
drbl-srv:~#
drbl-srv:~# apt-get update

Get:1 http://opensource.nchc.org.tw etch Release.gpg [378B]
Hit http://opensource.nchc.org.tw etch Release
Ign http://opensource.nchc.org.tw etch/main Packages/DiffIndex
Ign http://opensource.nchc.org.tw etch/main Sources/DiffIndex
Hit http://opensource.nchc.org.tw etch/main Packages
Hit http://opensource.nchc.org.tw etch/main Sources
Get:2 http://security.debian.org etch/updates Release.gpg [189B]
Hit http://security.debian.org etch/updates Release
Ign http://security.debian.org etch/updates/main Packages/DiffIndex
Ign http://security.debian.org etch/updates/main Sources/DiffIndex
Hit http://security.debian.org etch/updates/main Packages
Hit http://security.debian.org etch/updates/main Sources
Fetched 2B in 1s (1B/s)
Reading package lists... 51%
```

To direct input to this virtual machine, press Ctrl+G. VMware Player

# 基本管理篇 [3] 用 apt-get upgrade 升級系統

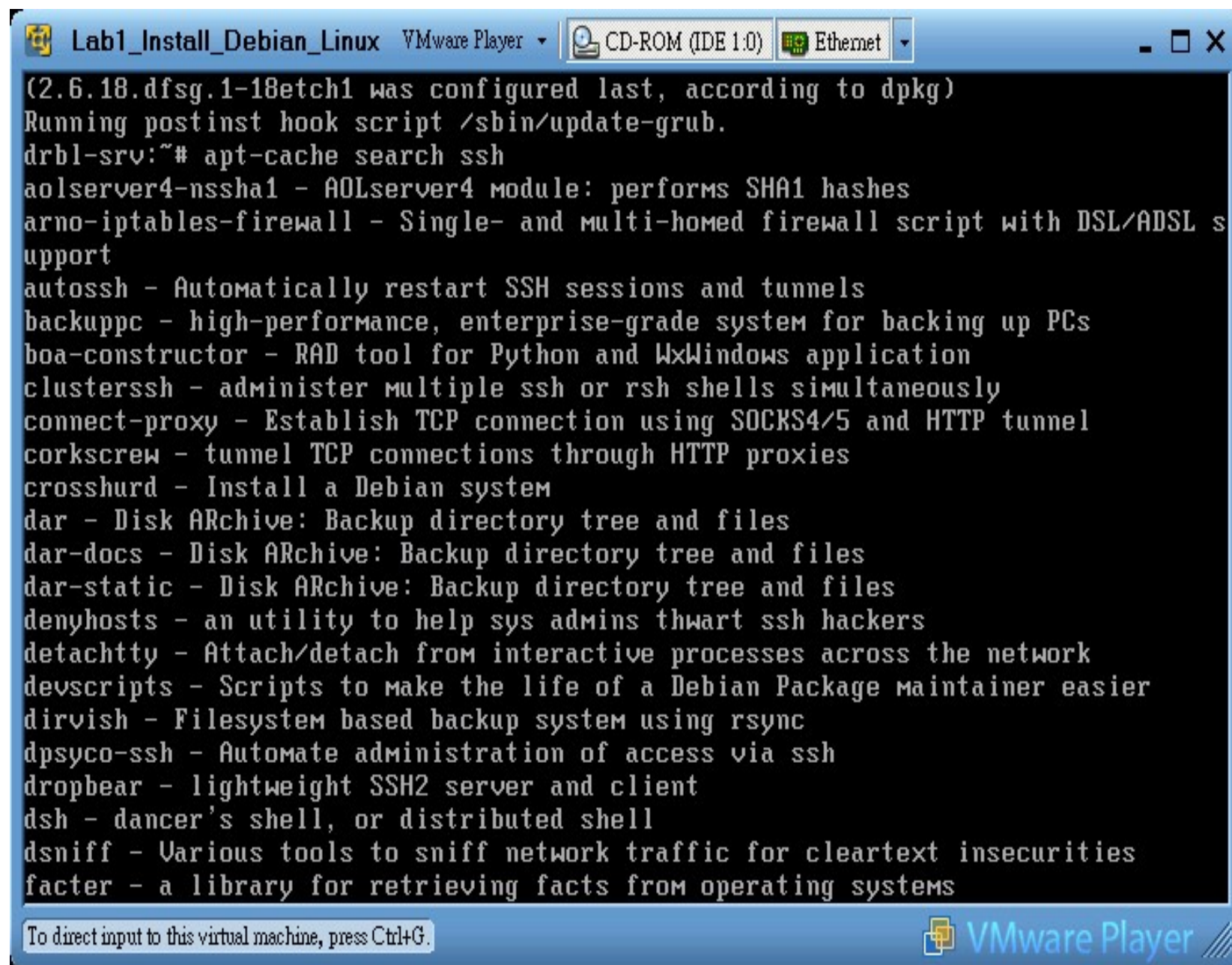


The screenshot shows a VMware Player window titled "Lab1\_Install\_Debian\_Linux". The terminal output is as follows:

```
Get:1 http://opensource.nchc.org.tw etch Release.gpg [378B]
Hit http://opensource.nchc.org.tw etch Release
Ign http://opensource.nchc.org.tw etch/main Packages/DiffIndex
Ign http://opensource.nchc.org.tw etch/main Sources/DiffIndex
Hit http://opensource.nchc.org.tw etch/main Packages
Hit http://opensource.nchc.org.tw etch/main Sources
Get:2 http://security.debian.org etch/updates Release.gpg [189B]
Hit http://security.debian.org etch/updates Release
Ign http://security.debian.org etch/updates/main Packages/DiffIndex
Ign http://security.debian.org etch/updates/main Sources/DiffIndex
Hit http://security.debian.org etch/updates/main Packages
Hit http://security.debian.org etch/updates/main Sources
Fetched 2B in 1s (1B/s)
Reading package lists... Done
drbl-srv:~#
drbl-srv:~# apt-get upgrade
Reading package lists... Done
Building dependency tree... Done
The following packages will be upgraded:
  cpio libgnutls13 libssl0.9.8 linux-image-2.6.18-6-686 perl-base
5 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 20.2MB of archives.
After unpacking 1872kB disk space will be freed.
Do you want to continue [Y/n]? _
```

At the bottom of the window, there is a status bar that reads "To direct input to this virtual machine, press Ctrl+G." and the VMware Player logo.

# 基本管理篇 [4] 用 apt-cache search 搜尋

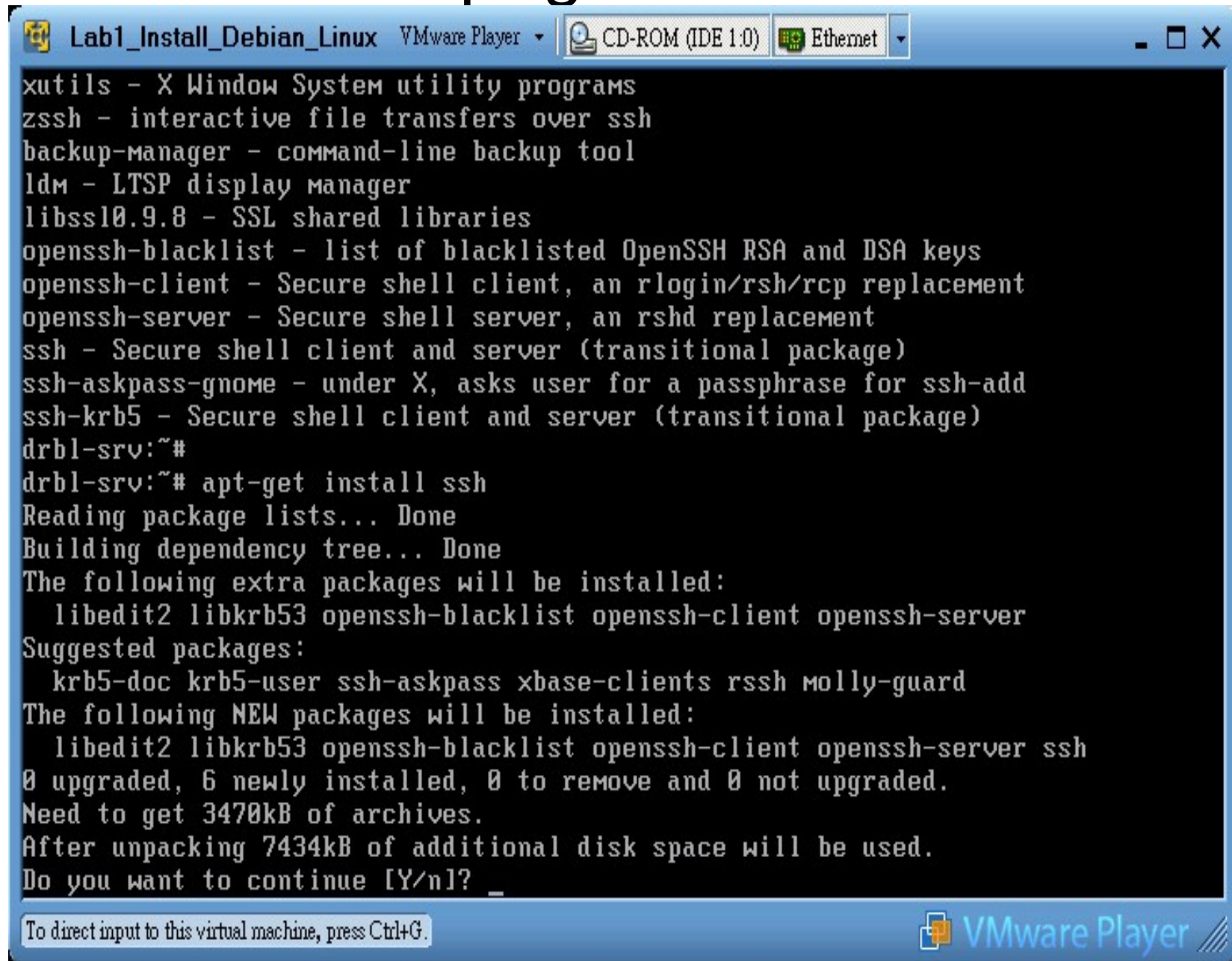


```
Lab1_Install_Debian_Linux VMware Player | CD-ROM (IDE 1:0) Ethernet | - □ X
(2.6.18.dfsg.1-18etch1 was configured last, according to dpkg)
Running postinst hook script /sbin/update-grub.
drbl-srv:~# apt-cache search ssh
aolserver4-nssha1 - AOLserver4 module: performs SHA1 hashes
arno-iptables-firewall - Single- and multi-homed firewall script with DSL/ADSL support
autossh - Automatically restart SSH sessions and tunnels
backuppc - high-performance, enterprise-grade system for backing up PCs
boa-constructor - RAD tool for Python and WxWindows application
clusterssh - administer multiple ssh or rsh shells simultaneously
connect-proxy - Establish TCP connection using SOCKS4/5 and HTTP tunnel
corkscrew - tunnel TCP connections through HTTP proxies
crosshurd - Install a Debian system
dar - Disk ARchive: Backup directory tree and files
dar-docs - Disk ARchive: Backup directory tree and files
dar-static - Disk ARchive: Backup directory tree and files
denyhosts - an utility to help sys admins thwart ssh hackers
detachtty - Attach/detach from interactive processes across the network
devscripts - Scripts to make the life of a Debian Package maintainer easier
dirvish - Filesystem based backup system using rsync
dpsyco-ssh - Automate administration of access via ssh
dropbear - lightweight SSH2 server and client
dsh - dancer's shell, or distributed shell
dsniff - Various tools to sniff network traffic for cleartext insecurities
factor - a library for retrieving facts from operating systems

To direct input to this virtual machine, press Ctrl+G. VMware Player
```

# 基本管理篇 [5] 用 apt-get install 安裝套件

## Ex. apt-get install ssh

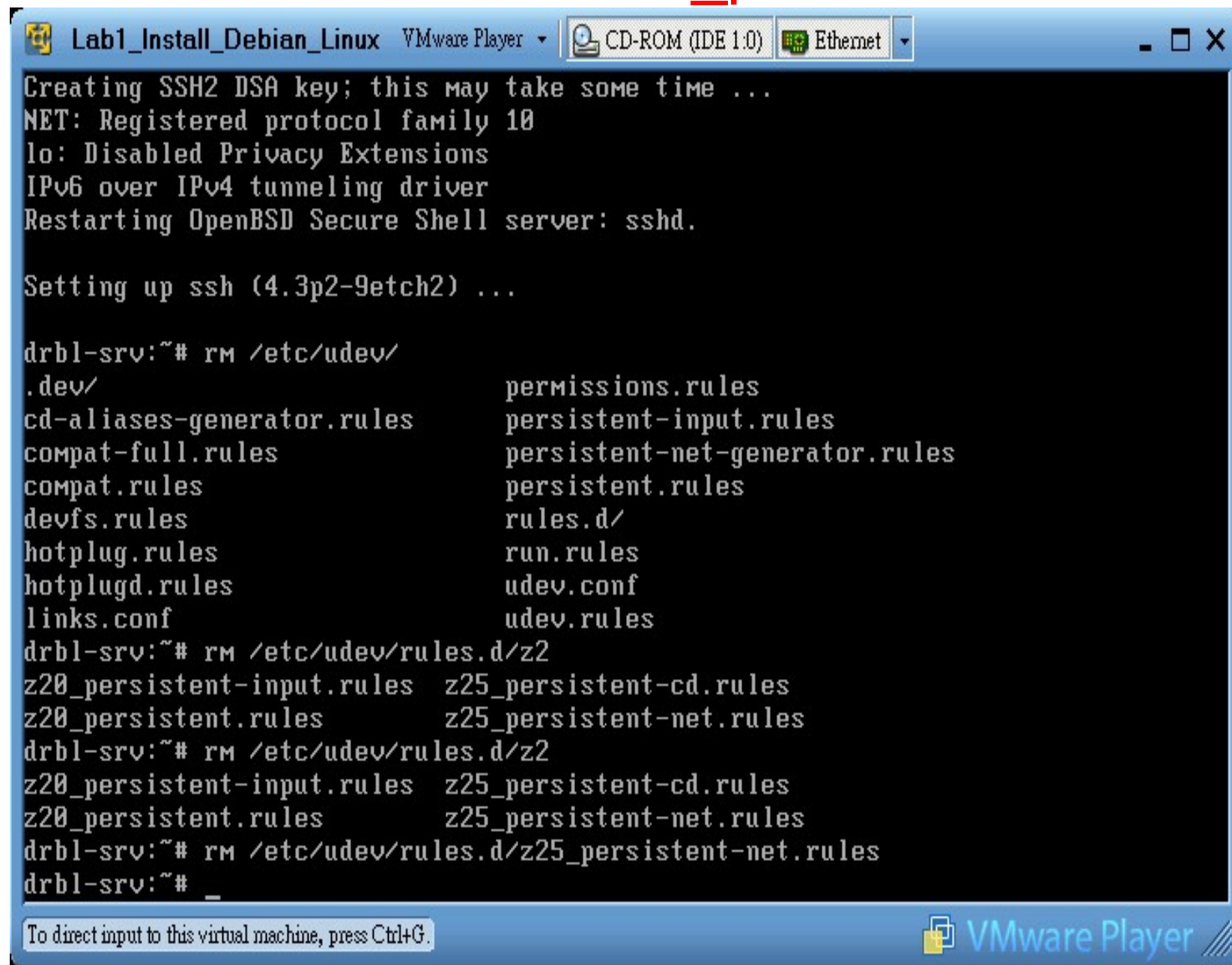


```
Lab1_Install_Debian_Linux VMware Player | CD-ROM (IDE 1:0) Ethernet | . □ X
xutils - X Window System utility programs
zssh - interactive file transfers over ssh
backup-manager - command-line backup tool
ldm - LTSP display manager
libssl0.9.8 - SSL shared libraries
openssh-blacklist - list of blacklisted OpenSSH RSA and DSA keys
openssh-client - Secure shell client, an rlogin/rsh/rcp replacement
openssh-server - Secure shell server, an rshd replacement
ssh - Secure shell client and server (transitional package)
ssh-askpass-gnome - under X, asks user for a passphrase for ssh-add
ssh-krb5 - Secure shell client and server (transitional package)
drbl-srv:~#
drbl-srv:~# apt-get install ssh
Reading package lists... Done
Building dependency tree... Done
The following extra packages will be installed:
  libedit2 libkrb53 openssh-blacklist openssh-client openssh-server
Suggested packages:
  krb5-doc krb5-user ssh-askpass xbase-clients rssh molly-guard
The following NEW packages will be installed:
  libedit2 libkrb53 openssh-blacklist openssh-client openssh-server ssh
0 upgraded, 6 newly installed, 0 to remove and 0 not upgraded.
Need to get 3470kB of archives.
After unpacking 7434kB of additional disk space will be used.
Do you want to continue [Y/n]? _
```

To direct input to this virtual machine, press Ctrl+G. VMware Player

# 管理番外篇 [\*] 關於 udev 鎖住網卡 MAC

## rm /etc/udev/rules.d/z25\_persistent-net.rules



```
Lab1_Install_Debian_Linux VMware Player | CD-ROM (IDE 1:0) Ethernet
Creating SSH2 DSA key; this may take some time ...
NET: Registered protocol family 10
lo: Disabled Privacy Extensions
IPv6 over IPv4 tunneling driver
Restarting OpenBSD Secure Shell server: sshd.

Setting up ssh (4.3p2-9etch2) ...

drbl-srv:~# rm /etc/udev/
.dev/
permissions.rules
cd-aliases-generator.rules persistent-input.rules
compat-full.rules persistent-net-generator.rules
compat.rules persistent.rules
devfs.rules rules.d/
hotplug.rules run.rules
hotplugd.rules udev.conf
links.conf udev.rules
drbl-srv:~# rm /etc/udev/rules.d/z2
z20_persistent-input.rules z25_persistent-cd.rules
z20_persistent.rules z25_persistent-net.rules
drbl-srv:~# rm /etc/udev/rules.d/z2
z20_persistent-input.rules z25_persistent-cd.rules
z20_persistent.rules z25_persistent-net.rules
drbl-srv:~# rm /etc/udev/rules.d/z25_persistent-net.rules
drbl-srv:~# _
```

To direct input to this virtual machine, press Ctrl+G.

VMware Player



# 基本管理篇 [6] 用 halt -n 關機

```
Lab1_Install_Debian_Linux VMware Player | CD-ROM (IDE 1:0) Ethernet |
compat.rules          persistent.rules
devfs.rules           rules.d/
hotplug.rules        run.rules
hotplugd.rules       udev.conf
links.conf           udev.rules
drbl-srv:~# rm /etc/udev/rules.d/z2
z20_persistent-input.rules  z25_persistent-cd.rules
z20_persistent.rules        z25_persistent-net.rules
drbl-srv:~# rm /etc/udev/rules.d/z2
z20_persistent-input.rules  z25_persistent-cd.rules
z20_persistent.rules        z25_persistent-net.rules
drbl-srv:~# rm /etc/udev/rules.d/z25_persistent-net.rules
drbl-srv:~# halt -n

Broadcast message from root@drbl-srv (tty1) (Thu Jul 17 08:55:29 2008):

The system is going down for system halt NOW!
INIT: Switching to runlevel: 0
INIT: Sending processes the TERM signal
drbl-srv:~# Stopping periodic command scheduler: crond.
Stopping Advanced Configuration and Power Interface daemon: acpid.
Stopping internet superserver: inetd.
Stopping OpenBSD Secure Shell server: sshd.
Saving the system clock..
_

To direct input to this virtual machine, press Ctrl+G. VMware Player
```