# install Linux server

(ubuntu 18.04)

xuan 2019.11.20



#### Welcome to VMware Workstation 15 Player



#### Create a New Virtual Machine

Create a new virtual machine, which will then be added to the top of your library.



#### Open a Virtual Machine

Open an existing virtual machine, which will then be added to the top of your library.



#### Upgrade to VMware Workstation Pro

Get advanced features such as snapshots, virtual network management, and more.



#### Help

View online help.

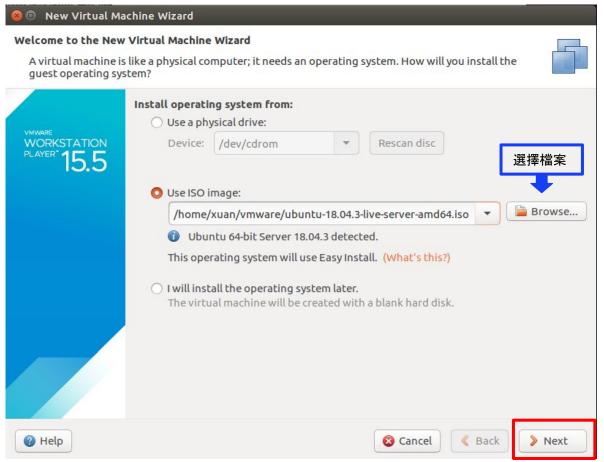


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### 步驟:

選擇 Creat a New Virtual Machine

新建一個虛擬機。

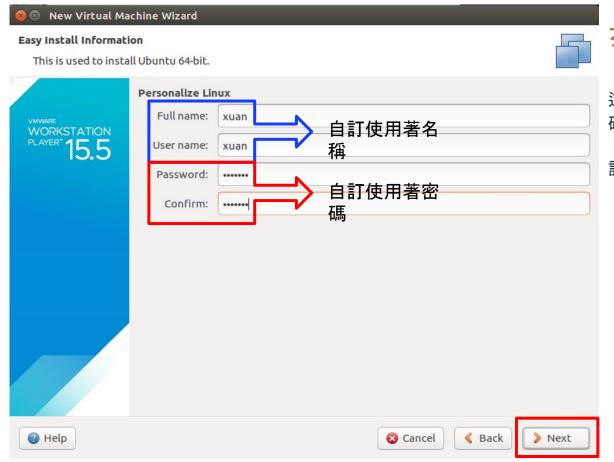


選擇 iso image.

這邊的版本是 ubuntu-18.04-live-server-amd.iso

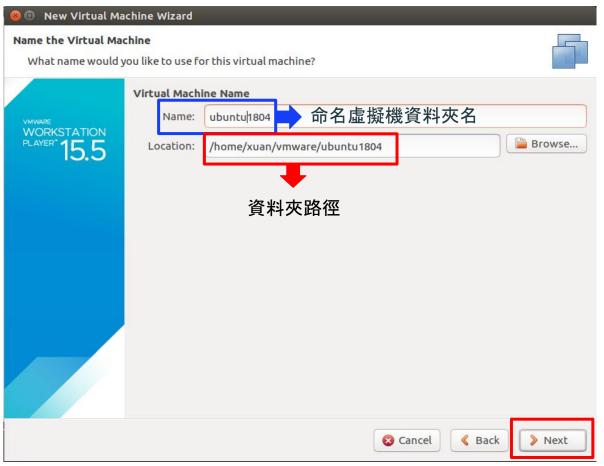
前面的/home/xuan/vmware/是我的資料夾路徑。

選擇檔案後 > Next 下一個步驟。



這邊是命名使用著名稱及設定密碼。

設定完後 > Next 下一個步驟。



命名虛擬機資料夾名稱。

設定完後 > Next 下一個步驟。

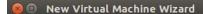


設定硬碟大小, 依據自己電腦硬碟 規格自行設定。

Store virtual disk as a single file: 將 虛擬硬碟存儲為單個文件, 如果直 接在電腦上做安裝, 之後備份較為 方便。

Split virtual disk into multple file: 將 虛擬硬碟切割為多個文件, 如果是 用隨身碟安裝或檔案格式為at的就 比合適。

設定完後 > Next 下一個步驟。



#### Ready to Create Virtual Machine

Click Finish to create the virtual machine and start installing Ubuntu 64-bit and then VMware Tools.

Automatically power on this virtual machine after creation.

Cancel

**&** Back

Finish



### 步驟:

準備創建虛擬機, 並且將安裝 VMware Tools.

設定完後 > Finish 下一個步驟。



自動安裝上述資源

Customize Hardware...

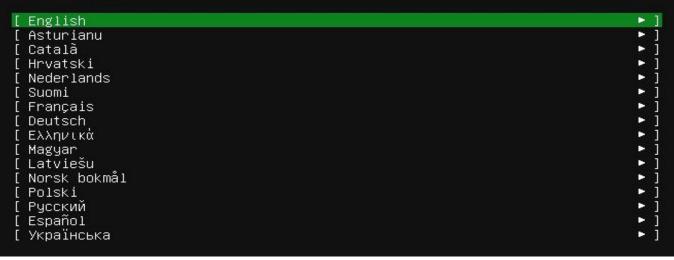
```
ISOLINUX 3.82 2009–06–09 ETCD Copyright (C) 1994–2009 H. Peter Anvin et al
    2.019353] plix4_smbus 0000:00:07.3: SMBus Host Controller not enabled!
    2.687290] sd 2:0:0:0: [sda] Assuming drive cache: write through
touch: /dev/.initramfs/lupin-waited-for-devs: No such file or directory
cp: can't stat '/custom-installation/initrd-override/*': No such file or directory
cp: can't stat '/custom–installation/iso–override/*': No such file or directory
Generating locales (this might take a while)...
 en_US.UTF-8... done
Generation complete.
grep: /root/floppy/preseed.cfg: No such file or directory
Using CD−ROM mount point /cdrom/
Identifying... [82f411df57c9bb5c0ab5a20c70b3a7a7-2]
Scanning disc for index files...
Found 2 package indexes, O source indexes, O translation indexes and 1 signatures
"Found label 'Ubuntu–Server 18.04.3 LTS _Bionic Beaver_ – Release amd64 (20190805)
This disc is called:
'Ubuntu–Server 18.04.3 LTS _Bionic Beaver_ – Release amd64 (20190805)'
Copying package lists...gpgv: Signature made Mon Aug 5 19:59:57 2019 UTC,
                    using RSA key D94AA3F0EFE21092
gpgv: Good signature from "Ubuntu CD Image Automatic Signing Key (2012) <cdimage@ubuntu.com>"
Reading Package Indexes... Done
Writing new source list
Source list entries for this disc are:
deb cdrom:[Ubuntu-Server 18.04.3 LTS _Bionic Beaver_ - Release amd64 (20190805)]/ bionic main restricted
Repeat this process for the rest of the CDs in your set.
```

等待創建虚擬機ス...

稍等一下~

Willkommen! Bienvenue! Welcome! Добро пожаловать! Welkom!

Please choose your preferred language.



看到這個畫面表示開始設定server 環境了。

首先選擇語言,這邊選擇English.(因為沒有中文,所以點選英文。)

設定完後 Enter鍵 下一個步驟。

#### Keyboard configuration

```
Please select your keyboard layout below, or select "Identify keyboard" to detect your layout automatically.

Layout: [English (US) 

Variant: [English (US) 

[Identify keyboard]
```

設定使用哪種布局的鍵盤?

在台灣使用的都是美式鍵盤, 所以這邊選擇English(US).

設定完後 Done 下一個步驟。若要返回Back 上一個步驟。

#### Network connections

Configure at least one interface this server can use to talk to other machines, and which preferably provides sufficient access for updates.

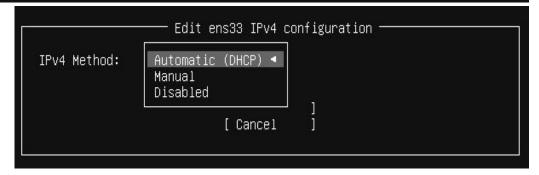


設定網路接口選擇 IPv4.

跳出旁邊選單這裡選擇 Automatic(DHCP).

設定完後 Done 下一個步驟。

若要返回 Back 上一個步驟。



#### Configure proxy

If this system requires a proxy to connect to the internet, enter its details here.

Proxy address: http://tw.archive.ubuntu.com/ubuntu

If you need to use a HTTP proxy to access the outside world, enter the proxy information here. Otherwise, leave this blank.

The proxy information should be given in the standard form of "http://[[user][:pass]@]host[:port]/".

#### Configure Ubuntu archive mirror

If you use an alternative mirror for Ubuntu, enter its details here.

Mirror address: http://tw.archive.ubuntu.com/ubuntu

You may provide an archive mirror that will be used instead of the default.

詢問此系統是否需要外部連接才能連網?

若需要 這邊填 http://tw.archive.ubuntu.com/ubuntu

設定完後 Done 下一個步驟, 若要返回 Back 上一個步驟。

#### Filesystem setup

The installer can guide you through partitioning an entire disk either directly or using LVM, or, if you prefer, you can do it manually.

If you choose to partition an entire disk you will still have a chance to review and modify the results.



用整個硬碟避免檔案被切割便於管搬移, 這裡選Use An Entire Disk.

設定完後 Done 下一個步驟, 若要返回 Back 上一個步驟。

#### Filesystem setup

The selected guided partitioning scheme creates the required bootloader partition on the chosen disk and then creates a single partition covering the rest of the disk, formatted as ext4 and mounted at '/'.

Choose the disk to install to:



確認後 Done 下一個步驟, 若要返回 Back 上一個步驟。

#### Filesystem setup FILE SYSTEM SUMMARY MOUNT POINT SIZE TYPE DEVICE TYPE 19.998G new ext4 new partition of local disk ▶ ] AVAILABLE DEVICES Create software RAID (md) ▶ ] USED DEVICES TYPE [ /dev/sda local disk 20.000G partition 1 new, to be formatted as ext4, mounted at / 19.998G

這裡在說明 硬碟分割區保留區(依據不同電腦, 這裡顯示的不同又!!)

確認後 Done 下一個步驟, 若要返回Back 上一個步驟。

——————————————————————————————————————
Selecting Continue below will begin the installation process and result in the loss of data on the disks selected to be formatted.
You will not be able to return to this or a previous screen once the installation has started.
Are you sure you want to continue?
[ No ] <mark>[ <u>C</u>ontinue ]</mark>

這裡告訴你,在下邊如果選擇Continue 後將開始進行安裝過程,並且將選擇的硬碟區塊格式化,請確保不會使數據 丟失。

在安裝開始後,無法再返回或上一步驟。

確認後 Continue 下一個步驟, 若要返回no 上一個步驟。

#### Profile setup

Enter the username and password you will use to log in to the system. You can configure SSH access on the next screen but a password is still needed for sudo.

Your name: xuan

Your server's name: xuan

The name it uses when it talks to other computers.

Pick a username: xuan

設定登入使用著名稱及密碼。

設定完後 Done 下一個步驟。

#### SSH Setup

You can choose to install the OpenSSH server package to enable secure remote access to your server.

[\_] Install OpenSSH server

Import SSH identity: [ No ▼ ]

You can import your SSH keys from Github or Launchpad.

Import Username:

[X] Allow password authentication over SSF

安裝 openssh, 之後才能夠遠端連線又!!

確認後 Done 下一個步驟。

Ubuntu 18.04.3 LTS ubuntu–server tty1

OK ] Started Wait until snapd is fully seeded.

OK ] Reached target Multi–User System.
OK ] Reached target Graphical Interface.

Starting Update UTMP about System Runlevel Changes...

OK ] Started Update UTMP about System Runlevel Changes.

等待安裝 openssh...

```
configuring disk: disk-sda
       configuring partition: partition-0
       configuring partition: partition-1
       configuring format: format-0
       configuring mount: mount-0
 configuring network
   running 'curtin net-meta auto'
     curtin command net-meta
 writing install sources to disk
   running 'curtin extract'
     curtin command extract
       acquiring and extracting image from cp:///media/filesystem
 configuring installed system
   running '/snap/bin/subiquity.subiquity-configure-run'
   running '/snap/bin/subiquity.subiquity-configure-apt
/snap/subiquity/1093/usr/bin/python3 false'
     curtin command apt-config
     curtin command in-target
   running 'curtin curthooks'
     curtin command curthooks
       configuring apt configuring apt
       installing missing packages
       configuring iscsi service
       configuring raid (mdadm) service
       installing kernel \
```

安裝系統...

等待一下~

[ View full log ]

```
Finished install!
/snap/subiquity/1093/usr/bin/python3 false'
     curtin command apt-config
     curtin command in-target
   running 'curtin curthooks'
     curtin command curthooks
       configuring apt configuring apt
       installing missing packages
       configuring iscsi service
       configuring raid (mdadm) service
       installing kernel
       setting up swap
       apply networking config
       writing etc/fstab
       configuring multipath
       updating packages on target system
       configuring pollinate user-agent on target
 finalizing installation
   running 'curtin hook'
     curtin command hook
 executing late commands
final system configuration
 configuring cloud-init
 restoring apt configuration
copying logs to installed system
```

[ View full log ] [ Reboot Now ]

### 步驟:

安裝完成,

選擇重新開機~

```
Starting System Logging Service...
      Starting Dispatcher daemon for systemd—networkd...
      Starting Login Service...
      Starting LXD - container startup/shutdown...
      Starting Pollinate to seed the pseudo random number generator...
      Starting LSB: automatic crash report generation...
OK ] Started FUSE filesystem for LXC.
OK 1 Started Deferred execution scheduler.
      Starting Accounts Service...
      Starting Permit User Sessions...
      Starting LSB: Record successful boot for GRUB...
OK ] Started irabalance daemon.
OK ] Started Regular background program processing daemon.
OK ] Started D-Bus System Message Bus.
OK ] Started Login Service.
OK ] Started Unattended Upgrades Shutdown.
      Starting Thermal Daemon Service...
      Starting Snappy daemon...
OK ] Started System Logging Service.
OK 1 Started LXD - container startup/shutdown.
OK ] Started Permit User Sessions.
      Starting Hold until boot process finishes up...
      Starting Terminate Plymouth Boot Screen...
OK ] Started Hold until boot process finishes up.
      Starting Set console scheme...
OK ] Started Terminate Plymouth Boot Screen.
OK ] Started LSB: automatic crash report generation.
OK 1 Started Thermal Daemon Service.
OK 1 Started Set console scheme.
   ] Created slice system-getty.slice.
OK ] Started Getty on tty1.
OK ] Reached target Login Prompts.
      Starting Authorization Manager...
OK 1 Started Authorization Manager.
OK ] Started Accounts Service.
OK 1 Started LSB: Record successful boot for GRUB.
```

### 步驟

看到這黑色畫面, 就是 server 正在開機嘍!

Ubuntu 18.04.3 LTS xuan tty1 xuan login: [ 21.845321] cloud-init[1411]: Generating locales (this might take a while)... 22.549147] cloud-init[1411]: en\_US.UTF-8... done 22.550073] cloud-init[1411]: Generation complete. 22.779738] cloud-init[1411]: Cloud-init v. 19.1-1-gbaa47854-Oubuntu1~18.04.1 running 'modules:c nfig' at Wed. 20 Nov 2019 14:56:43 +0000. Up 21.73 seconds. ci–İnfo: no authorized ssh keys fingerprints found for user xuan. <14>Nov 20 14:56:44 ec2: <14>Nov 20 14:56:44 ec2: ----BEGIN SSH HOST KEY FINGERPRINTS----<14>Nov 20 14:56:44 ec2: 1024 SHA256:VTynByAkcKu/yisX/H2cOOasOksNTBjGDhCNfjTzjao root@xuan (DSA) <14>Nov 20 14:56:44 ec2: 256 SHA256:cDUDjH/vSb9RvojZ99qM/5WEkjoMtnK2TlJZt3DLC1c root@xuan (ECDSA) <14>Nov 20 14:56:44 ec2: 256 SHA256:tiNCreVr+fy2MDlTmn1Xkw7iJ4/qRkZZ7kSxs8i2B3I root@xuan (ED25519) (14>Nov 20 14:56:44 ec2: 2048 SHA256:fbSp2Ma3449sAJKyAUTsEgfbChtfLeTKuU5JXhFXykg root@xuan (RSA) <14>Nov 20 14:56:44 ec2: ----END SSH HOST KEY FINGERPRINTS--------BEGIN SSH HOST KEY KEYS---ecdsa–sha2–nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBFtbNRUG/bOo8bFYZleEeKxcbO5 opsCDhpbRNjYtgjCz3+4BjCjrAbRpTOtRQsPlzMU198X75Zb1f46eYMex/g= root@xuan ssh—ed25519 AAAAC3NzaC1lZDI1NTE5AAAAILPt4eiGxBcmkhWX00B/C5EsplQc3XL4c6Kg6nKhFm8Z root@xuan ssh–rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDBwI8e/ewYixyU2gQIQVz33pPIUPnTsNgn4mR5qMVojGeklVB+zf8iOZTPdMN \_S9c6StEIZOGcvxI5yWyLFXdzshjVDFaDw7jRhwkxSKwPsgbSY4foHPdoCdu9DrXrm1ENEppm347BxQYvy+zW1Q5aDxFRJEeHOZ awbUxkrQSPqiS/o2XX7X3buFND/cntIOwq9yK79sDsWYWCMD7p094CUGXLEcooOIiSO2+tLPxOiEHSMoXNhRQRWDyiMtDtltAAy KSuC+SIE2JlW88L+fReOiPl3/TKCDfosqtifHjhrNA4Yd+/XI29OYhLZ9d4OBnCwB64+j5UoqvzOqtuZ root@xuan ----END SSH HOST KEY KEYS----23.354361] cloud-init[1486]: Cloud-init v. 19.1-1-gbaa47854-Oubuntu1~18.04.1 running 'modules:f

[ 23.354513] cloud–init[1486]: ci–info: no authorized ssh keys fingerprints found for user xuan. [ 23.354598] cloud–init[1486]: Cloud–init v. 19.1–1–gbaa47854–Oubuntu1~18.04.1 finished at Wed, 2 Nov 2019 14:56:44 +0000. Datasource DataSourceNoCloud [seed=/var/lib/cloud/seed/nocloud–net][dsmod

nal' at Wed, 20 Nov 2019 14:56:44 +0000. Up 23.21 seconds.

=netl. Up 23.34 seconds

### 步驟

跑一些系統東西...

```
Jbuntu 18.04.3 LTS xuan tty1
kuan login: [   21.845321] cloud–init[1411]: Generating locales (this might take a while)...
   22.549147] cloud-init[1411]:
                                en_US.UTF-8... done
   22.550073] cloud-init[1411]: Generation complete.
   22.779738] cloud-init[1411]: Cloud-init v. 19.1–1–gbaa47854–Oubuntu1~18.04.1 running 'modules:co
nfig' at Wed, 20 Nov 2019 14:56:43 +0000. Up 21.73 seconds.
ci–info: no authorized ssh keys fingerprints found for user xuan.
<14>Nov 20 14:56:44 ec2:
<14>Nov 20 14:56:44 ec2: ----BEGIN SSH HOST KEY FINGERPRINTS----
(14>Nov 20 14:56:44 ec2: 1024 SHA256:VTunBuAkcKu/uisX/H2cOOasOksNTBiGDhCNfiTziao root@xuan (DSA)
(14>Nov 20 14:56:44 ec2: 256 SHA256:cDUDjH/vSb9RvojZ99qM/5WEkjoMtnK2TlJZt3DLC1c root@xuan (ECDSA)
<14>Nov 20 14:56:44 ec2: 256 SHA256:tjNCreVr+fy2MDlTmn1Xkw7jJ4/qRkZZ7kSxs8i2B3I root@xuan (ED25519)
(14>Nov 20 14:56:44 ec2: 2048 SHA256:fbSp2Ma3449sAJKyAUTsEgfbChtfLeTKuU5JXhFXykg root@xuan (RSA)
<14>Nov 20 14:56:44 ec2: ----END SSH HOST KEY FINGERPRINTS----
----BEGIN SSH HOST KEY KEYS----
ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBFtbNRUG/bOo8bFYZleEeKxcb05G
ppsCDhpbRNjYtgjCz3+4BjCjrAbRpTOtRQsPlzMU198X75Zb1f46eYMex/g= root@xuan
ssh–ed25519 AAAAC3NzaC11ZDI1NTE5AAAAILPt4eiGxBcmkhWX00B/C5EsplQc3XL4c6Kg6nKhFm8Z root@xuan
ssh–rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDBwI8e/ewYixyU2gQIQVz33pPIUPnTsNgn4mR5gMVojGeklVB+zf8iOZTPdMNa
S9c6StEIZOGcvxI5yWyLFXdzshjVDFaDw7jRhwkxSKwPsgbSY4foHPdoCdu9DrXrm1ENEppm347BxQYvy+zWlQ5aDxFRJEeHOZ.
awbUxkrQSPqiS/o2XX7X3buFND/cntIOwq9yK79sDsWYWCMD7p094CUGXLEcooOIiSO2+tLPxOiEHSMoXNhRQRWDyiMtDtltAAye
KSuC+SIE2JlW88L+fReOiPl3/TKCDfosqtifHjhrNA4Yd+/XI29OYhLZ9d4OBnCwB64+j5UoqvzOqtuZ root@xuan
----END SSH HOST KEY KEYS-----
   23.354361] cloud-init[1486]: Cloud-init v. 19.1–1–gbaa47854–Oubuntu1~18.04.1 running 'modules:fi
nal' at Wed, 20 Nov 2019 14:56:44 +0000. Up 23.21 seconds.
   23.354513] cloud-init[1486]: ci-info: no authorized ssh keys fingerprints found for user xuan.
   23.354598] cloud-init[1486]: Cloud-init v. 19.1-1-gbaa47854-Oubuntu1~18.04.1 finished at Wed. 20
Nov 2019 14:56:44 +0000. Datasource DataSourceNoCloud [seed=/var/lib/cloud/seed/nocloud-net][dsmode
=net]. Up 23.34 seconds
```

Jbuntu 18.04.3 LTS xuan tty1

xuan login: \_

少縣:

準備登入嘍!

輸入剛剛設定的使用著 名稱,輸入完 enter 鍵輸 入密碼。 Ubuntu 18.04.3 LTS xuan tty1

xuan login: xuan

Password:

Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0–55–generic x86\_64)

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

\* Management: https://landscape.canonical.com
\* Support: https://ubuntu.com/advantage

System information as of Wed Nov 20 14:59:00 UTC 2019

System load: 0.07 Processes: 178
Usage of /: 18.2% of 19.56GB Users logged in: 0

Memory usage: 11% IP address for ens33: 192.168.37.134

Swap usage: 0%

O packages can be updated. O updates are security updates.

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

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law.

To run a command as administrator (user "root"), use "sudo <command>". See "man sudo\_root" for details.

xuan@xuan:~\$ \_

### 步驟:

看到紅框,表示登入成功!進入linux server了。

## 恭喜完成安裝 Linux server!!