

VirtualBox Setup

Install VirtualBox





Outline

- ☐ Objective
- ☐ Experiment Environment
- ☐ Installation
 - ☒ VirtualBox 6.1.2
 - ☒ Add VM
 - ☒ Ubuntu 18.04



Objective

- ❑ Prepare a operational environment
 - VirtualBox: Open-source cross-platform virtualization application
 - Run virtual machines
 - Ubuntu: Open-source operating system
 - A most popular OS for software development



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Experiment Environment

- ❑ Ubuntu Desktop **18.04**
- ❑ **Minimum** Hardware Requirements:
 - **2** Cores (CPUs)
 - **8GB** RAM
 - **20GB** HDD



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VirtualBox Installation (1/6)

- Go to official website:

<https://www.virtualbox.org/wiki/Downloads>

- Download the “platform packages” for the corresponding host’s

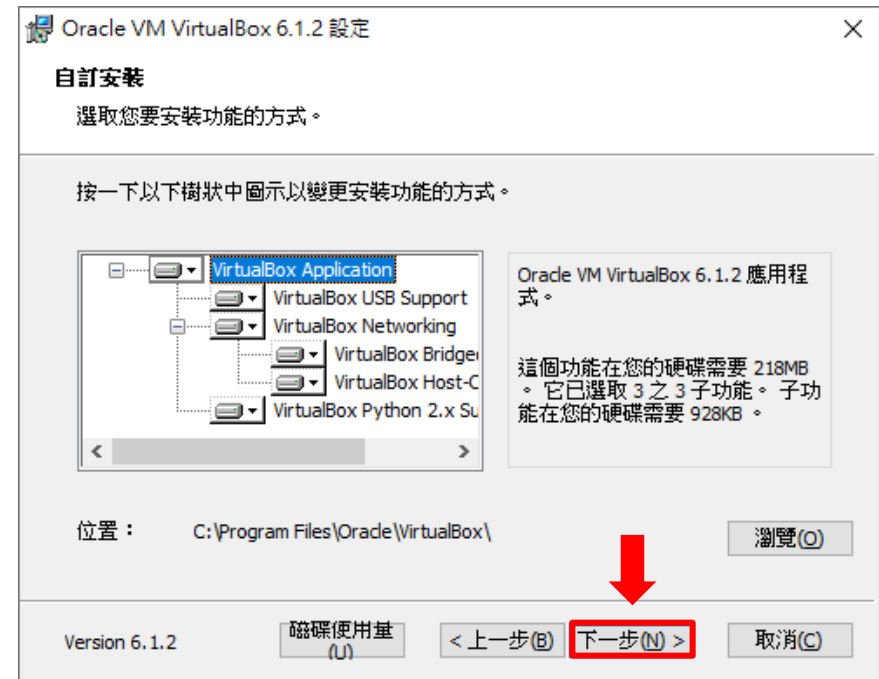
The screenshot shows the VirtualBox Downloads page. On the left is a sidebar with links: About, Screenshots, Downloads, Documentation, End-user docs, Technical docs, Contribute, and Community. The main content area has the VirtualBox logo and the heading 'Download VirtualBox'. Below this, it says 'Here you will find links to VirtualBox binaries and its source code.' The 'VirtualBox binaries' section explains that by downloading, you agree to the terms and conditions of the respective license. It provides links for the latest VirtualBox 6.0 packages and VirtualBox 5.2 packages. A red box highlights the 'VirtualBox 6.1.2 platform packages' section, which contains a list of links: Windows hosts, OS X hosts, Linux distributions, and Solaris hosts. A red arrow points to this section. Below this, it states that the binaries are released under the terms of the GPL version 2 and provides a link to the changelog. It also mentions that users might want to compare checksums to verify the integrity of downloaded packages, with links for SHA256 and MD5 checksums. A note recommends upgrading VirtualBox and installing the guest additions. The 'VirtualBox 6.1.2 Oracle VM VirtualBox Extension Pack' section lists a link for all supported platforms and provides information about support for USB 2.0 and USB 3.0 devices, VirtualBox RDP, disk encryption, NVMe and PXE boot for Intel cards, and a link to the User Manual. The 'VirtualBox 6.1.2 Software Developer Kit (SDK)' section lists a link for all platforms. Finally, the 'User Manual' section provides a link to the VirtualBox User Manual.



VirtualBox Installation (2/6)

❑ Execute “VirtualBox-6.1.2-135663-Win.exe”

名稱	修改日期	類型	大小
今天 (1)			
VirtualBox-6.1.2-135663-Win	2020/2/9 下午 02:46	應用程式	110,102 KB
上週 (1)			





VirtualBox Installation (3/6)

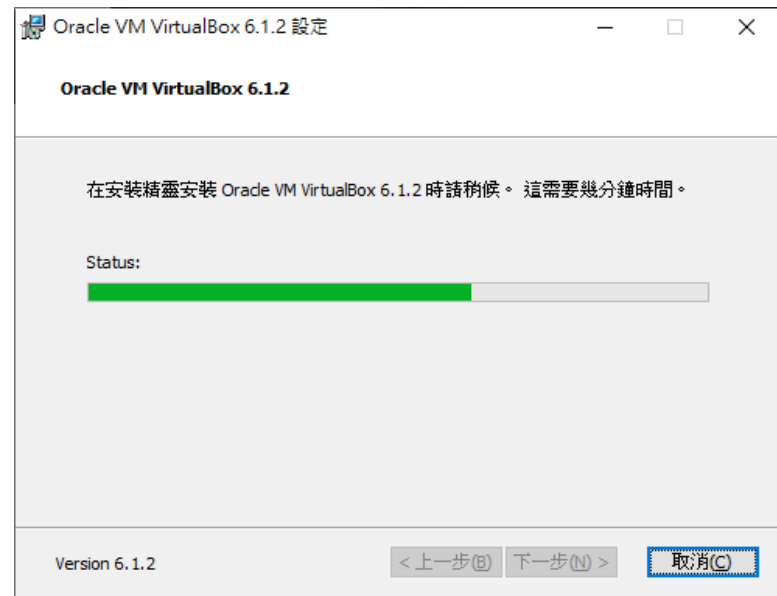
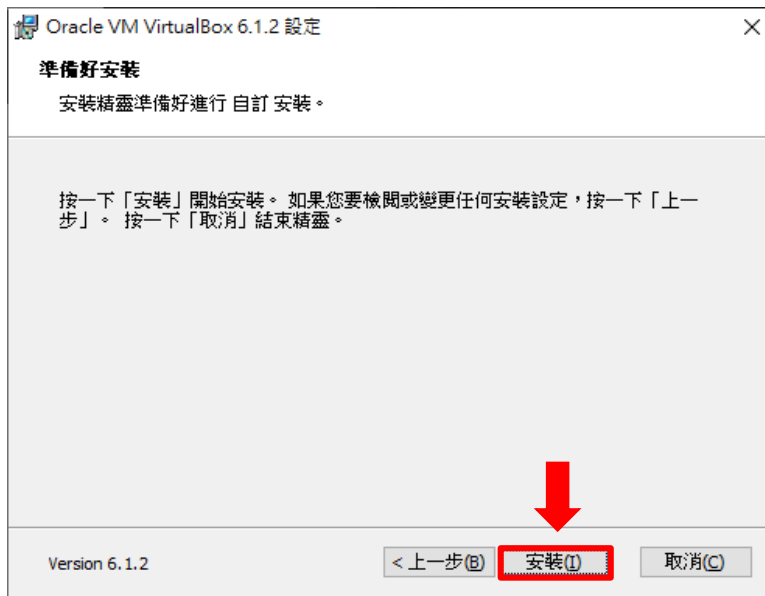
- ❑ Choose how you want to install





VirtualBox Installation (4/6)

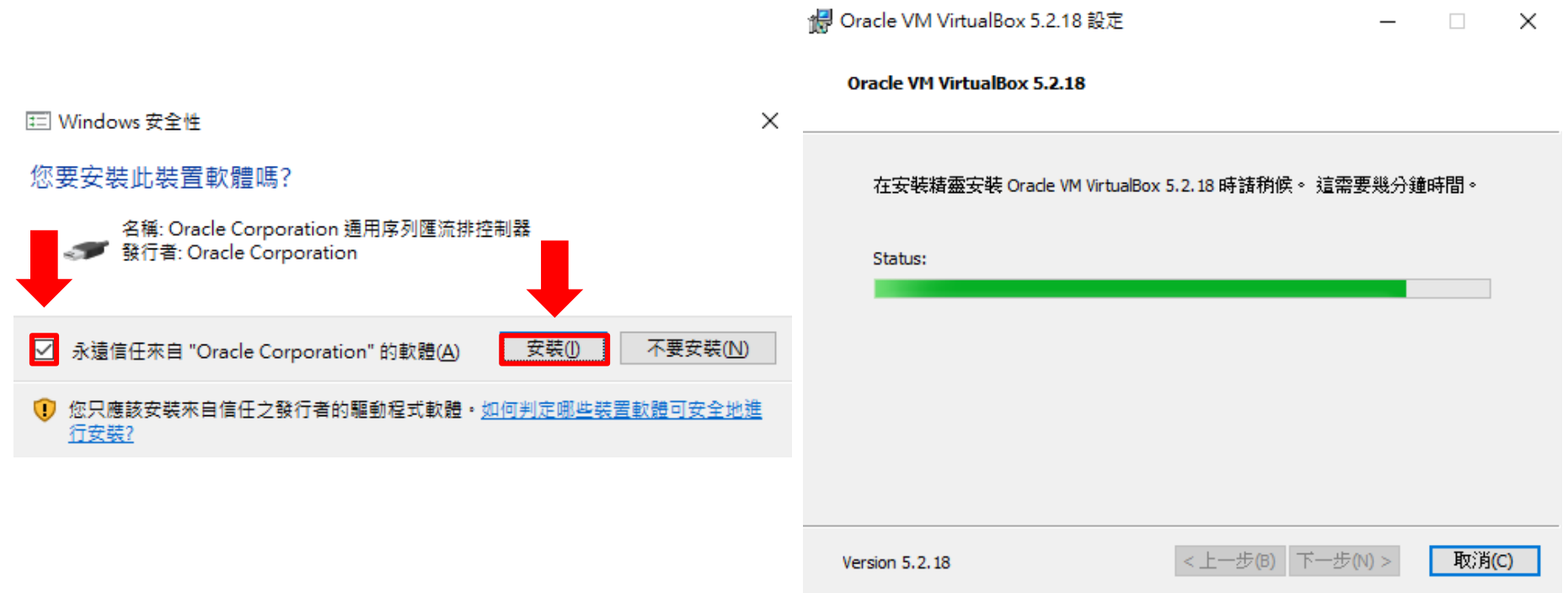
1. Click "Yes"
2. Click "Install"
3. Wait for installing





VirtualBox Installation (5/6)

- ☐ Click “Always trust software from ‘Oracle Corporation’”
- ☐ Waiting





VirtualBox Installation (6/6)

- Click “Finish”





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- ❑ Experiment Environment
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 - Add VM
 - Download image file
 - Virtual machine setting
 - Ubuntu 18.04



Download image file (1/10)

❑ Download image file (.iso) first

■ <https://www.ubuntu-tw.org/modules/tinyd0/>

■ Ubuntu Desktop 16.04

下載 Ubuntu

發行版

- ☒ Ubuntu 桌面版本
☐ Ubuntu 伺服器版本

不同發行版具備不同的圖形環境與配套軟體。如果您不知道如何選擇，請選擇 Ubuntu 桌面版本。

版本

- ☐ 20.10 (半年支援)
☐ 20.04 LTS (5年支援)
☒ 18.04 LTS (5年支援)
☐ 16.04 LTS (5年支援)

20.04 LTS (2020/04 - 2025/04) 為最新 LTS 版 (長期支援, 穩定, 五年支援)。16.04 (及之前版本) 的預設桌面為經典 Unity, 18.04 開始為 Gnome 3, 但您仍可手動安裝 Unity 並進行切換。詳細資訊請參考 [Release End of Life](#)

電腦架構

- ☐ 32 位元版本
☒ 64 位元版本

目前一般電腦大多使用 64 位元架構, 故從 18.04 開始, 桌面版也將不再提供 32 位元版本。另外, 目前在下載區無 Mac 版本可下載。

下載選項

☐ 下載 BitTorrent 種子

開始下載

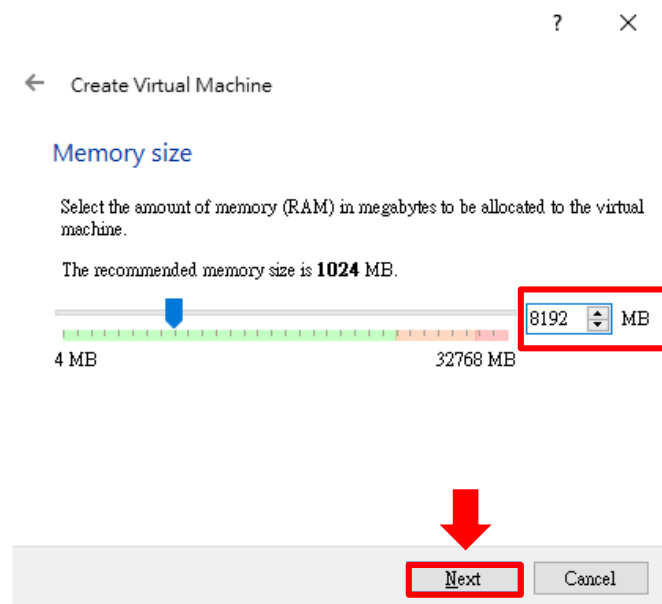
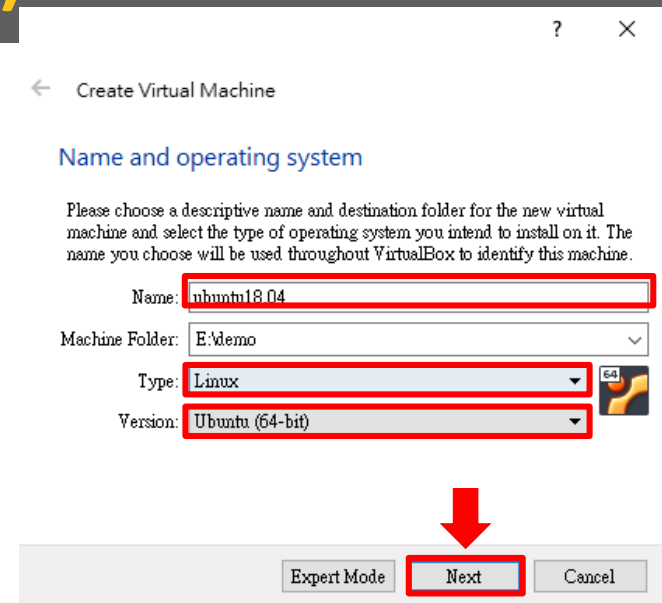
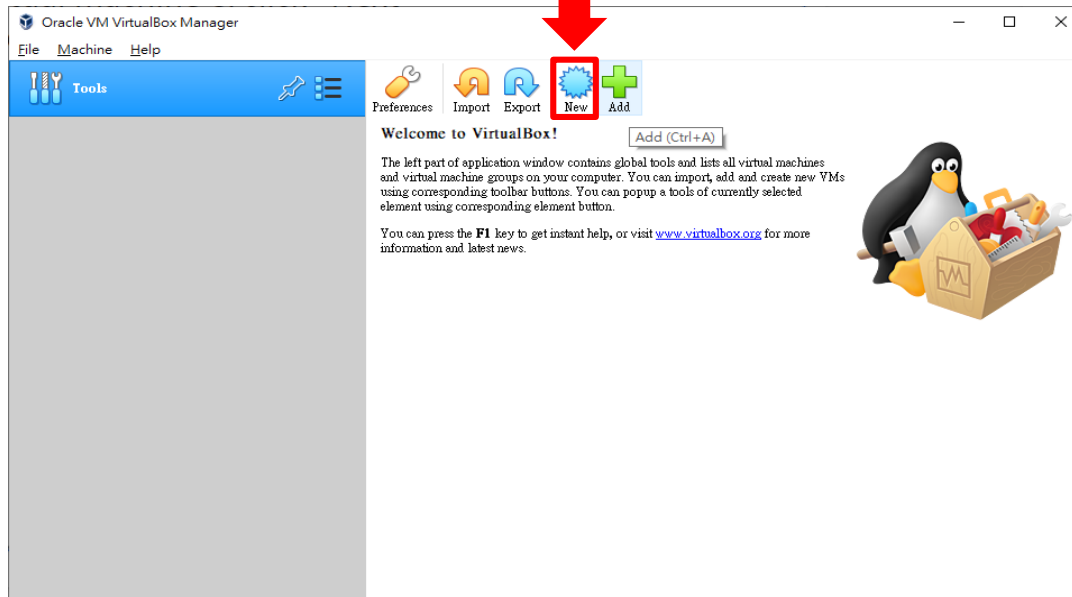
或是 [至此瀏覽所有版本及檔案](#)





Virtual machine setting (2/10)

1. Start VirtualBox & Click “New”
2. Name the virtual machine (**SDN-NFV**), then click “Next”
3. Adjust the memory size to **8192MB**, then click “Next”





Virtual machine setting (3/10)

1. Click “Create”
2. Click “Next”

?

×

← Create Virtual Machine

Hard disk

If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select one from the list or from another location using the folder icon.

If you need a more complex storage set-up you can skip this step and make the changes to the machine settings once the machine is created.

The recommended size of the hard disk is **12.00 GB**.

☐ Do not add a virtual hard disk

☒ Create a virtual hard disk now

☐ Use an existing virtual hard disk file

Empty

Create Cancel



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← Create Virtual Hard Disk

Hard disk file type

Please choose the type of file that you would like to use for the new virtual hard disk. If you do not need to use it with other virtualization software you can leave this setting unchanged.

☒ VDI (VirtualBox Disk Image)

☐ VHD (Virtual Hard Disk)

☐ VMDK (Virtual Machine Disk)

Expert Mode Next Cancel





Virtual machine setting (4/10)

1. Click “Next”
2. Adjust the size of virtual HD to **20GB**, then click “Create”

← Create Virtual Hard Disk

Storage on physical hard disk

Please choose whether the new virtual hard disk file should grow as it is used (dynamically allocated) or if it should be created at its maximum size (fixed size).

A **dynamically allocated** hard disk file will only use space on your physical hard disk as it fills up (up to a maximum **fixed size**), although it will not shrink again automatically when space on it is freed.

A **fixed size** hard disk file may take longer to create on some systems but is often faster to use.

☒ Dynamically allocated
☐ Fixed size

Next Cancel

← Create Virtual Hard Disk

File location and size

Please type the name of the new virtual hard disk file into the box below or click on the folder icon to select a different folder to create the file in.

C:\Users\Stan\VirtualBox VMs\SDN_NFV\SDN_NFV.vdi

Select the size of the virtual hard disk in megabytes. This size is the limit on the amount of file data that a virtual machine will be able to store on the hard disk.

4.00 MB 2.00 TB

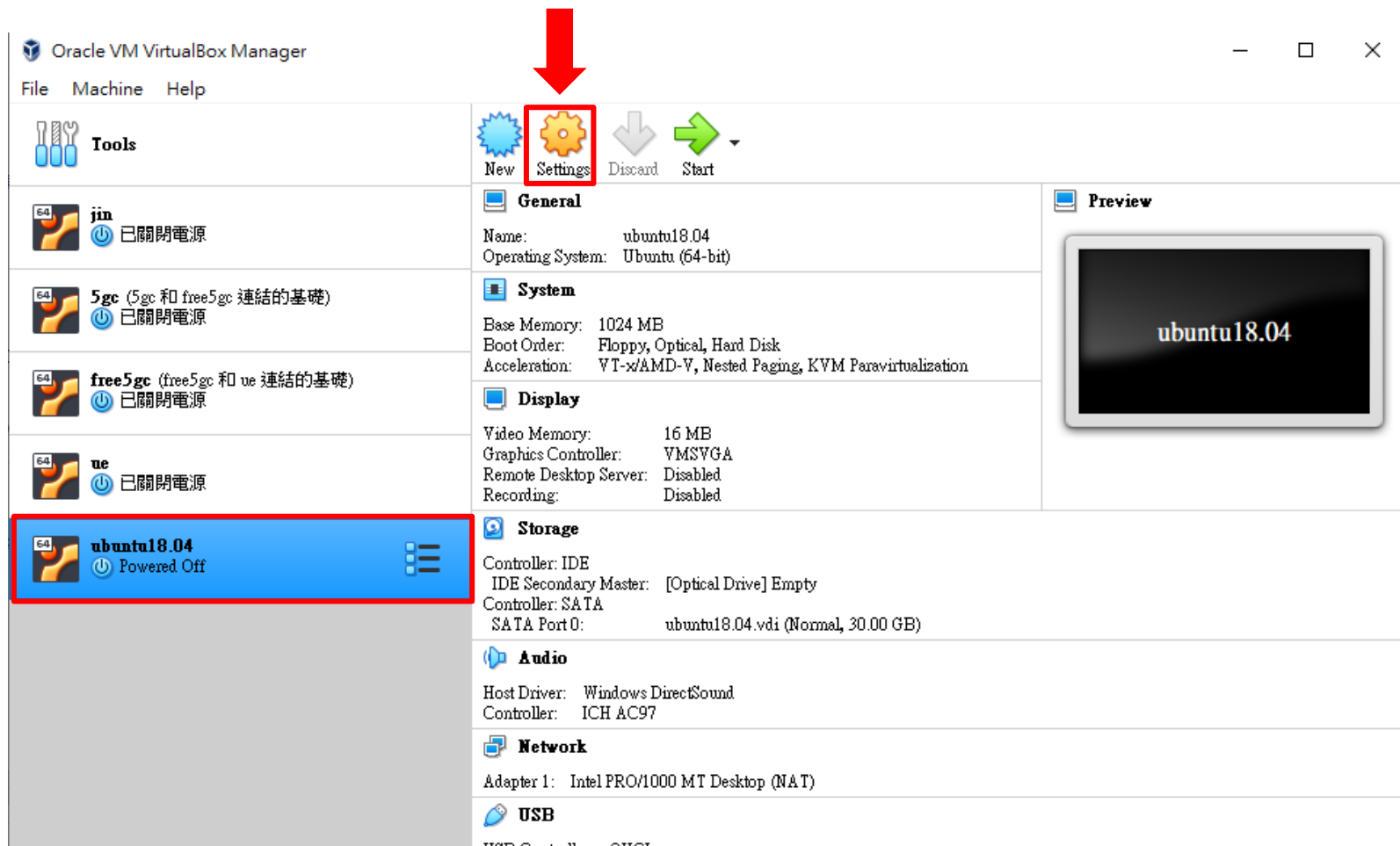
20 GB

Create Cancel



Virtual machine setting (5/10)

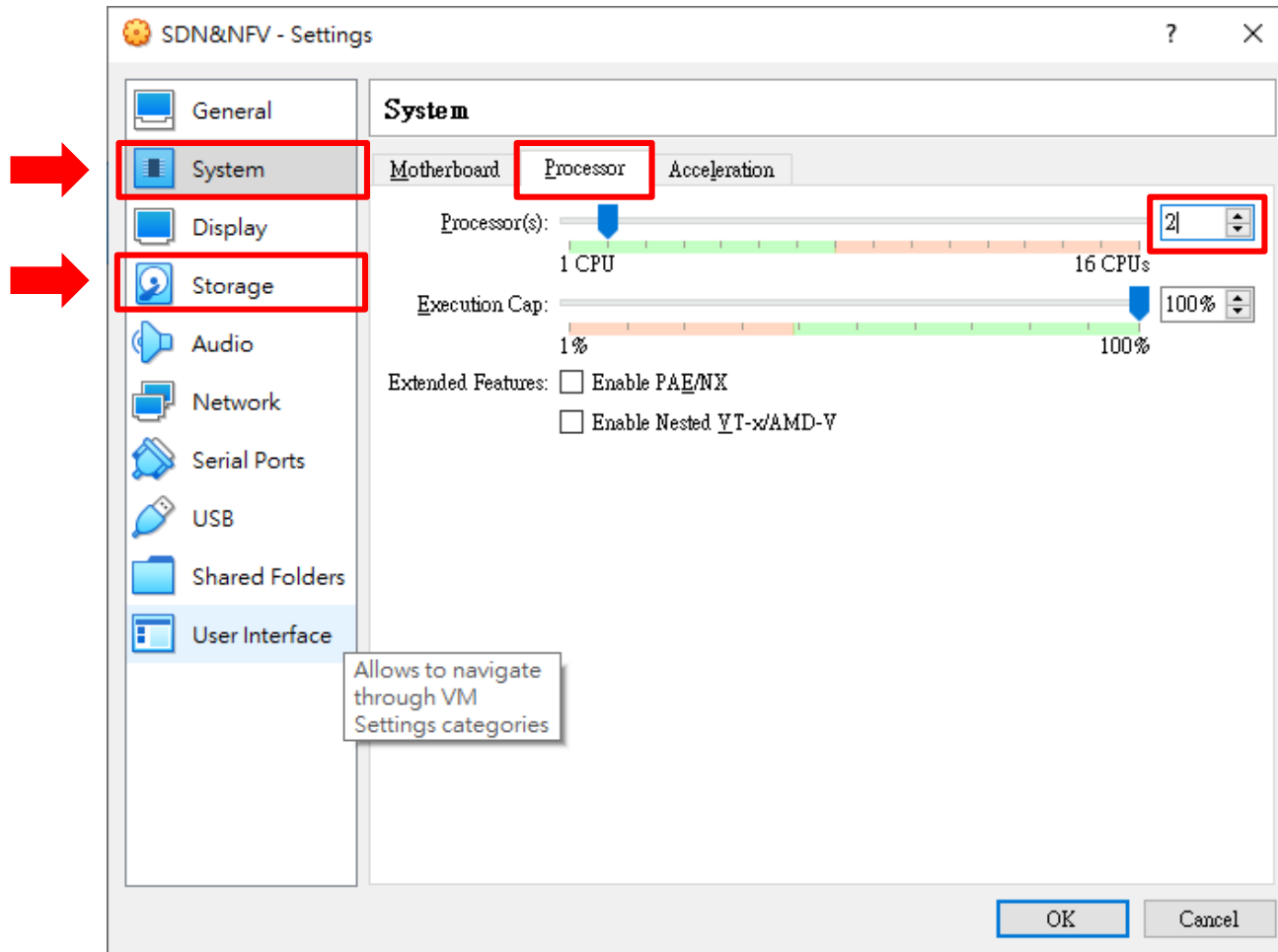
Click “Settings”





Virtual machine setting (6/10)

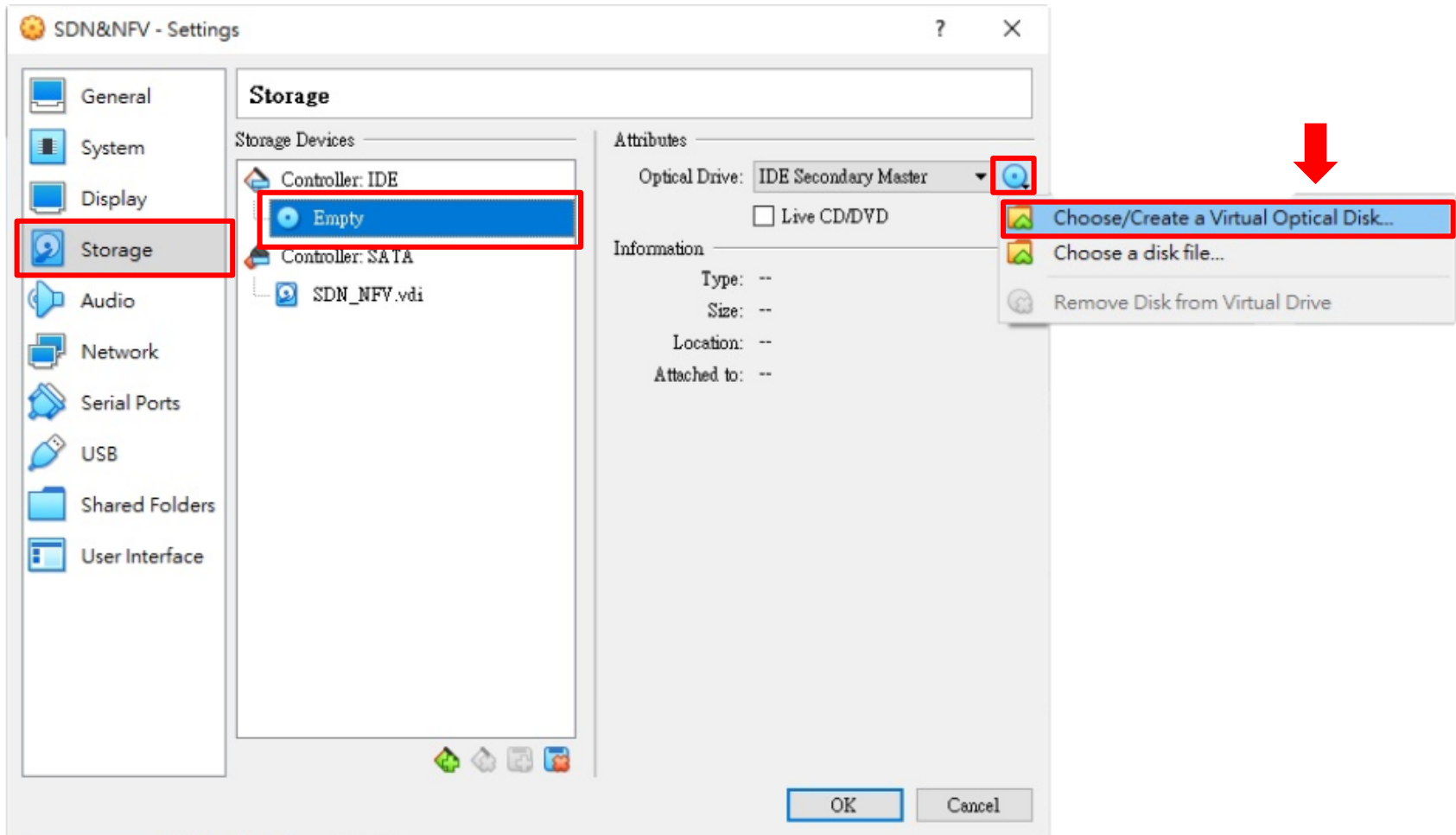
- ❑ System > Processor
 - Set **2 CPUs**, then click “Storage”





Virtual machine setting (7/10)

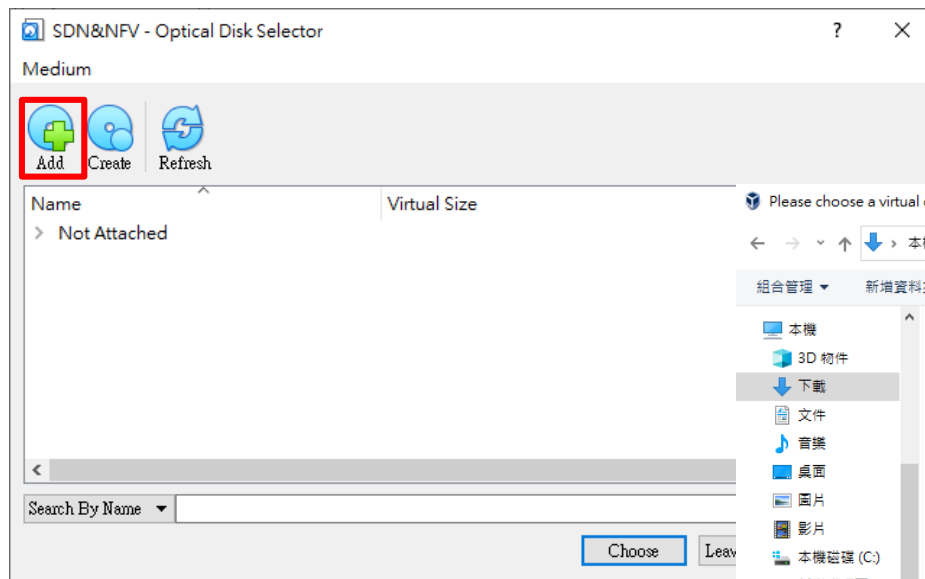
Storage > Controller: IDE





Virtual machine setting (8/10)

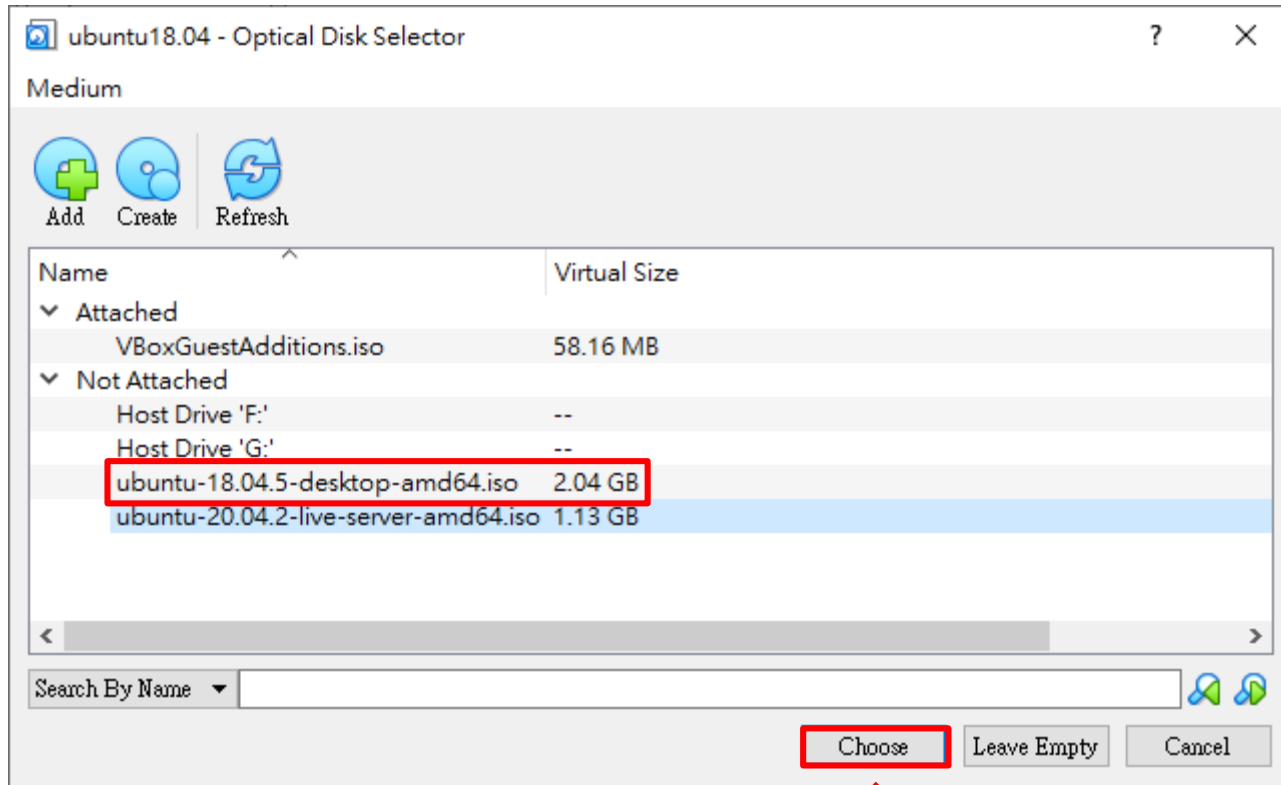
1. Click “Add”
2. Choose the previously downloaded image file (.iso)
3. Click “Open”





Virtual machine setting (9/10)

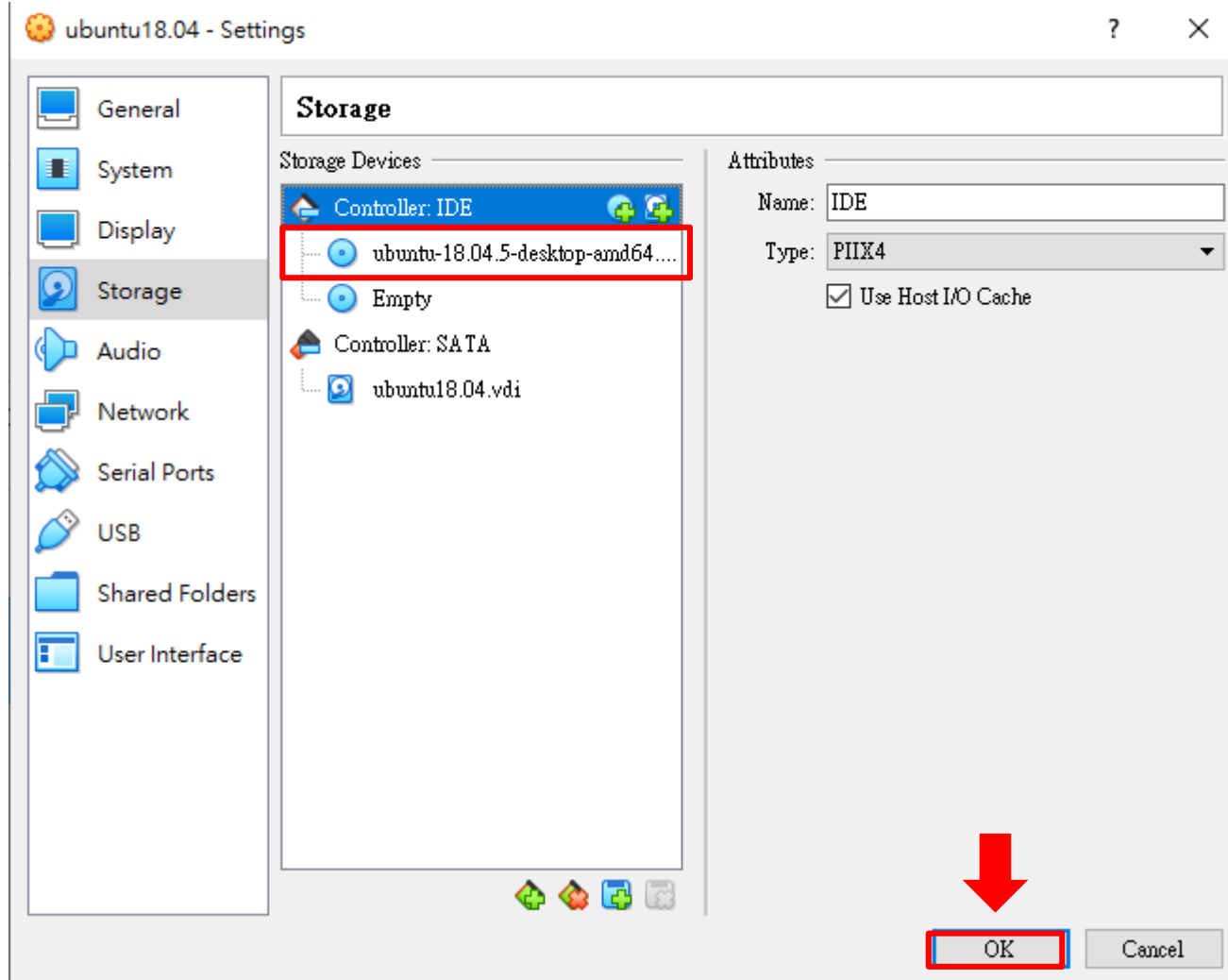
- Click “Choose”





Virtual machine setting (10/10)

- Make sure all settings are right, then click “OK”





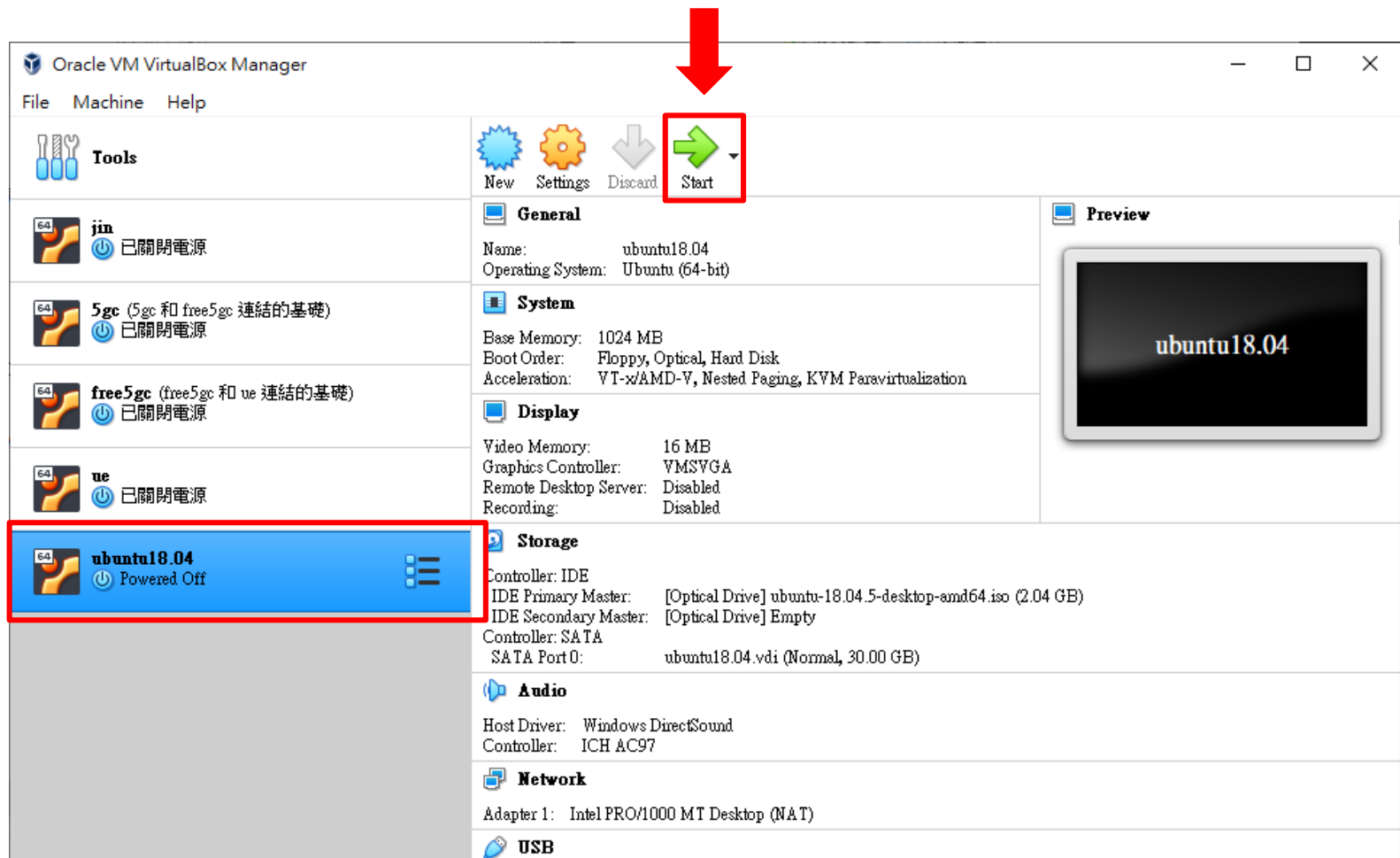
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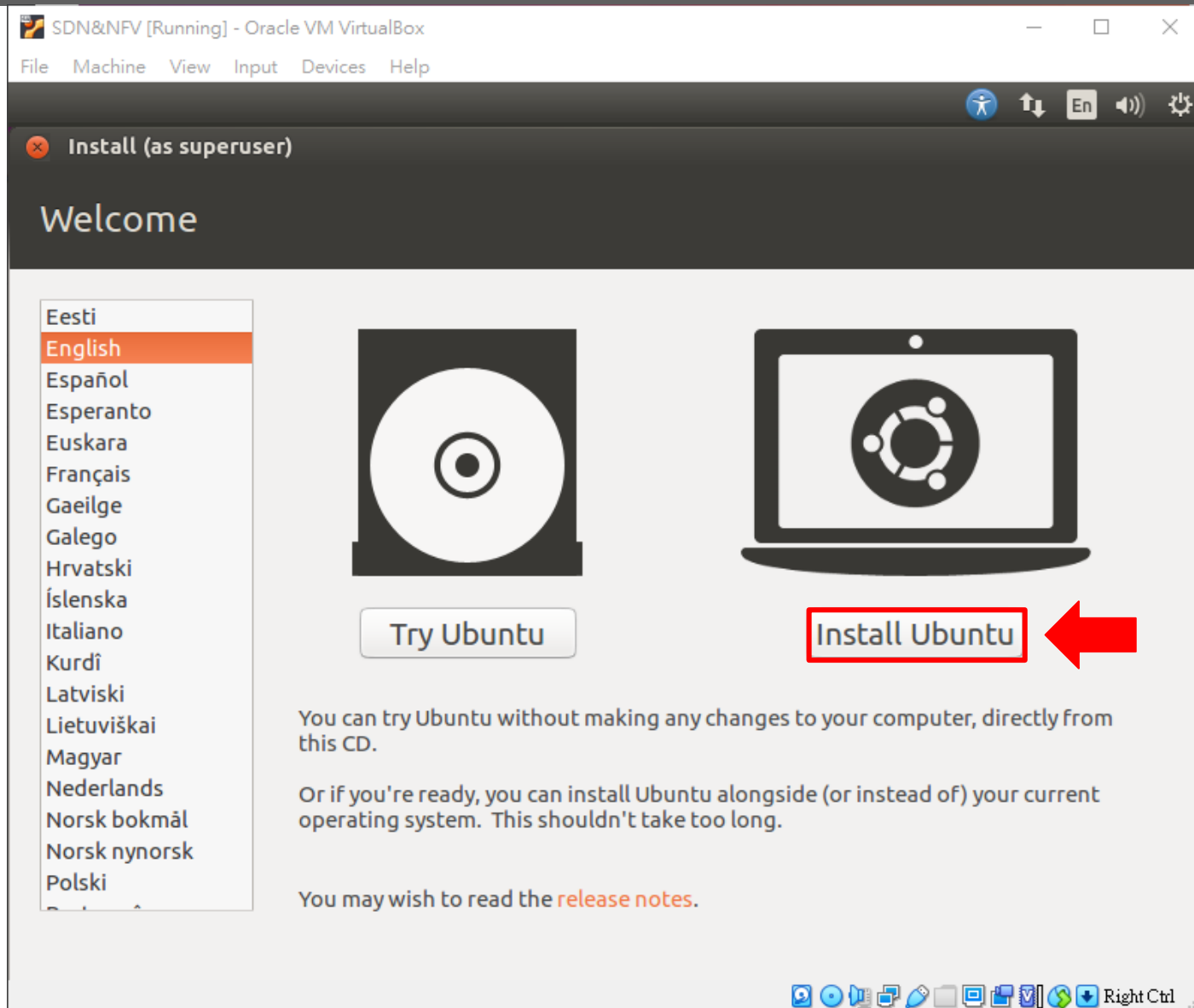
Ubuntu Installation (1/12)

Click “Start”



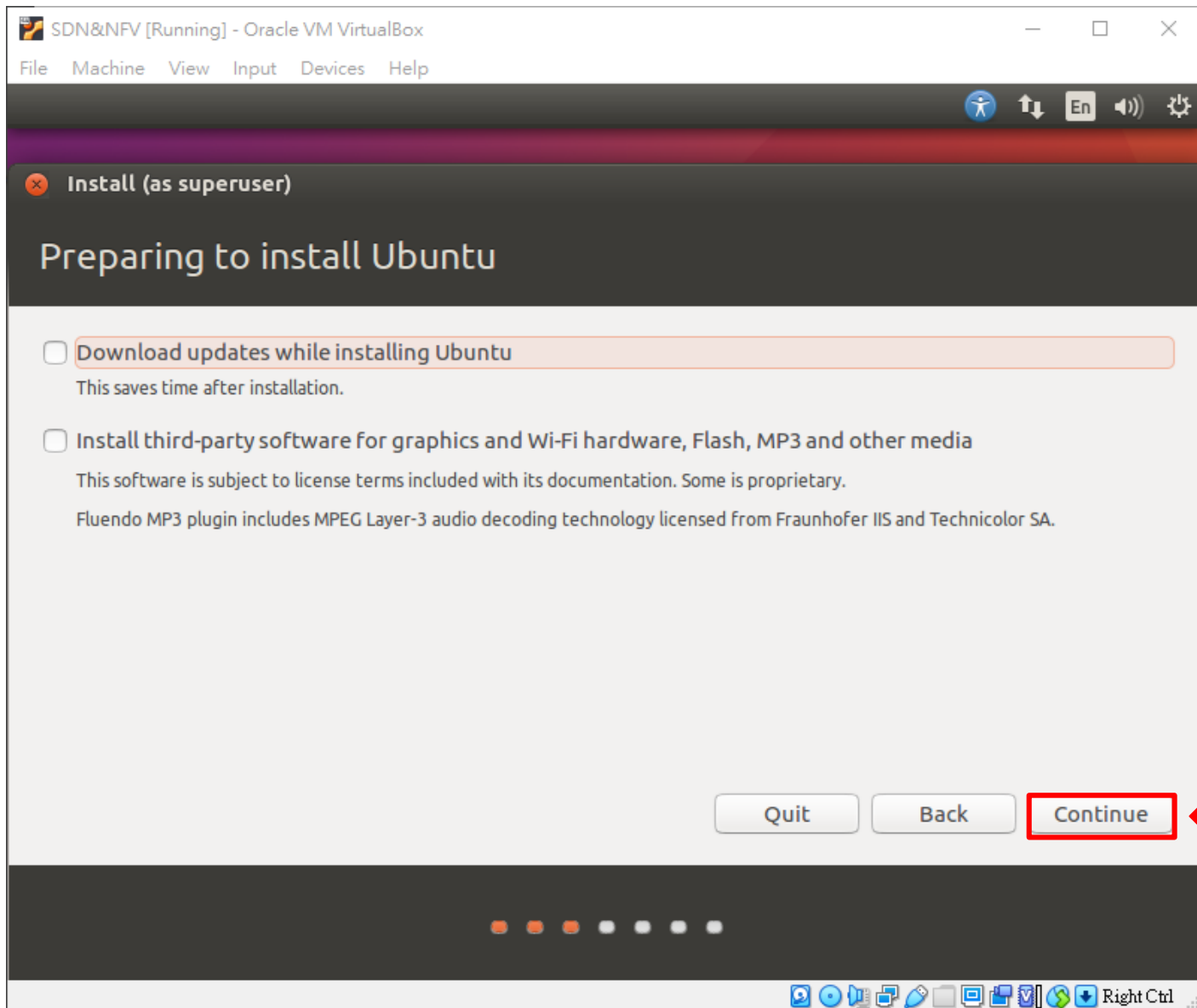


Ubuntu Installation (2/12)



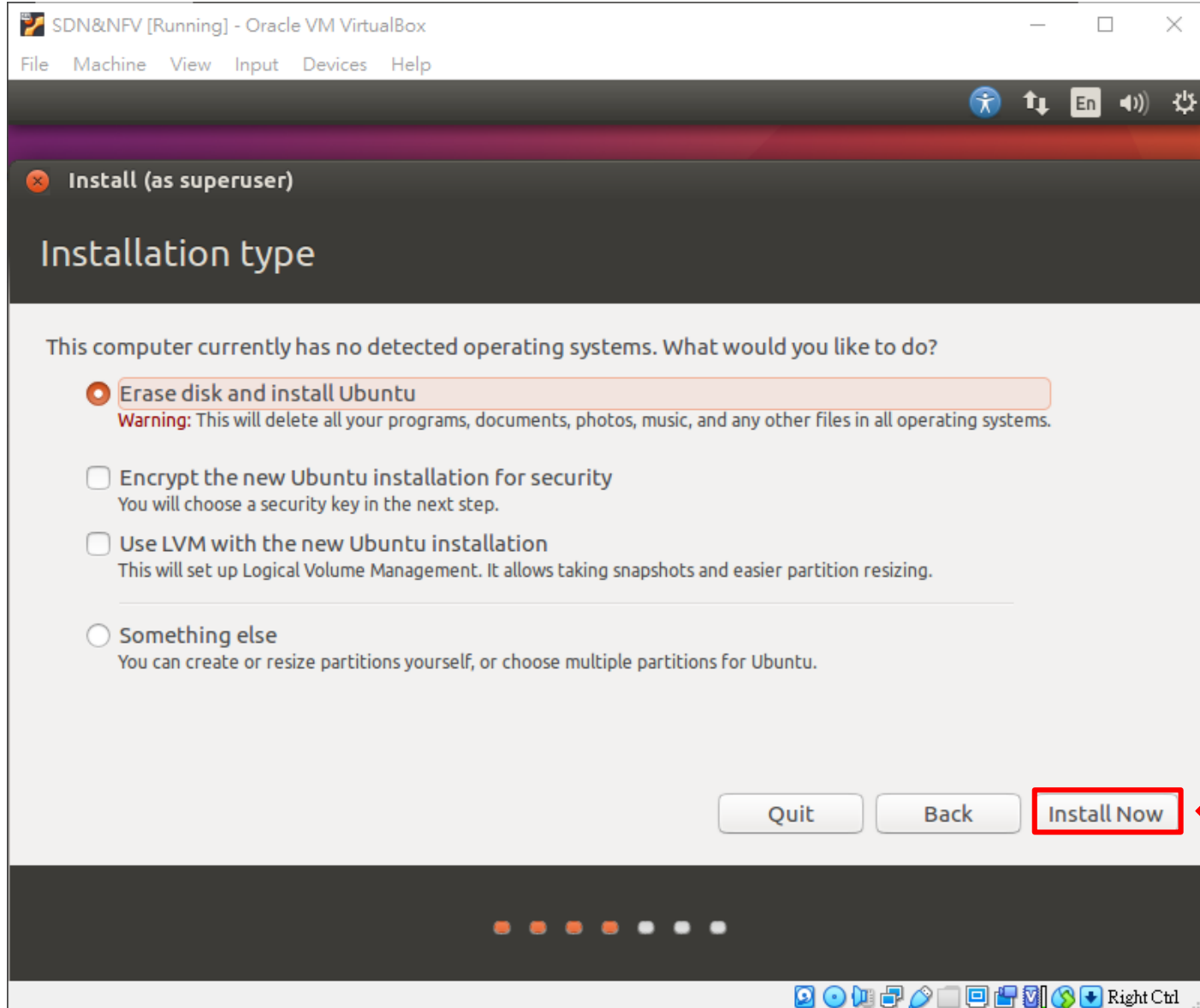


Ubuntu Installation (3/12)



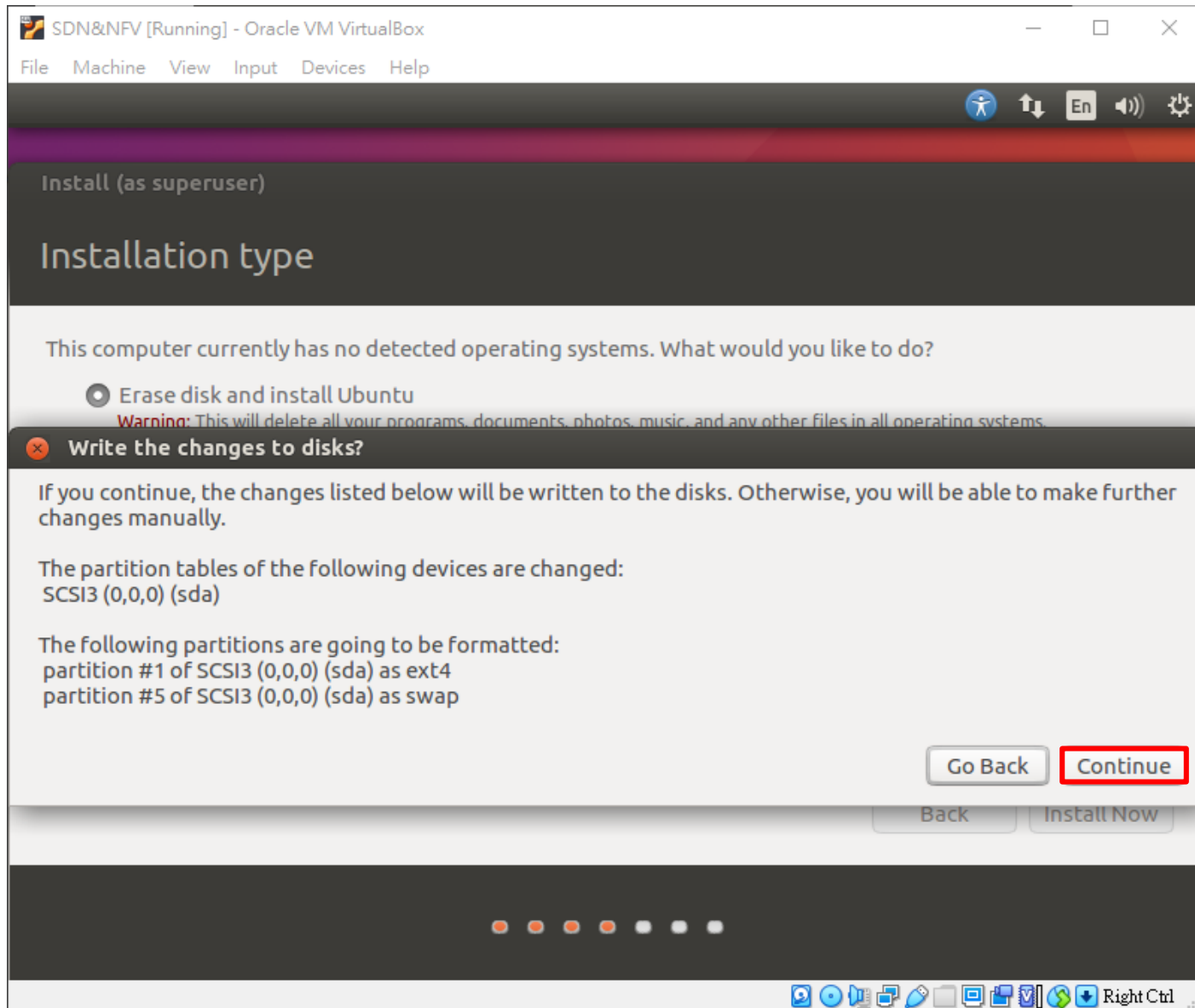


Ubuntu Installation (4/12)



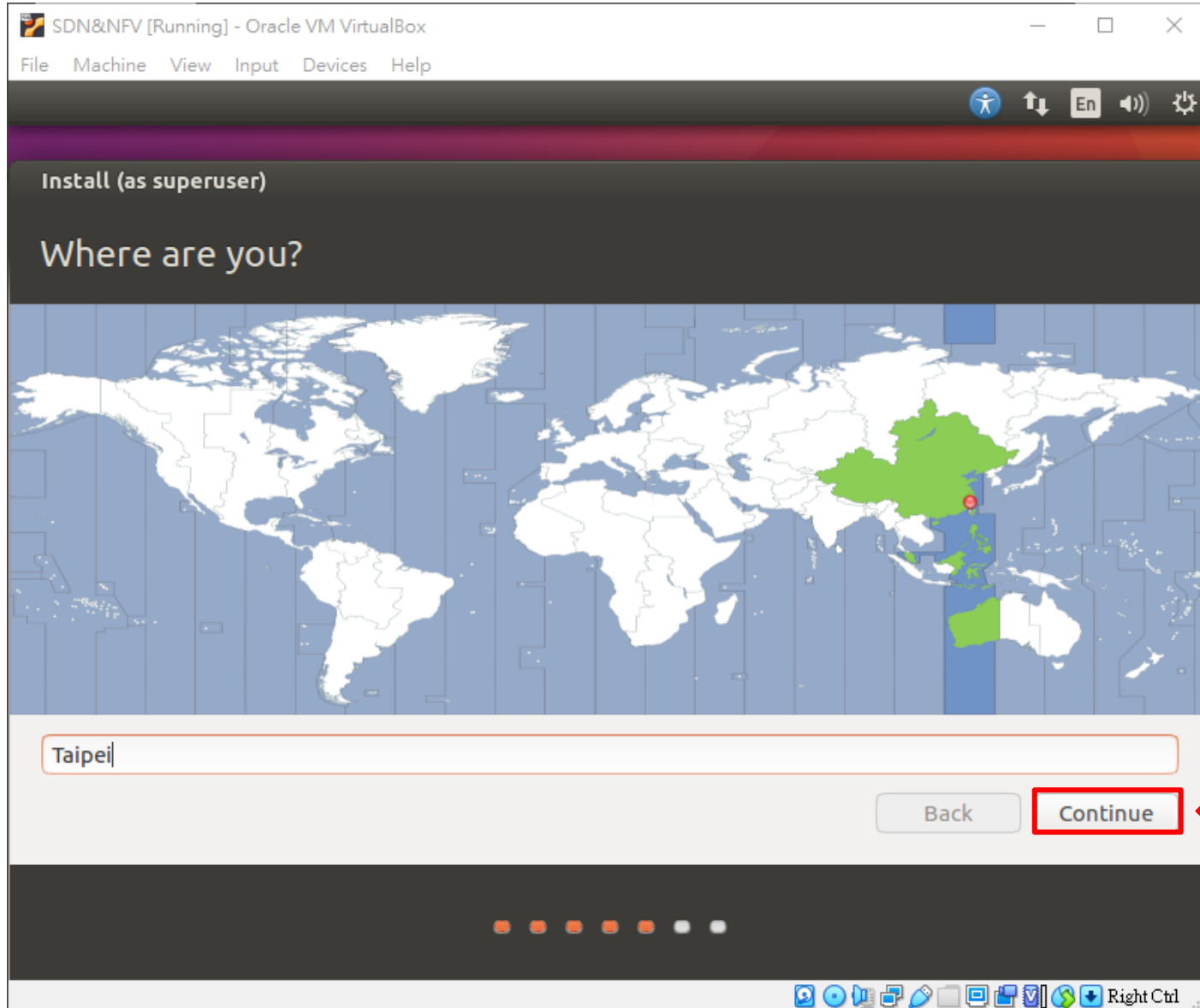


Ubuntu Installation (5/12)



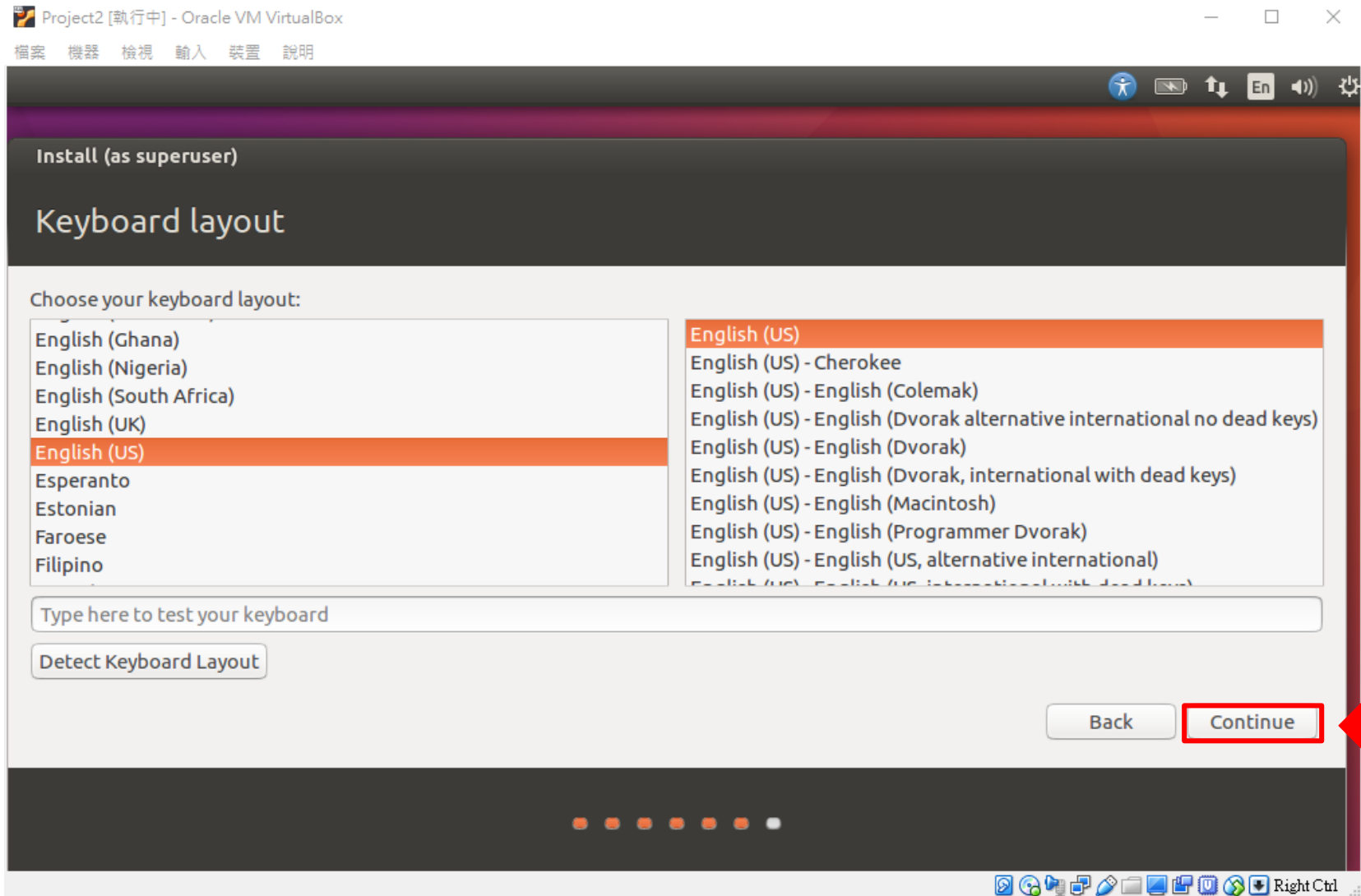


Ubuntu Installation (6/12)





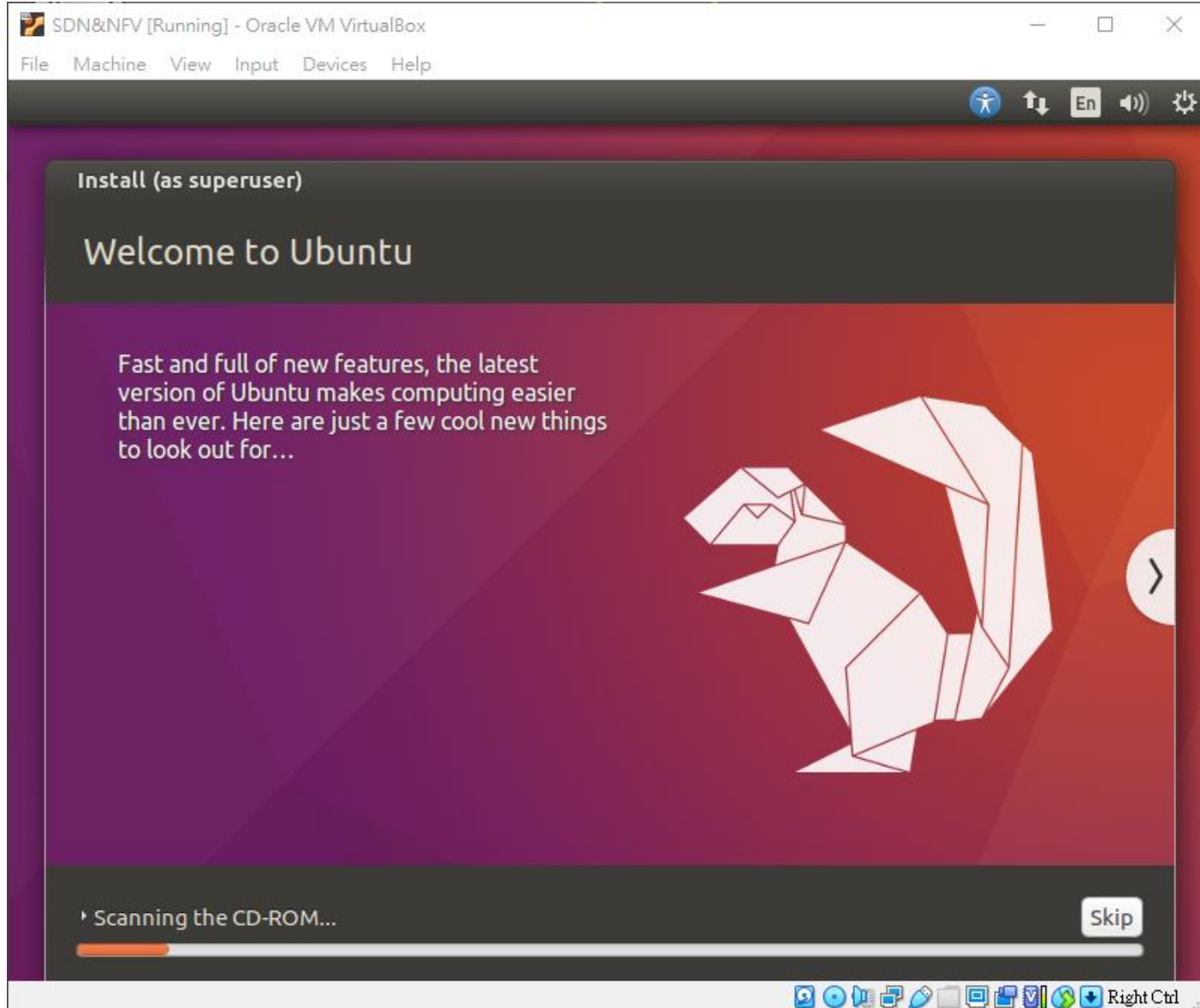
Ubuntu Installation (7/12)





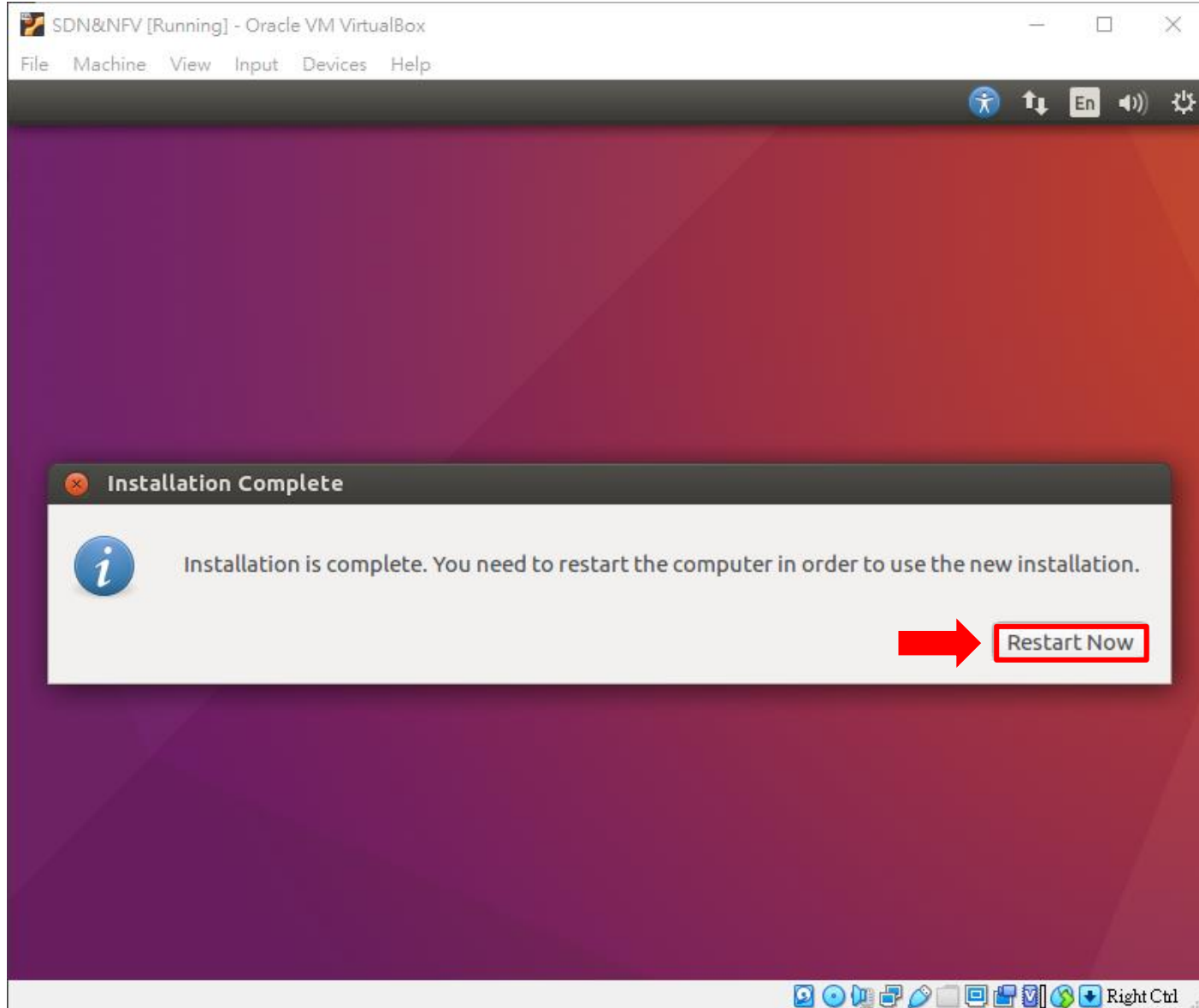


Ubuntu Installation (9/12)





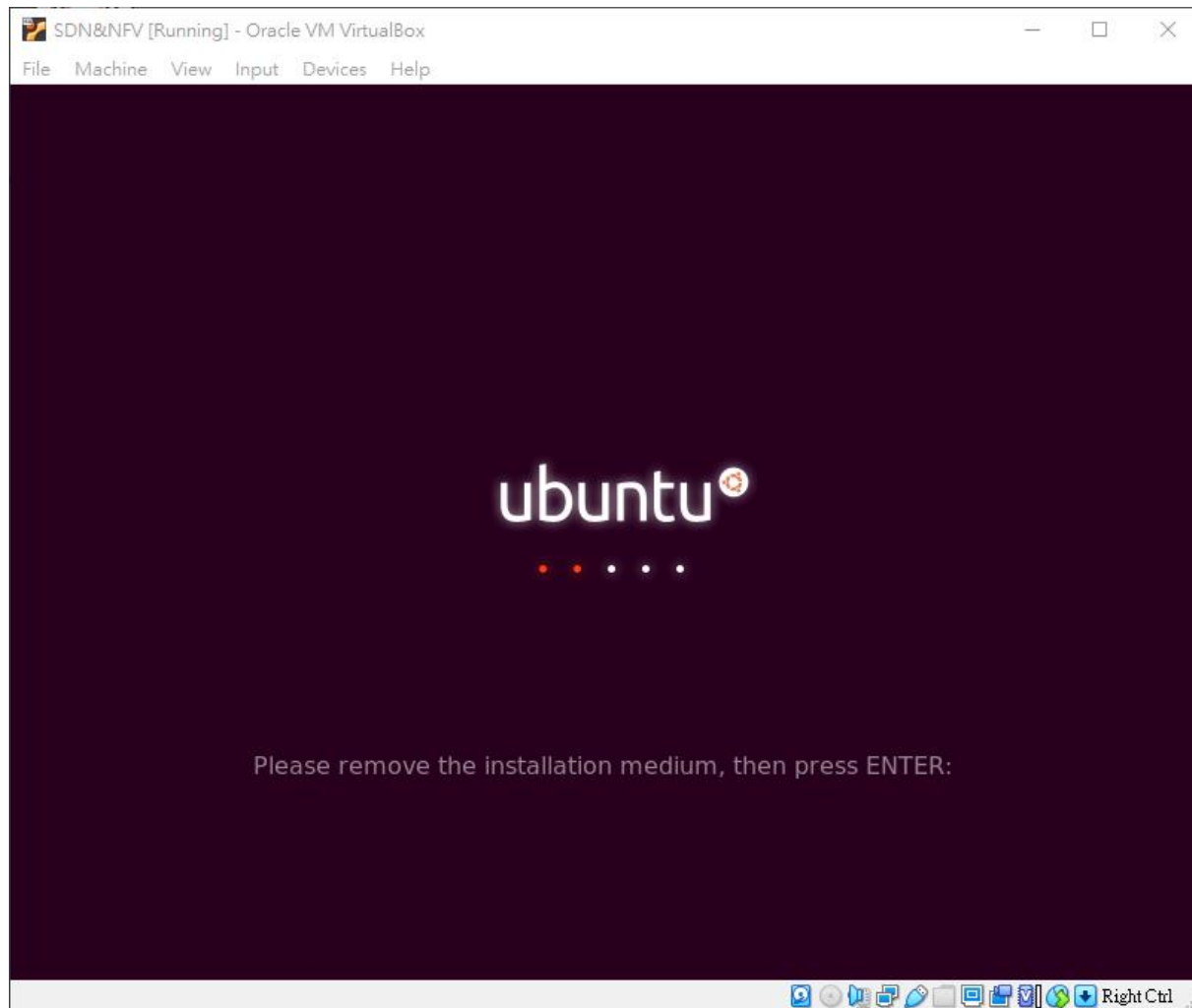
Ubuntu Installation (10/12)





Ubuntu Installation (11/12)

- ❑ Press “Enter”, then VM will restart





Ubuntu Installation (12/12)

