

VirtualBox Tutorial




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Oracle VM VirtualBox Download

- **VirtualBox is open-source virtualization software that allows users to run multiple operating systems on a single computer**

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

 VirtualBox-7.0.6-155176-Win.exe



The screenshot shows the VirtualBox website's download page. On the left is a sidebar with navigation links: About, Screenshots, Downloads, Documentation (with sub-links for End-user docs and Technical docs), Contribute, and Community. The main content area has a large 'VirtualBox' title and a 'Download VirtualBox' section. Below this, it states that users will find links to binaries and source code. The 'VirtualBox binaries' section includes a license agreement and a link to 'VirtualBox 6.1 builds'. The 'VirtualBox 7.0.6 platform packages' section lists various operating systems, with 'Windows hosts' highlighted by a red box. Other listed options include macOS / Intel hosts, Developer preview for macOS / Arm64 (M1/M2) hosts, Linux distributions, Solaris hosts, and Solaris 11 IPS hosts. Further down, it mentions the GPL version 3 terms, a changelog, and checksums (SHA256 and MD5). A note at the bottom recommends upgrading guest additions after upgrading VirtualBox.

VirtualBox
Download VirtualBox

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

VirtualBox binaries

By downloading, you agree to the terms and conditions of the respective license.

If you're looking for the latest VirtualBox 6.1 packages, see [VirtualBox 6.1 builds](#). Version 6.1 will remain supported until December 2023.

VirtualBox 7.0.6 platform packages

- [Windows hosts](#)
- [macOS / Intel hosts](#)
- [Developer preview for macOS / Arm64 \(M1/M2\) hosts](#)
- [Linux distributions](#)
- [Solaris hosts](#)
- [Solaris 11 IPS hosts](#)

The binaries are released under the terms of the GPL version 3.

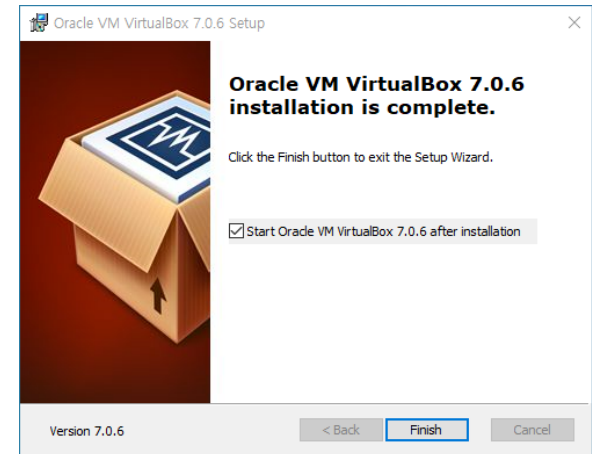
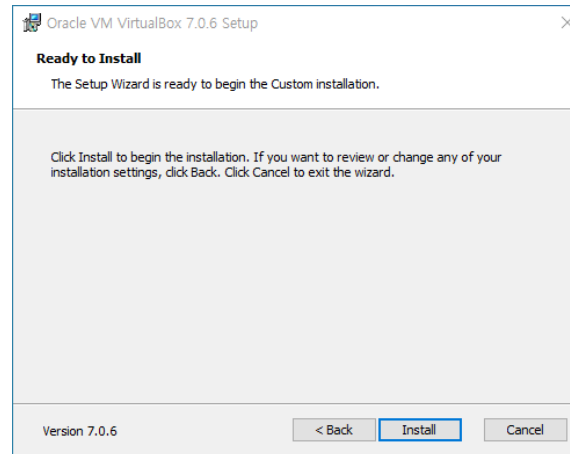
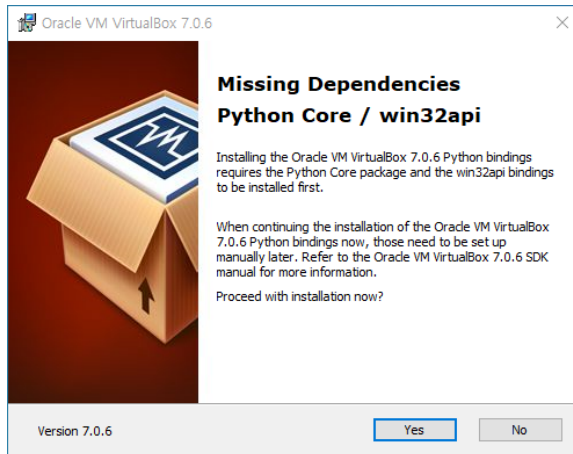
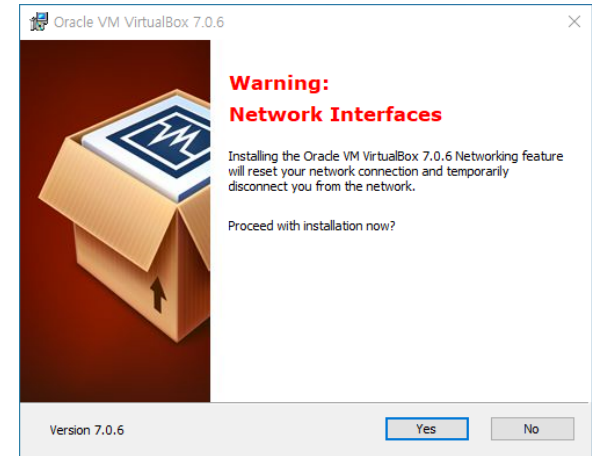
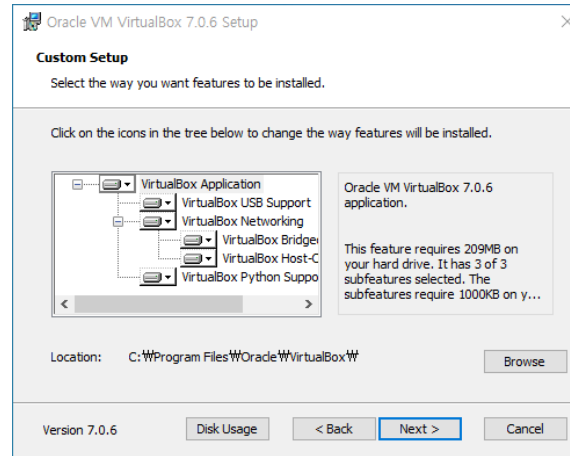
See the [changelog](#) for what has changed.

You might want to compare the checksums to verify the integrity of downloaded packages. *The SHA256 checksums should be favored as the*

- [SHA256 checksums](#), [MD5 checksums](#)

Note: After upgrading VirtualBox it is recommended to upgrade the guest additions as well.

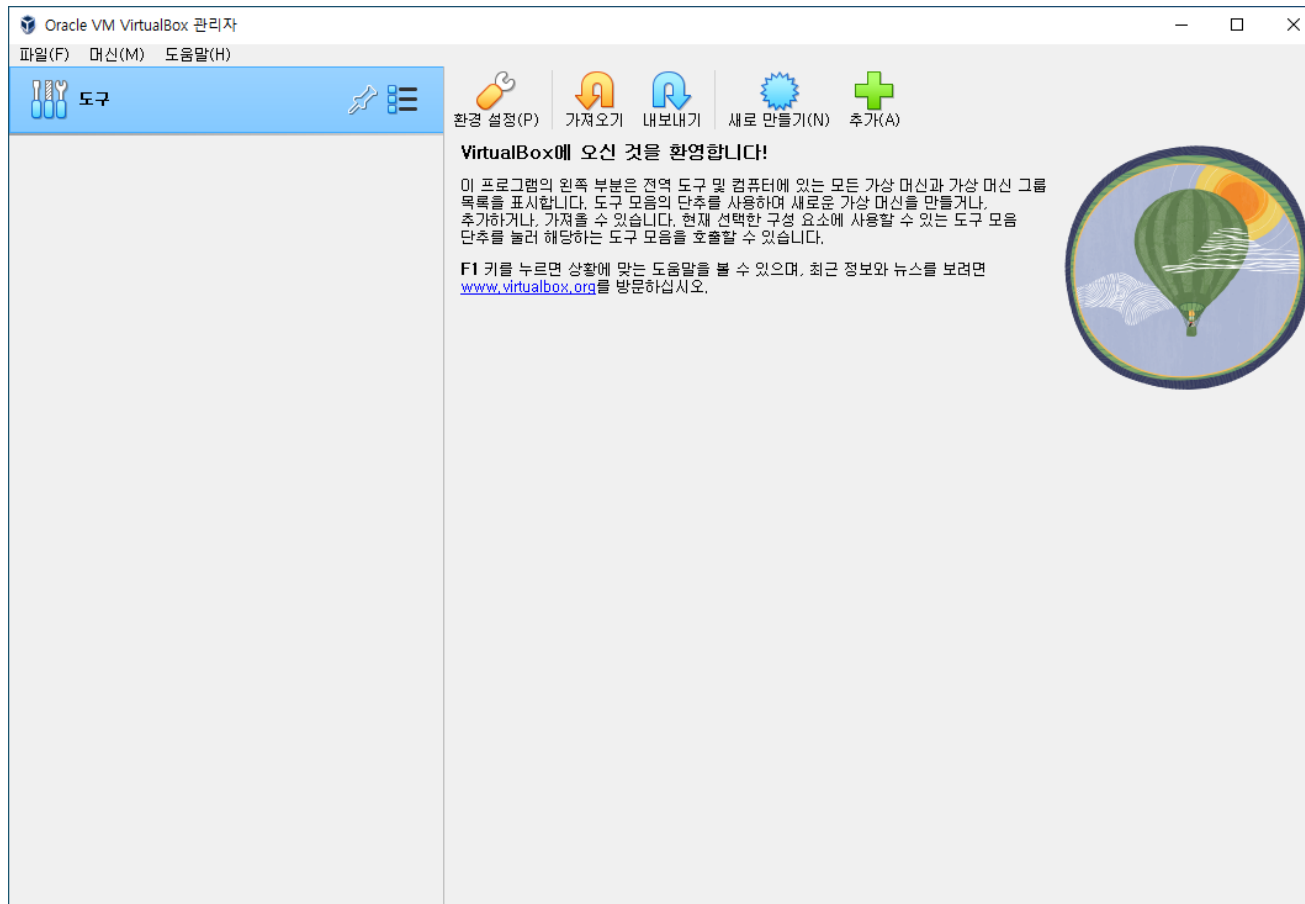
Oracle VM VirtualBox Installation (1)



Just click the button to proceed

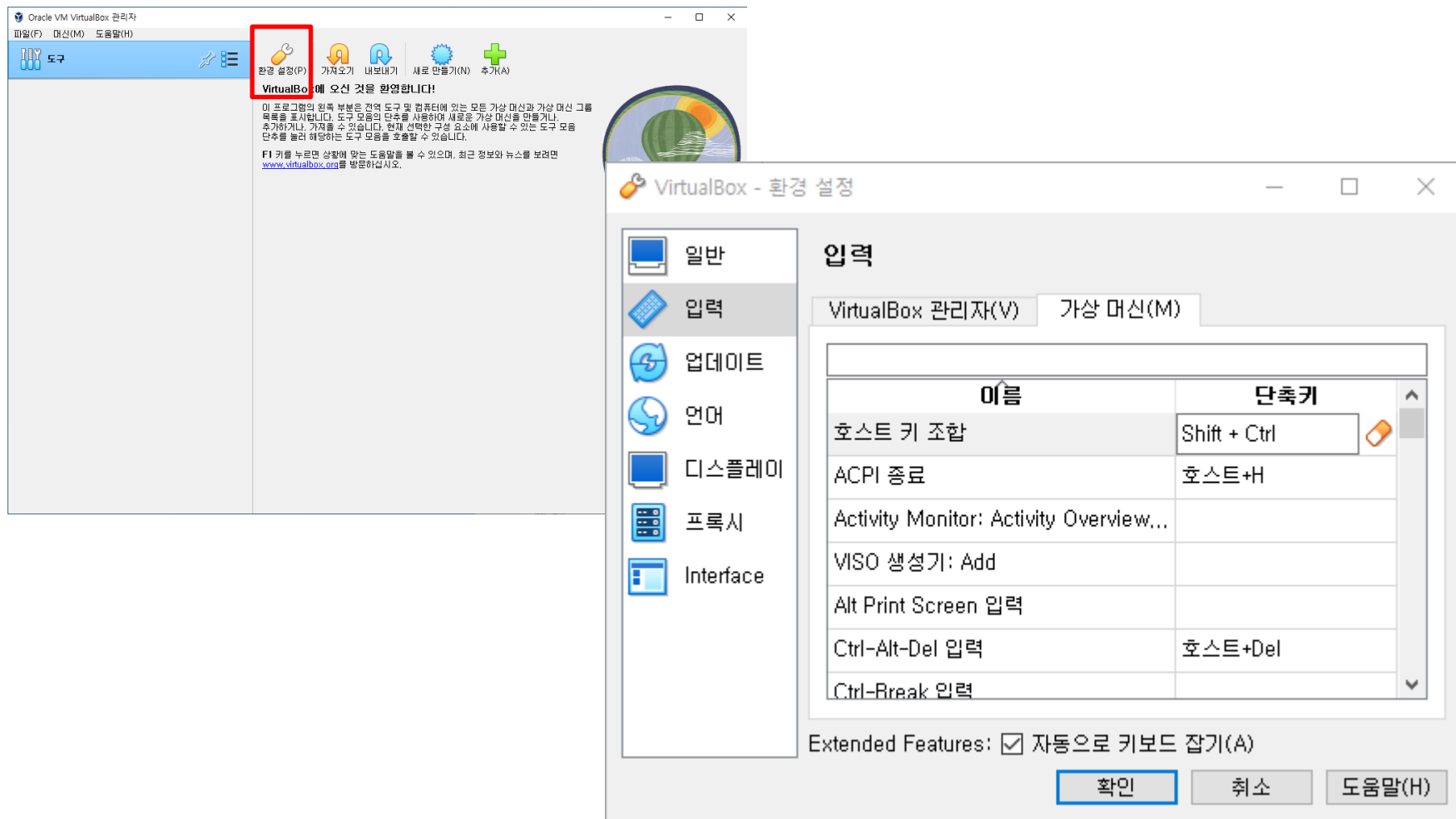
Oracle VM VirtualBox Installation (2)

- Once completed, you will see this interface



Oracle VM VirtualBox Setup

- Change the host key to release the keyboard ownership from VirtualBox and seamlessly move to the host OS (e.g. windows)



Ubuntu Download

■ Download Ubuntu 22.04 LTS ISO file (4GB)

— <https://ubuntu.com/download/desktop>

Download Ubuntu Desktop

The open-source desktop operating system that powers millions of PCs and laptops around the world. Find out more about Ubuntu's features and how we support developers and organisations below.

[Ubuntu Desktop homepage](#)

[Visit the Ubuntu Desktop blog ›](#)

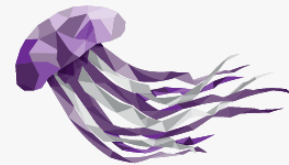
Ubuntu 22.04.2 LTS

The latest LTS version of Ubuntu, for desktop PCs and laptops. LTS stands for long-term support — which means five years of free security and maintenance updates, guaranteed until April 2027.

[Ubuntu 22.04 LTS release notes](#)

Recommended system requirements:

- ✓ 2 GHz dual-core processor or better
- ✓ 4 GB system memory
- ✓ 25 GB of free hard drive space
- ✓ Internet access is helpful
- ✓ Either a DVD drive or a USB port for the installer media

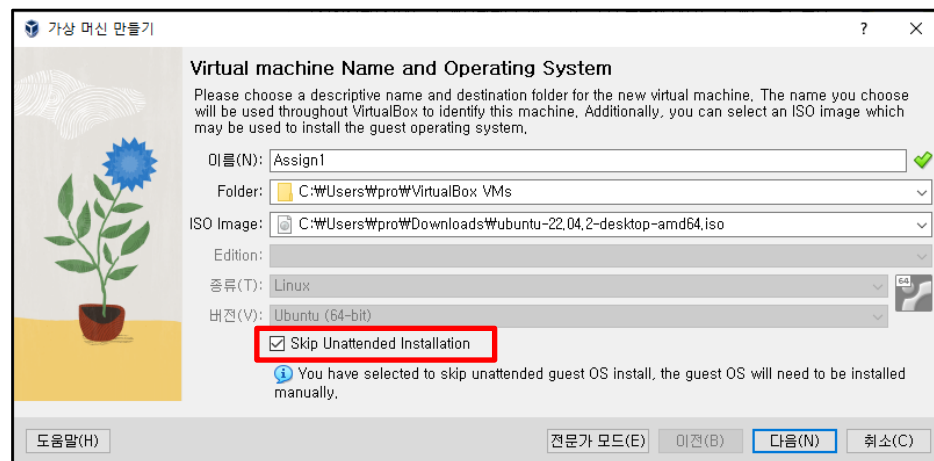
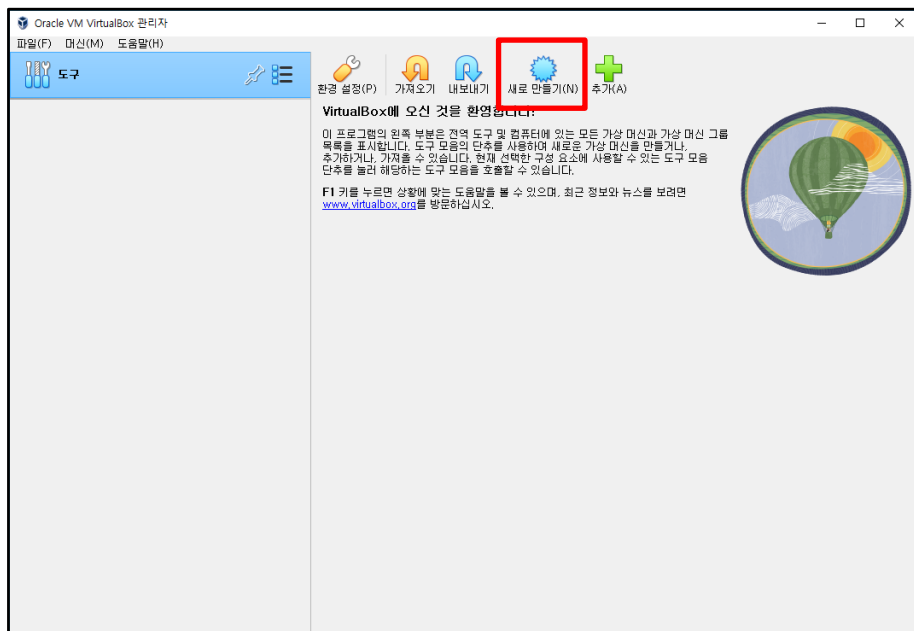


[Download](#)

For other versions of Ubuntu Desktop including torrents, the network installer, a list of local mirrors and past releases [see our alternative downloads](#).

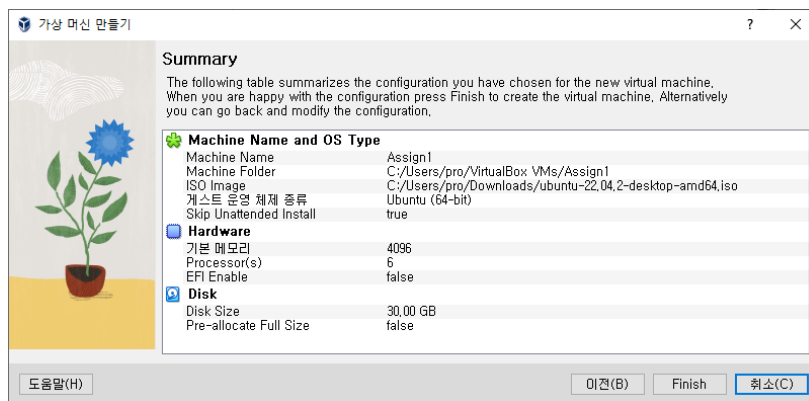
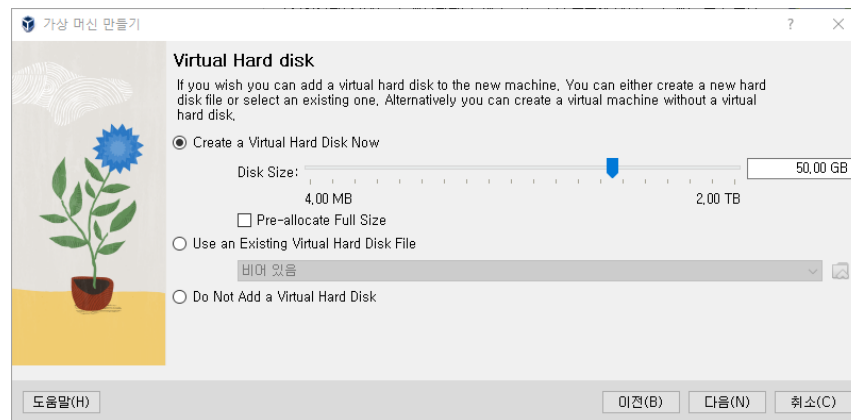
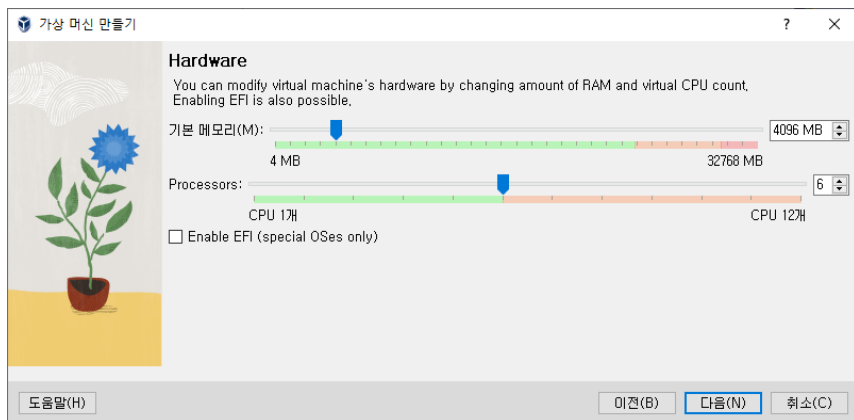
VM Preparation in VirtualBox (1)

- Preparation to Install Ubuntu 22.04 LTS in VirtualBox
 - Check “Skip Unattended Installation”



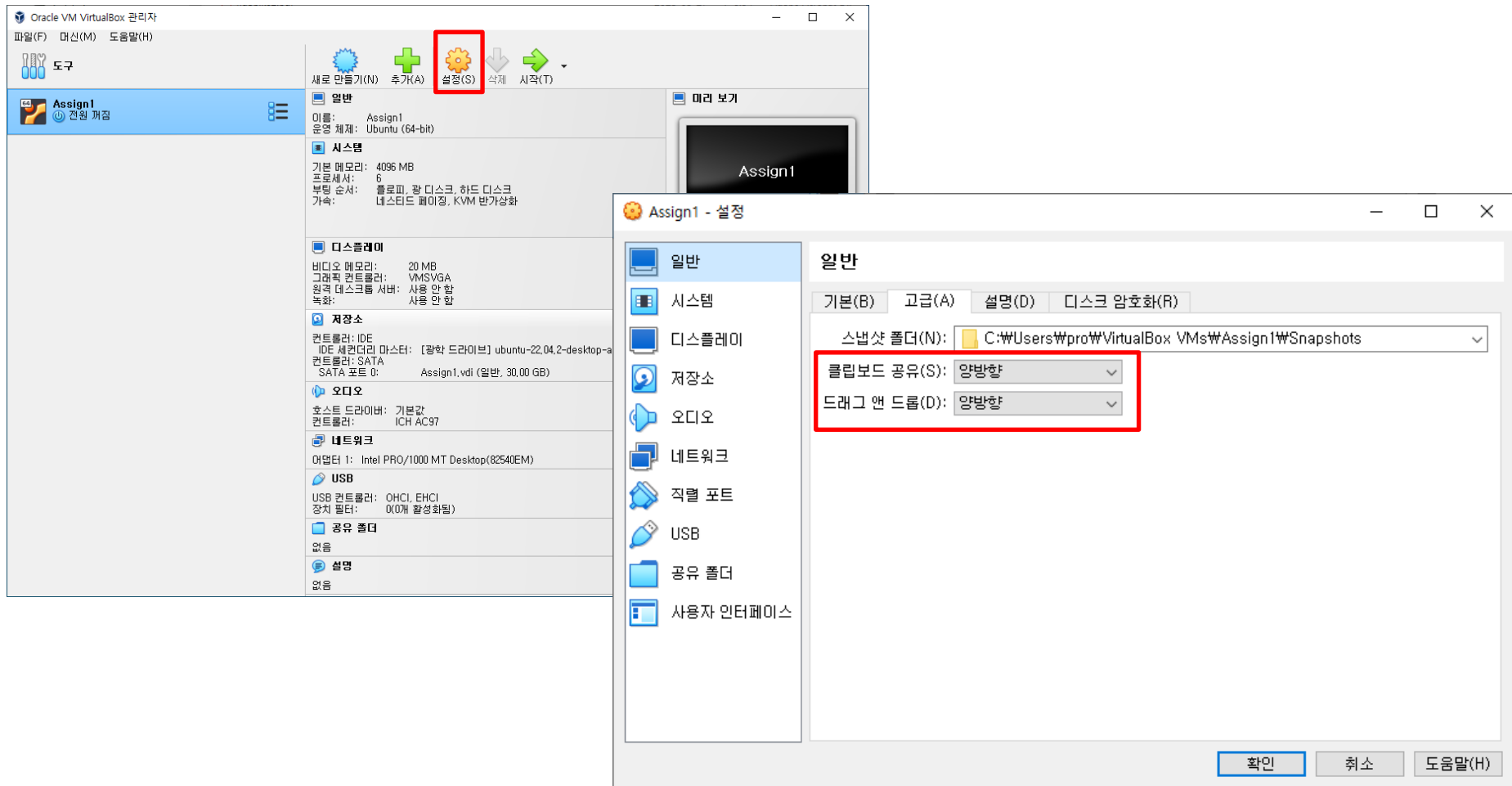
VM Preparation in VirtualBox (2)

- Preparation to Install Ubuntu 22.04 LTS in VirtualBox (cont'd)
 - Allocate memory at least 2GB (>4GB recommended)
 - Allocate hard disk over 50GB

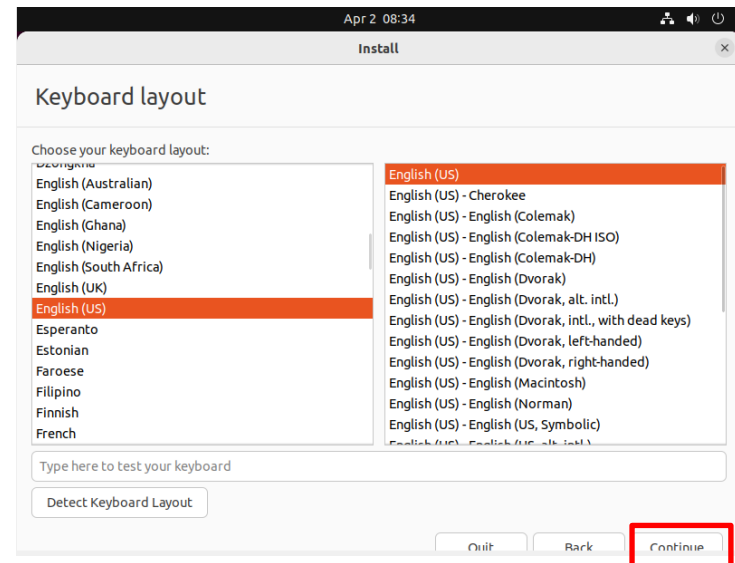
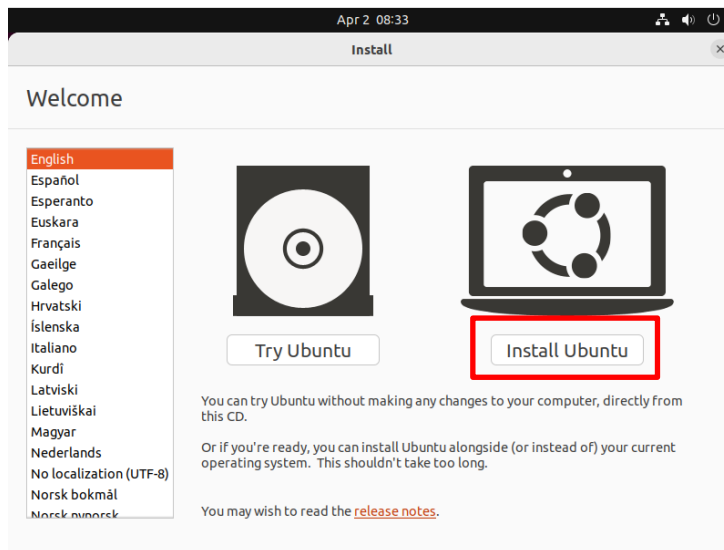


VM Preparation in VirtualBox (3)

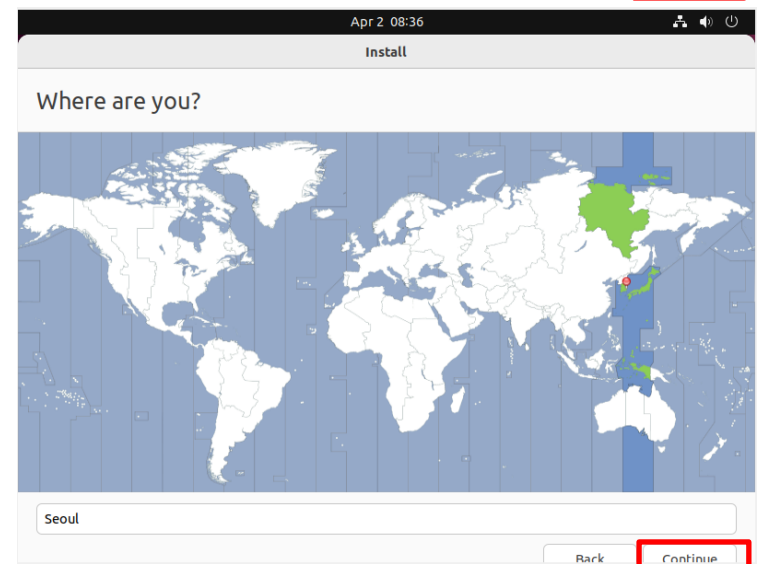
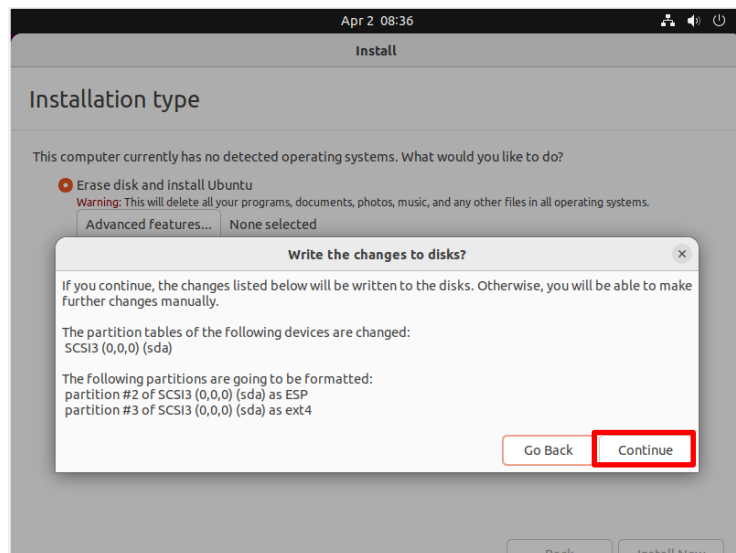
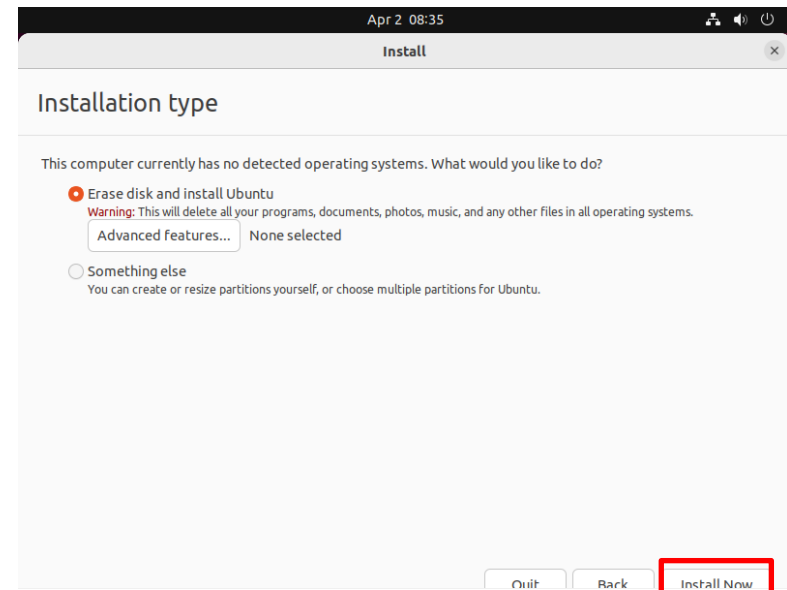
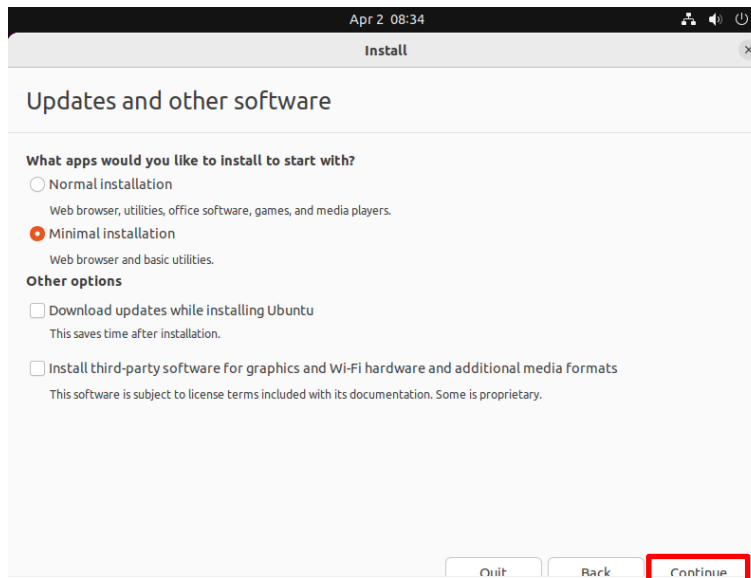
- Preparation to Install Ubuntu 22.04 LTS in VirtualBox (cont'd)
 - Set Clipboard to easily copy & paste between VirtualBox and Host OS



Ubuntu Installation in VirtualBox (1)

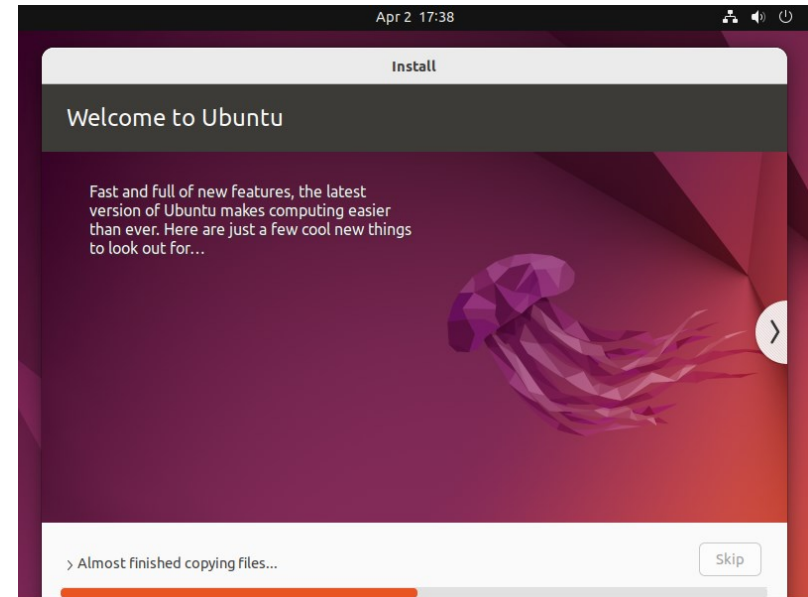
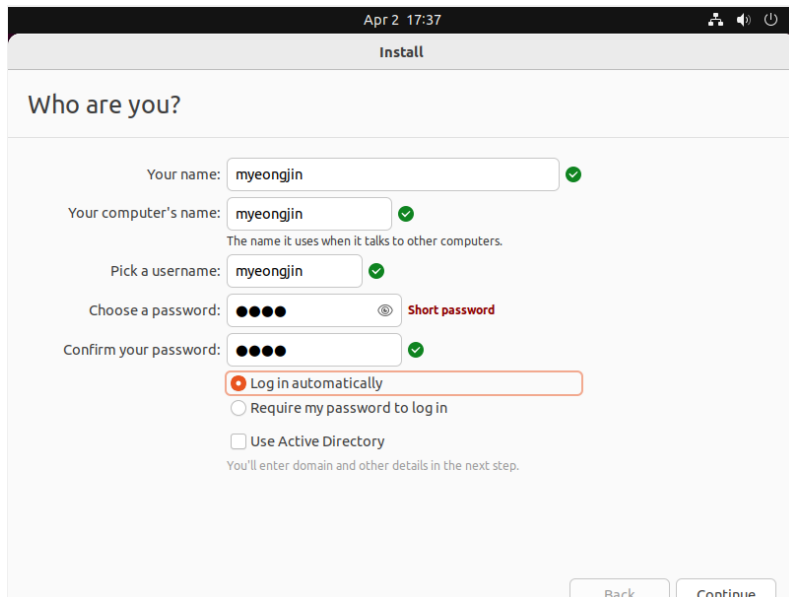


Ubuntu Installation in VirtualBox (2)



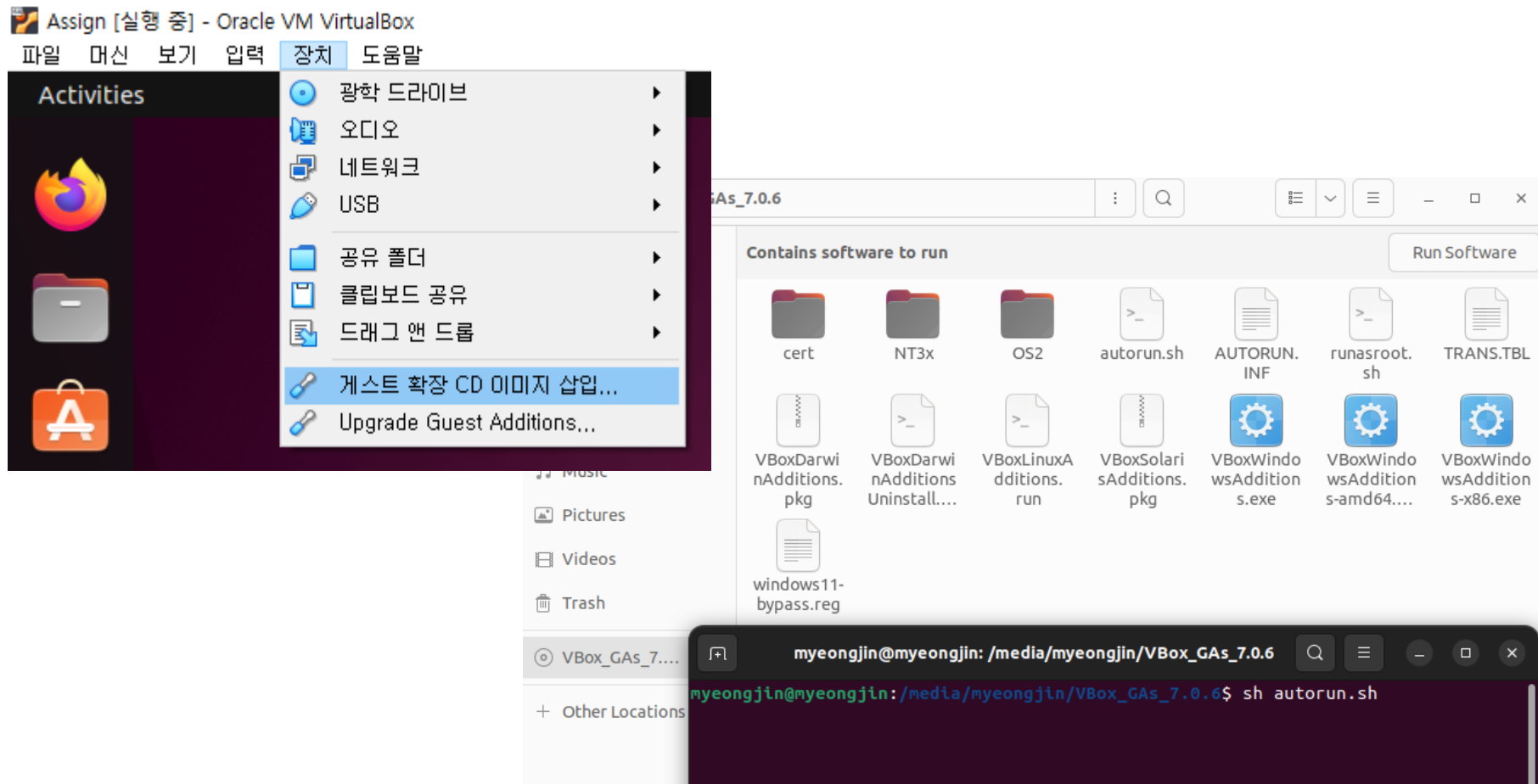
Ubuntu Installation in VirtualBox (3)

- Restart the VM after installation is complete



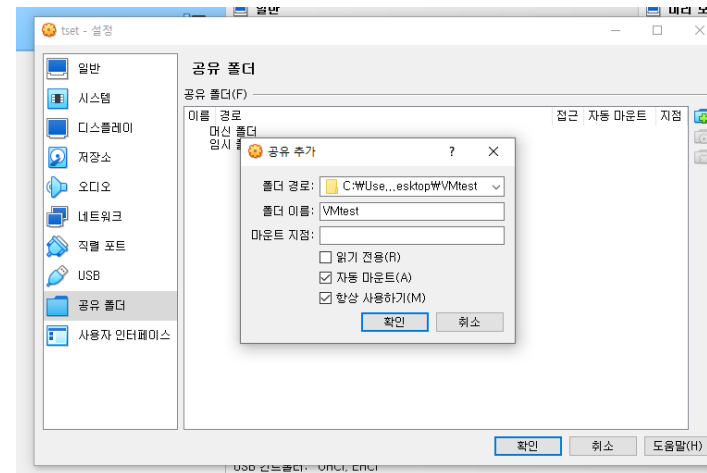
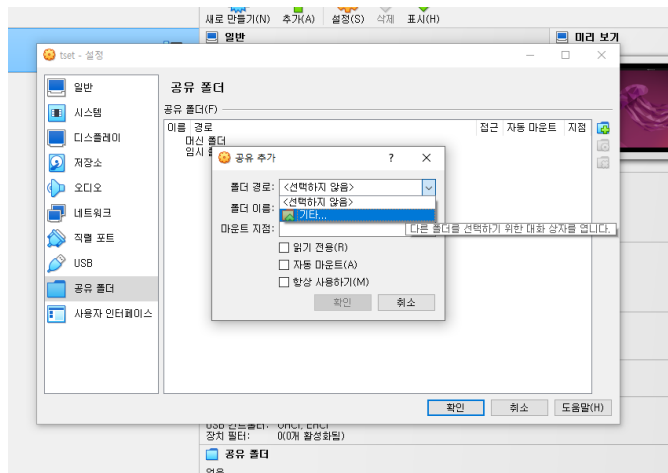
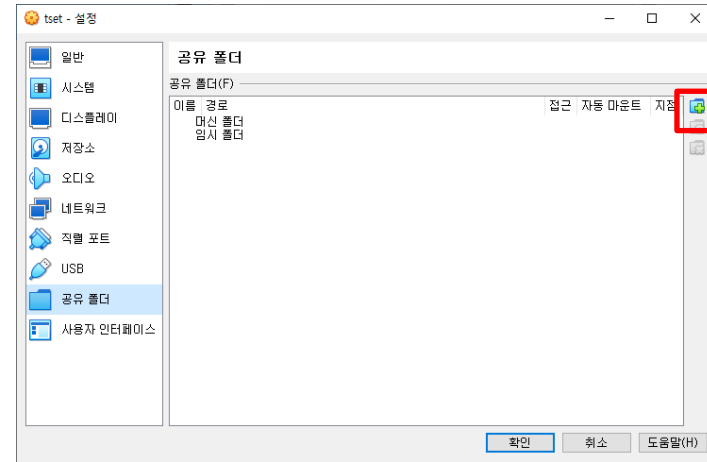
Ubuntu Installation in VirtualBox (4)

- Install guest additions that allow you to control and guest execution



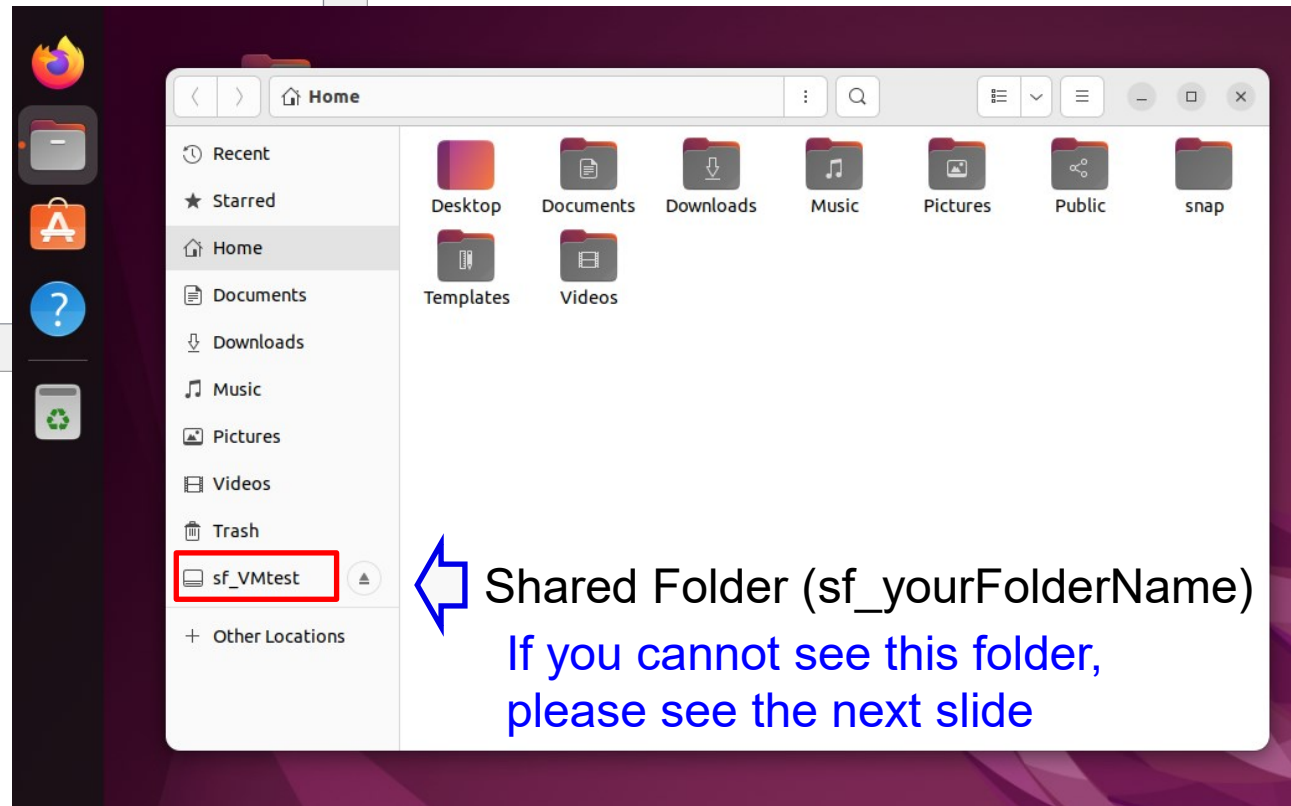
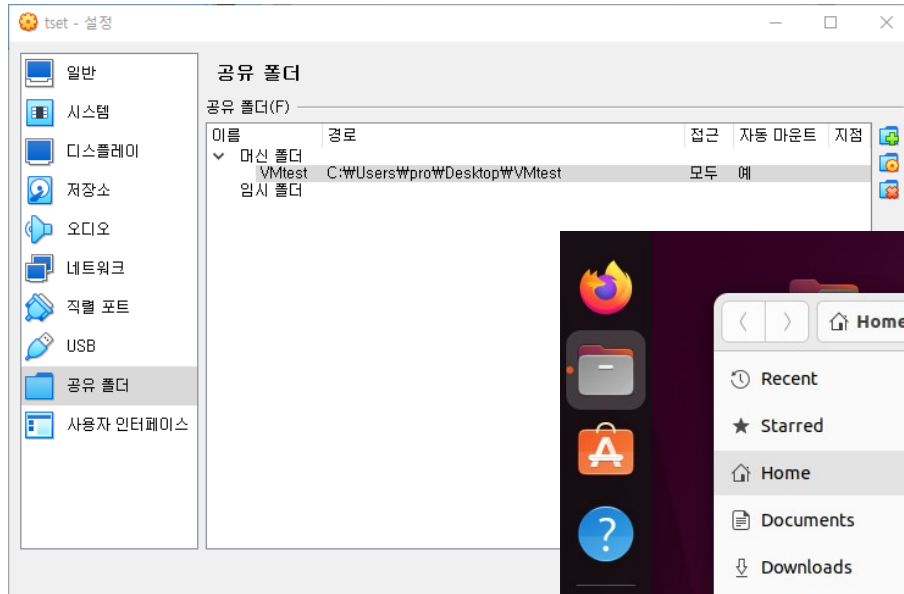
File Sharing between VirtualBox and Host (1)

- For file sharing between your VM and Host, please setup shared folder in VirtualBox (e.g. “VMtest” folder)



File Sharing between VirtualBox and Host (2)

■ Setup shared folder in VirtualBox



File Sharing between VirtualBox and Host (3)

- **If you cannot see the shared folder, you will need to manually mount a folder**

- Make a new folder in your VM

- \$ mkdir VM

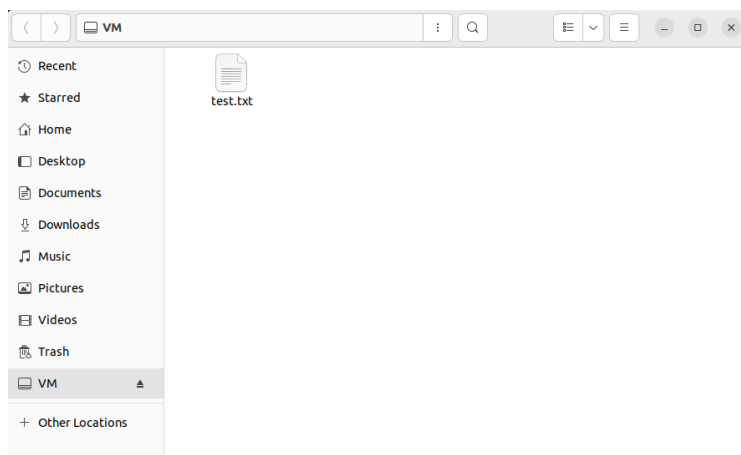
- \$ cd VM

```
test@test:~/Desktop$ mkdir VM
test@test:~/Desktop$ cd VM
test@test:~/Desktop/VM$ pwd
/home/test/Desktop/VM
```

- \$ sudo adduser [name] vboxsf `test@test:~/Desktop$ sudo adduser test vboxsf`

- \$ sudo mount -t vboxsf [shared folder name] [folder path in VirtualBox]

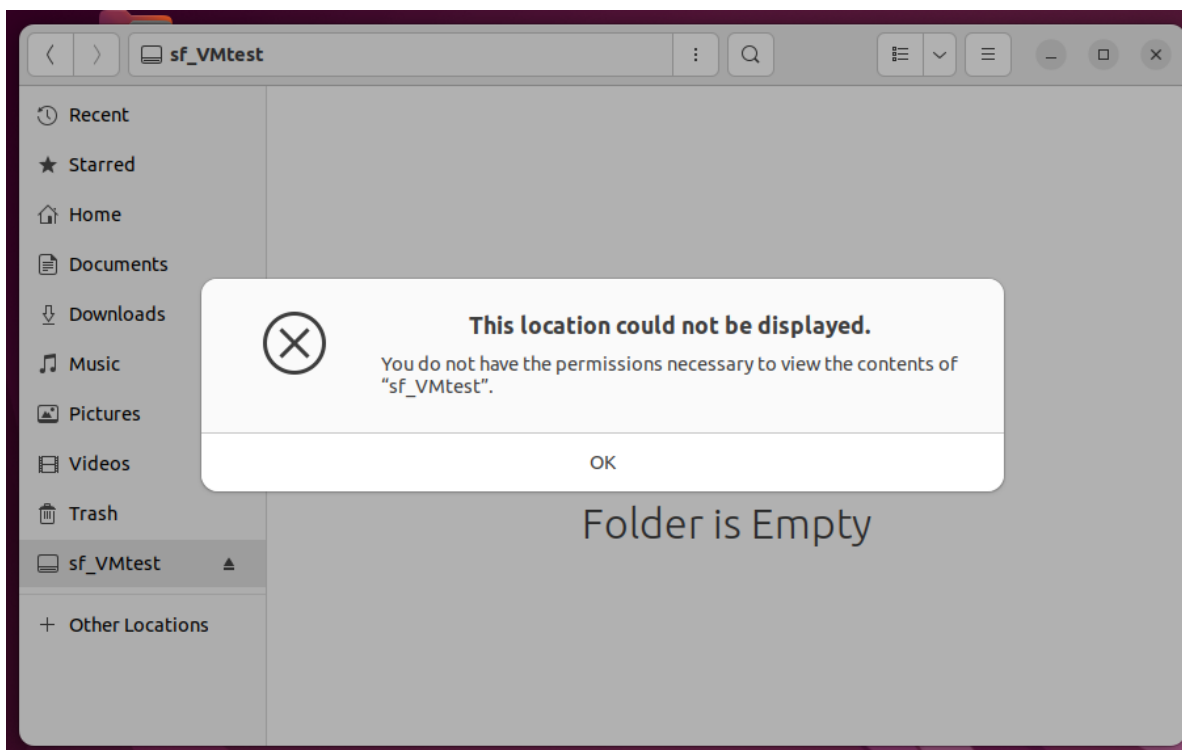
```
test@test:~/Desktop$ sudo mount -t vboxsf VMtest /home/test/Desktop/VM/
```



File Sharing between VirtualBox and Host (4)

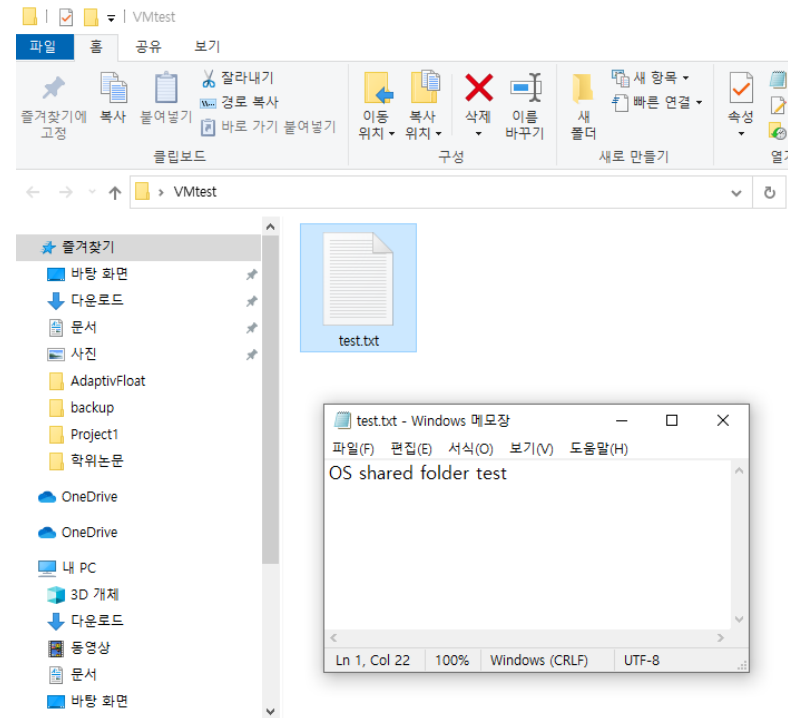
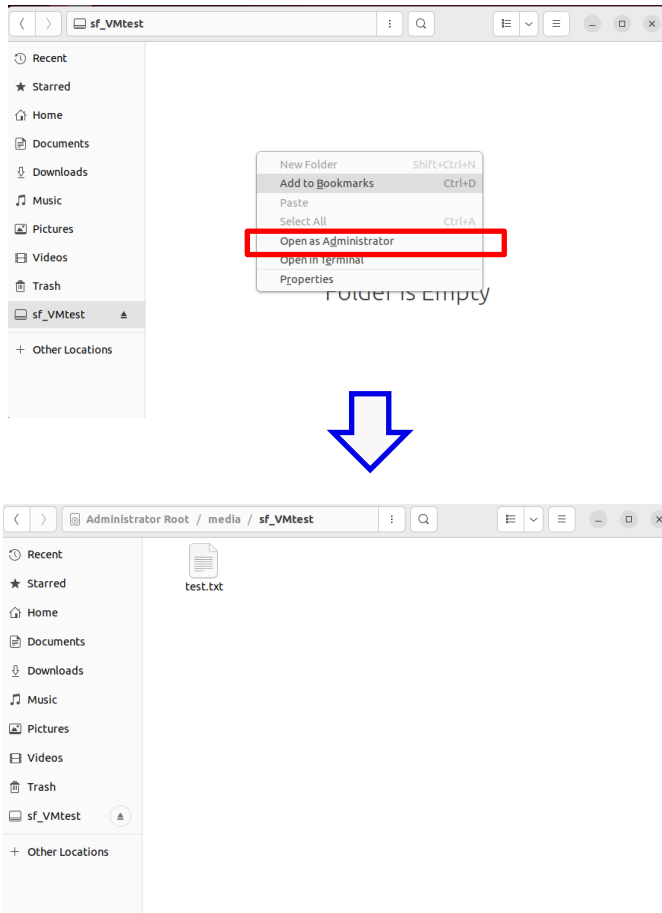
■ Install administrator plugin

- \$ sudo apt-get install nautilus-admin -y
- \$ nautilus -q
- If you see the message below, you can ignore and skip



File Sharing between VirtualBox and Host (5)

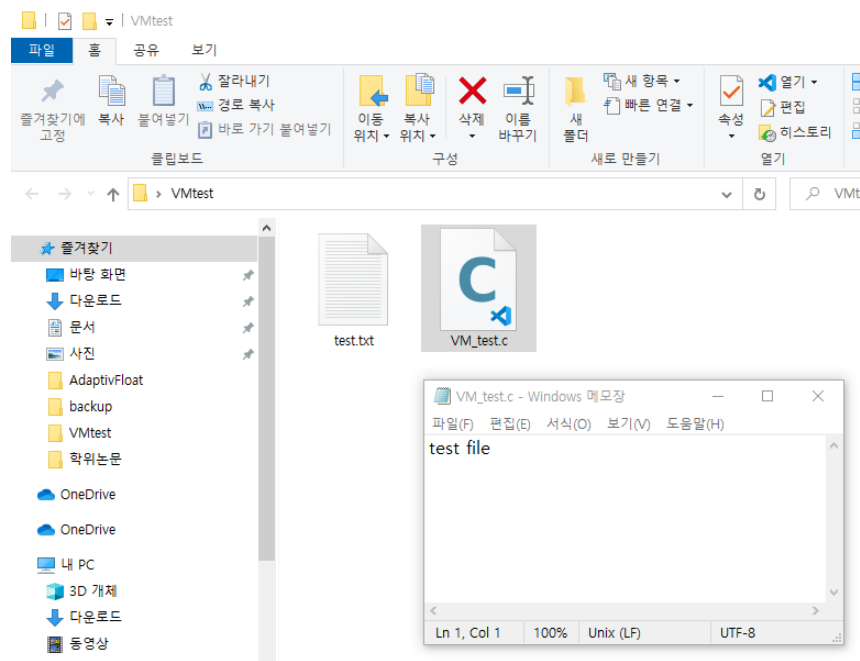
■ Run administrator plugin



File Sharing between VirtualBox and Host (6)

- When you copy files to the shared folder in VM, you will see the files at the shared folder in Host as well
 - \$ sudo cp [file name] [your shared folder path]/[copy file name]

```
test@test:~/Desktop$ cat test.c
test file
test@test:~/Desktop$ sudo cp test.c /media/sf_VMtest/VM_test.c
test@test:~/Desktop$ sudo ls /media/sf_VMtest/
test.txt  VM_test.c
```



File Sharing between VirtualBox and Host (7)

- Similarly, you can copy files (put by Host) from the shared folder dropped at Host to your local folder by cp command in your VM
 - \$ sudo cp /[your shared folder path]/[file name] [copy file name]

```
test@test:~/Desktop$ ls -al
total 12
drwxr-xr-x  2 test test 4096  4월  14 13:48 .
drwxr-x--- 14 test test 4096  4월  14 13:26 ..
-rw-rw-r--  1 test test   10  4월  14 13:26 test.c
test@test:~/Desktop$ sudo cp /media/sf_VMtest/test.txt copy_file.txt
test@test:~/Desktop$ ls -al
total 16
drwxr-xr-x  2 test test 4096  4월  14 13:49 .
drwxr-x--- 14 test test 4096  4월  14 13:26 ..
-rwxr-x---  1 root root   23  4월  14 13:49 copy_file.txt
-rw-rw-r--  1 test test   10  4월  14 13:26 test.c
test@test:~/Desktop$ sudo chmod 777 copy_file.txt
test@test:~/Desktop$ cat copy_file.txt
OS shared folder test
test@test:~/Desktop$
```