

리눅스 개발 환경 구축

VMWare Player & osboxes image

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리눅스 설치 방법

- 멀티 부팅으로 **native** 설치 - OS 이미지 필요
- Windows에서 WSL 활용
 - <https://learn.microsoft.com/ko-kr/windows/wsl/install>
- VMWare, VirtualBox등 가상 머신 활용

VMWare Player 설치

vmware workstation player 다운로드 및 설치

<https://www.vmware.com/kr/products/workstation-player/workstation-player-evaluation.html>

- google에서 'vmware player' 검색 후 사이트 방문 및 다운로드
- macos의 경우 'vmware fusion player' 검색 후 사이트 방문 및 다운로드

VMware Workstation 17 Player



VMware Workstation Player

VMware Workstation Player는 Windows 또는 Linux PC에서 단일 가상 머신을 실행하기에 가장 적합한 유틸리티입니다. 조직은 Workstation Player를 사용하여 관리형 기업 데스크톱을 제공할 수 있으며, 학생과 교육 관계자는 학습 및 교육을 위해 사용할 수 있습니다.

무료 버전은 비상업적인 개인 및 가정용으로 사용할 수 있습니다. VMware는 또한 학생들과 비영리 단체가 이 제품의 이점을 활용할 수 있기를 바랍니다.

상업 조직에서 Workstation Player를 사용하려면 상업용 라이선스가 필요합니다.

더 강력한 가상화 솔루션이 필요하십니까? Workstation Pro를 확인해 보십시오.

Windows용 Workstation 17 Player 사용해 보기

지금 다운로드 >



Linux용 Workstation 17 Player 사용해 보기

지금 다운로드 >

VMware Fusion 13

VMWARE
FUSION[®]
PRO
13



VMware Fusion은 재부팅 없이 Apple Mac에서 Windows, Linux 등을 실행할 수 있는 최고의 방법을 제공합니다.

Fusion 13은 macOS 12 이상을 실행하는 Intel 및 Apple Silicon Mac을 지원하며 개발자, IT 관리자 및 일반 사용자를 위한 기능을 포함합니다.

아래 링크를 사용하여 등록할 필요 없이 모든 기능을 갖춘 30일 무료 평가판을 시작하거나 Fusion Player의 무료 개인용 라이선스를 등록하십시오.

macOS 12+용 Fusion 13 Pro

[지금 다운로드 >](#)

macOS 12+용 Fusion 13 Player

[개인용 라이선스 등록 >](#)



VMware Fusion Player – Personal Use License

Fusion Player offers a Personal Use License, available for free with a valid CustomerConnect account. Home users, Open Source contributors, students, and anyone else can use Fusion Player Free for Non-Commercial activity.

Top Evaluation Resources

- u [Fusion Community](#)
- u [Documentation and Release Notes](#)
- u [Downloading and installing VMware Fusion](#)
- u [Fusion Player FAQ](#)

Welcome, won l.

[Log Out](#)

You registered for this product. Your downloads are now available below.

[View My Evaluations](#)[Installation & Configuration](#)[License & Download](#)[Troubleshooting & Support](#)[How to Buy](#)

Thank you for registering for VMware Fusion.

Your perpetual license and download can be found below. If you have questions or need support, visit the [VMware Technology Network](#) for product documentation, knowledge bases and other resources, or contact your local authorized [VMware partner](#). Additional support is also available for purchase within the [VMware store](#).

License Information

COMPONENT	EXPIRATION DATE	LICENSE KEYS
VMware Fusion Player 13 – Personal Use		

Download Packages

[VMware Fusion - Binaries](#)[VMware Fusion Player – Personal Use License - Binaries](#)

VMware Fusion 13.0.2 (for Intel-based and Apple silicon Macs)
2023-04-25 | 13.0.2 | 672.09 MB | dmg

[Manually Download](#)

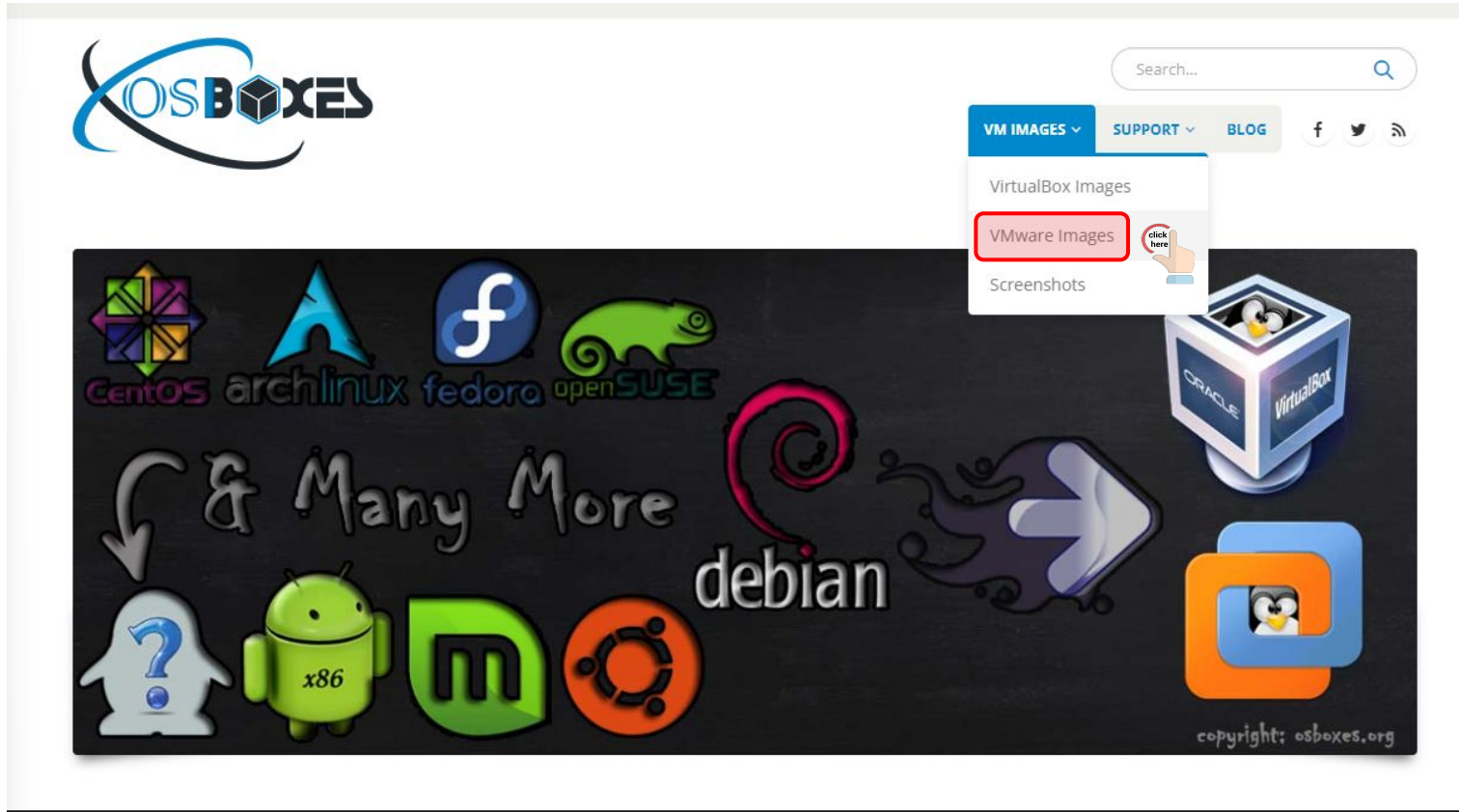
MD5SUM(*): 09ad98ba511caeede47e9aae37b9bdf2

SHA1SUM(*): f509ad82f21f37ea73b2373ebef0e88d9963ecf3

SHA256SUM(*): c86b40823b97334f20b4e6b475b488ec23faf06c986e291965b9e56f7b44c042

Ubuntu Image (가상디스크) 다운로드

<https://osboxes.org>



TrueNAS

TrueOS - (Discontinued)

Ubuntu

Download **VMware (VMDK) image**, [Visit Official Website](#)

Ubuntu Budgie

Ubuntu Gnome - (Discontinued)

Ubuntu 22.04 Jammy Jellyfish

VirtualBox

VMware

Info

◦ VMware (VMDK) 64bit [Download](#) Size: 2.57GB

SHA256: c91671558bf3dd449d38f11d8faadd80c1e514d4b13803618d978729931d8i



Ubuntu Image (가상 디스크) 설치

Player ▾



Home

Welcome to VMware Workstation 17 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.



Download a Virtual Appliance

Download a virtual appliance from the marketplace. You can then open it in Player.



Help

View online help.

New Virtual Machine Wizard

Welcome to the New Virtual Machine Wizard
A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?

Install from:

☐ Installer disc:

No drives available

☐ Installer disc image file (iso):

autoinst.iso

Browse...

☒ I will install the operating system later.

The virtual machine will be created with a blank hard disk.

Help

< Back

Next >

Cancel

New Virtual Machine Wizard

×

Select a Guest Operating System
Which operating system will be installed on this virtual machine?

Guest operating system

☐ Microsoft Windows

☒ Linux

☐ Other

Version

Ubuntu 64-bit

▼

Help

< Back

Next >

Cancel

New Virtual Machine Wizard ✕

Name the Virtual Machine
What name would you like to use for this virtual machine?

Virtual machine name:

Location:

New Virtual Machine Wizard



Specify Disk Capacity

How large do you want this disk to be?

The virtual machine's hard disk is stored as one or more files on the host computer's physical disk. These file(s) start small and become larger as you add applications, files, and data to your virtual machine.

Maximum disk size (GB):

Recommended size for Ubuntu 64-bit: 20 GB

☐ Store virtual disk as a single file

☒ Split virtual disk into multiple files

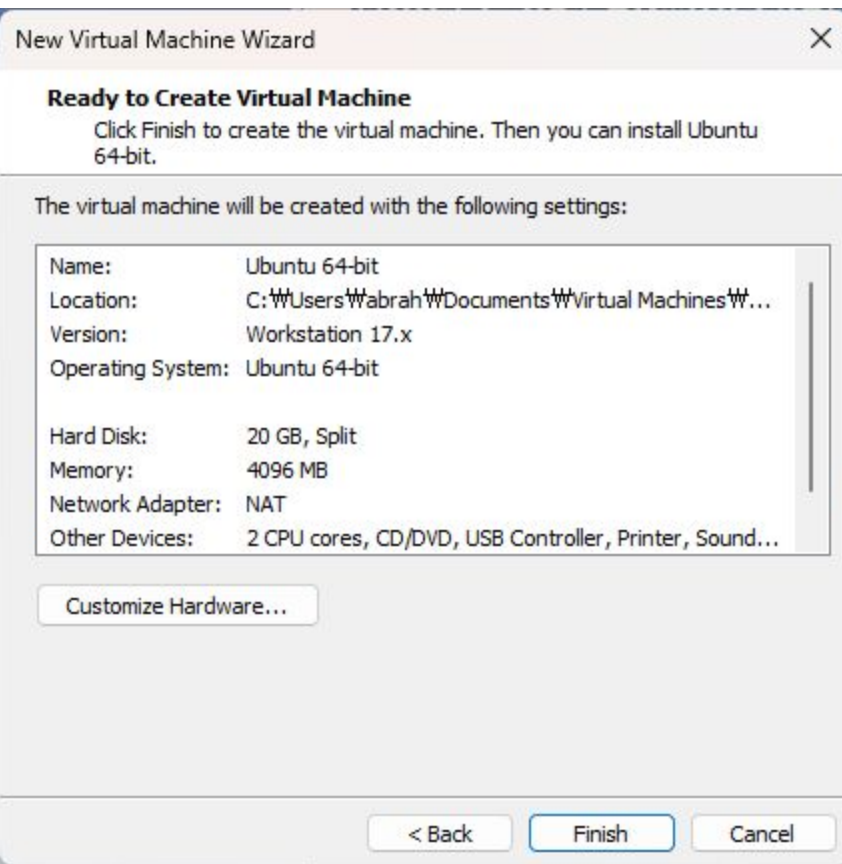
Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

Help

< Back

Next >

Cancel



Device	Summary
Memory	4 GB
Processors	2
New CD/DVD (SATA)	Auto detect
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

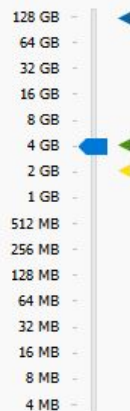
Add...

Remove

Memory

Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.

Memory for this virtual machine: 4096 MB



■ Maximum recommended memory
(Memory swapping may occur beyond this size.)
111.9 GB

■ Recommended memory
4 GB

■ Guest OS recommended minimum
2 GB

Close

Help

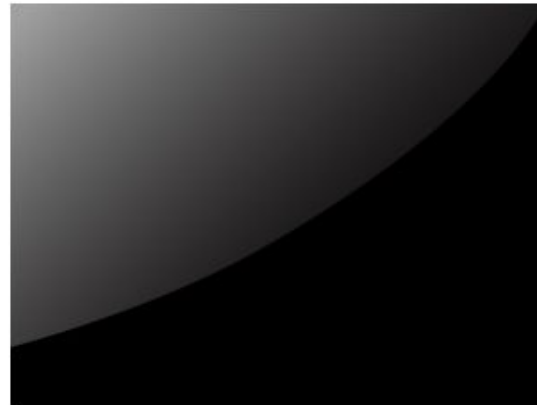
Player ▾



Home



Ubuntu 64-bit



Virtual Machine Name:

Ubuntu 64-bit

State: Powered Off

OS: Ubuntu 64-bit

Version: Workstation 17.x virtual machine

RAM: 4 GB



Play virtual machine



Edit virtual machine settings

Virtual Machine Settings

Hardware Options

Device	Summary
Memory	4 GB
Processors	2
Hard Disk (SCSI)	20 GB
CD/DVD (SATA)	Auto detect
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Add...

Remove

Disk file

\\abrah\\Documents\\Virtual Machines\\Ubuntu 64-bit\\Ubuntu 64-bit.vmdk

Capacity

Current size: 2.6 MB

System free: 183.9 GB

Maximum size: 20 GB

Disk information

Disk space is not preallocated for this hard disk.

Hard disk contents are stored in multiple files.

Disk utilities

Defragment files and consolidate free space.

Defragment

Expand disk capacity.

Expand...

Compact disk to reclaim unused space.


Compact











Advanced...

OK

Cancel

Help

이름	수정한 날짜	유형	크기
▽ 오래 전			
 Ubuntu 22.04 (64bit).vmdk	2022-04-23 오전 9:45	VMware virtual di...	8,896,960...

Virtual Machines > Ubuntu 64-bit				▽	↻
이름	수정한 날짜	유형	크기		
 mksSandbox.log	2023-08-30 오전 11:05	텍스트 문서	84KB		
 Ubuntu 22.04 (64bit).vmdk	2022-04-23 오전 9:45	VMware virtual di...	8,896,960...		
 Ubuntu 64-bit.nvram	2023-08-30 오전 11:05	VMware Virtual ...	9KB		
 Ubuntu 64-bit.scoreboard	2023-08-30 오전 11:03	SCOREBOARD 파일	8KB		
 Ubuntu 64-bit.vmdk	2023-08-30 오전 10:59	VMware virtual di...	1KB		
 Ubuntu 64-bit.vmsd	2023-08-30 오전 10:59	VMware snapshot...	0KB		
 Ubuntu 64-bit.vmx	2023-08-30 오전 11:04	VMware virtual m...	4KB		
 Ubuntu 64-bit.vmx	2023-08-30 오전 10:59	VMware Team M...	1KB		
 Ubuntu 64-bit-s001.vmdk	2023-08-30 오전 10:59	VMware virtual di...	512KB		
 Ubuntu 64-bit-s002.vmdk	2023-08-30 오전 10:59	VMware virtual di...	512KB		

교체

Ubuntu 가상 머신 부팅

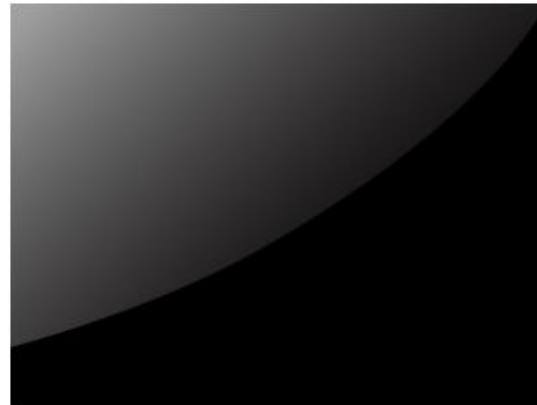
Player ▾



Home



Ubuntu 64-bit



Virtual Machine Name:

Ubuntu 64-bit

State: Powered Off

OS: Ubuntu 64-bit

Version: Workstation 17.x virtual machine

RAM: 4 GB



Play virtual machine



Edit virtual machine settings

부팅시 에러 메시지



Player ▾



Aug 30 07:08



osboxes.org

Not listed?



Ubuntu



Ubuntu 22.04 Jammy Jellyfish

VirtualBox

VMware

Info

Username: osboxes

Password: osboxes.org

Gust Tools: Installed

Keyboard Layout: US (Qwerty)

VMware Compatibility: Version 10+

Aug 29 22:10



osboxes.org



Ubuntu



Home

개발 환경 설정



terminal



>
_

Terminal



Characters



Soyombo Terminal Mark-1 U+11AA1, : Soyombo Terminal ...



Soyombo Terminal Mark-2 U+11AA2, : Soyombo Terminal ...



```
osboxes@osboxes:~$ passwd
Changing password for osboxes.
Current password:
```



```
New password:
```

```
BAD PASSWORD: The password is shorter than 8 characters
```

```
New password:
```



```
BAD PASSWORD: The password fails the dictionary check - it is based on a dictionary word
```

```
New password:
```

```
Retype new password:
```



```
passwd: password updated successfully
```

```
osboxes@osboxes:~$
```



Package Manager Update

```
osboxes@osboxes:~$ apt update
Reading package lists... Done
E: Could not open lock file /var/lib/apt/lists/lock - open (13: Permission denied)
E: Unable to lock directory /var/lib/apt/lists/
W: Problem unlinking the file /var/cache/apt/pkgcache.bin - RemoveCaches (13: Permission denied)
W: Problem unlinking the file /var/cache/apt/srcpkgcache.bin - RemoveCaches (13: Permission denied)
osboxes@osboxes:~$ sudo apt update
[sudo] password for osboxes:
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:2 http://security.ubuntu.com/ubuntu jammy-security/main i386 Packages [312 kB]
```


check gcc and make

```
osboxes@osboxes:~$ gcc
Command 'gcc' not found, but can be installed with:
sudo apt install gcc
osboxes@osboxes:~$ make
Command 'make' not found, but can be installed with:
sudo apt install make          # version 4.3-4.1build1, or
sudo apt install make-guile    # version 4.3-4.1build1
osboxes@osboxes:~$
```

Install gcc and make

```
osboxes@osboxes:~$ sudo apt install gcc make
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu cpp-11 gcc-11
  gcc-11-base gcc-12-base libasan6 libatomic1 libbinutils libc-dev-bin
  libc-devtools libc6 libc6-dbg libc6-dev libcc1-0 libcrypt-dev libctf-nobfd0
  libctf0 libgcc-11-dev libgcc-s1 libgomp1 libitm1 liblsan0 libnsl-dev
  libquadmath0 libstdc++6 libtirpc-common libtirpc-dev libtirpc3 libtsan0
  libubsan1 linux-libc-dev manpages-dev rpcsvc-proto
Suggested packages:
  binutils-doc gcc-11-locales gcc-multilib autoconf automake libtool flex
  bison gcc-doc gcc-11-multilib gcc-11-doc glibc-doc make-doc
Recommended packages:
  libnss-nis libnss-nisplus
The following NEW packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu gcc gcc-11 libasan6
  libatomic1 libbinutils libc-dev-bin libc-devtools libc6-dev libcc1-0
  libcrypt-dev libctf-nobfd0 libctf0 libgcc-11-dev libitm1 liblsan0
  libnsl-dev libquadmath0 libtirpc-dev libtsan0 libubsan1 linux-libc-dev make
  manpages-dev rpcsvc-proto
The following packages will be upgraded:
  cpp-11 gcc-11-base gcc-12-base libc6 libc6-dbg libgcc-s1 libgomp1
  libstdc++6 libtirpc-common libtirpc3
10 upgraded, 27 newly installed, 0 to remove and 510 not upgraded.
Need to get 67.3 MB of archives.
After this operation, 132 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
```

check gcc and make again

```
Setting up gcc (4:11.2.0-1ubuntu1) ...  
Processing triggers for man-db (2.10.2-1) ...  
Processing triggers for libc-bin (2.35-0ubuntu3) ...  
osboxes@osboxes:~$ gcc  
gcc: fatal error: no input files  
compilation terminated.  
osboxes@osboxes:~$ make  
make: *** No targets specified and no makefile found. Stop.  
osboxes@osboxes:~$
```

vim 설치 및 설정

\$ sudo apt install vim

\$ vim ~/.vimrc

```
:set nu  
:set ai  
:set ci  
:set si  
:set et  
:set ts=4  
:set sw=4
```