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Kelas : A

Pengenalan VMWare Workstation dan Linux OS

Materi:

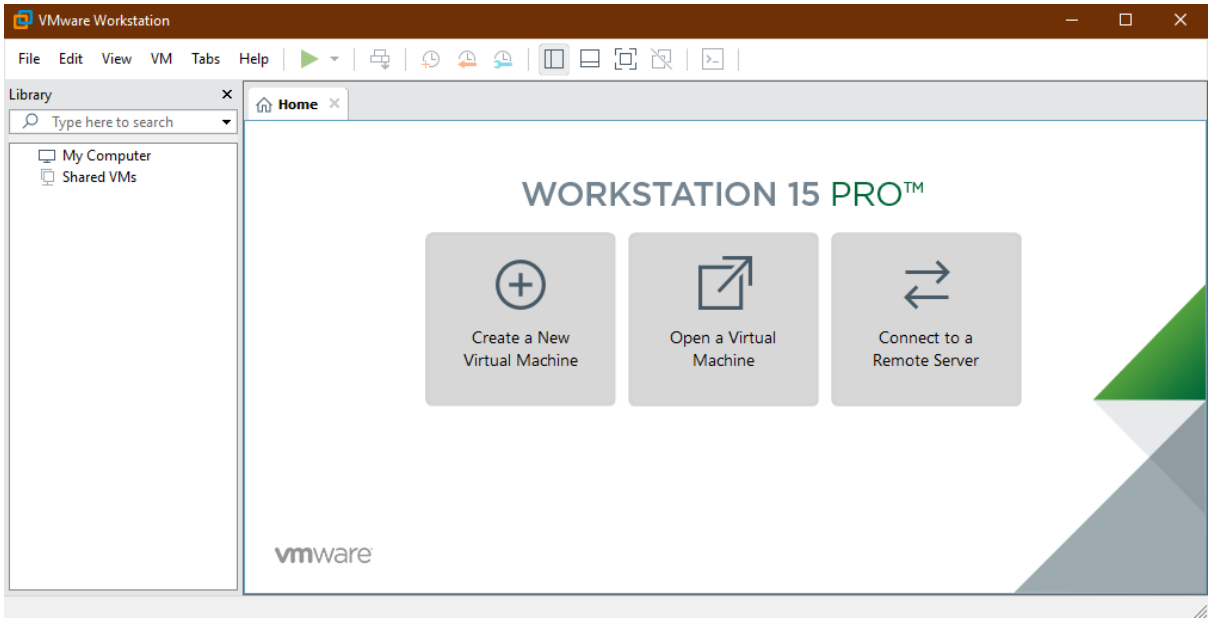
1. Review materi
2. Pengenalan VMWare
3. Linux OS (ubuntu)
4. Evaluasi

Mencoba membuat layanan hosting berbasiskan private cloud.

Pengantar Pengenalan VMWare Workstation

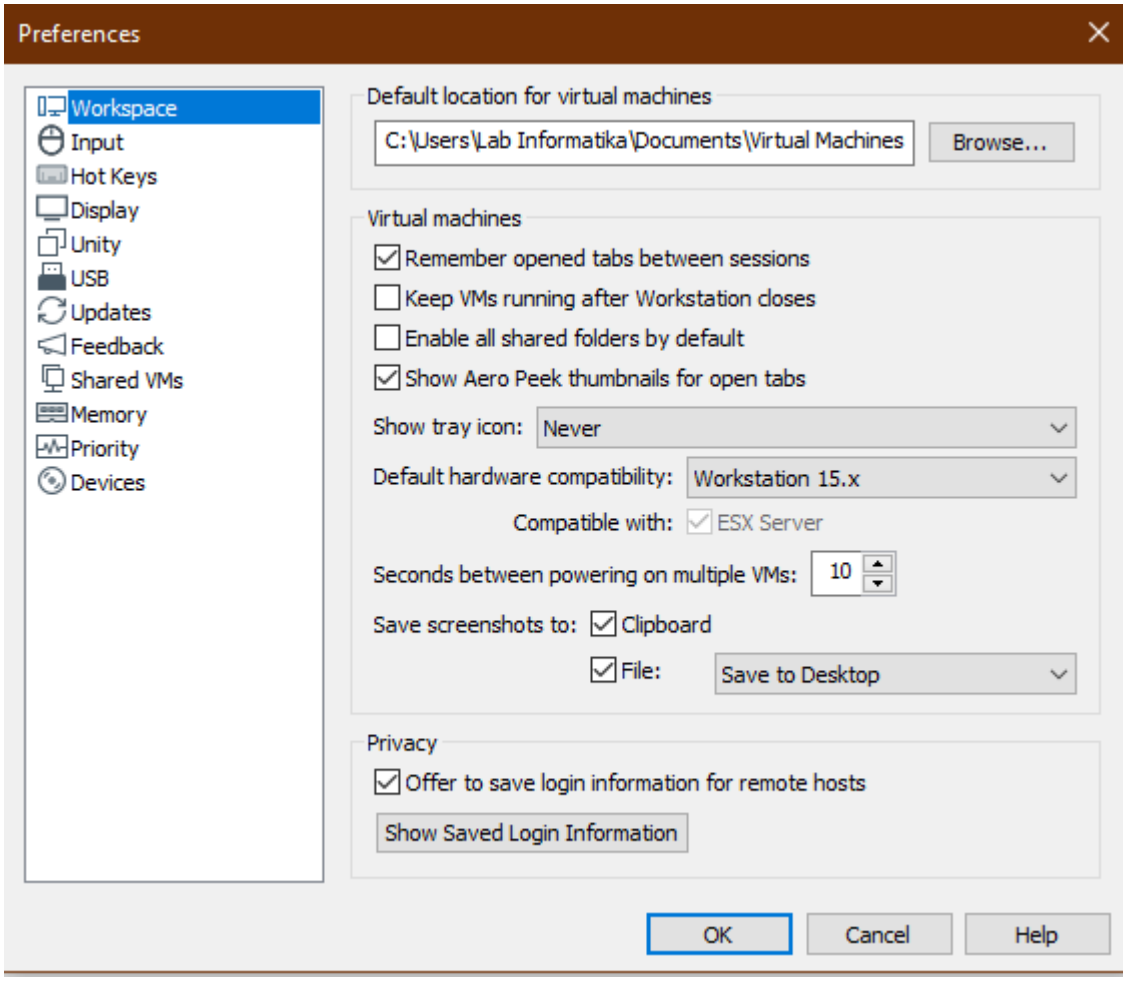
Di aplikasi VMWare terdapat 4 layer yang ada yaitu: Virtual OS (berada di layer pertama) menggunakan Linux, Windows. Di bawahnya ada Aplikasi VMWare W (VMWare Server). OS pada komputer (Base Operating System). Hardware fisik komputer lab (Server hardware: DELL, HP, etc).

VMWare digunakan khusus untuk virtualisasi sistem operasi. VIrtualisasi (kegiatan untuk menciptakan sesuatu dalam versi maya tanpa menghadirkan versi nyata dari sebuah sesuatu itu sendiri). Contoh yang dapat divirtualisasikan yaitu: CPU, RAM, etc. VMWare menyediakan banyak sekali aplikasi. Menggunakan VMMWare versi 15 (yang pro).

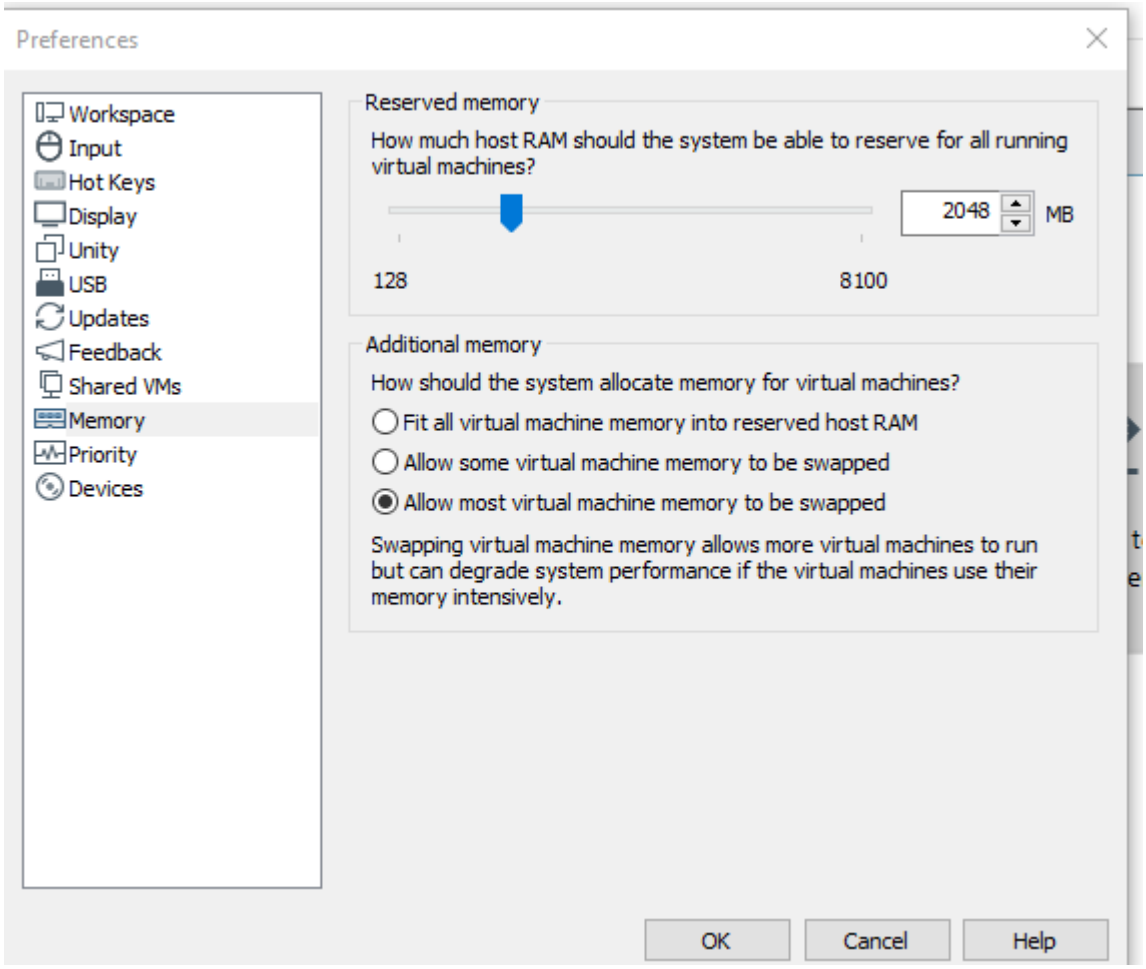


Bilamana komputer yang digunakan (komputer fisik) tidaka memiliki RAM yang cukup, maka dapat digunakan opsi swap. Maka kaan muncul tampilan seperti ini.

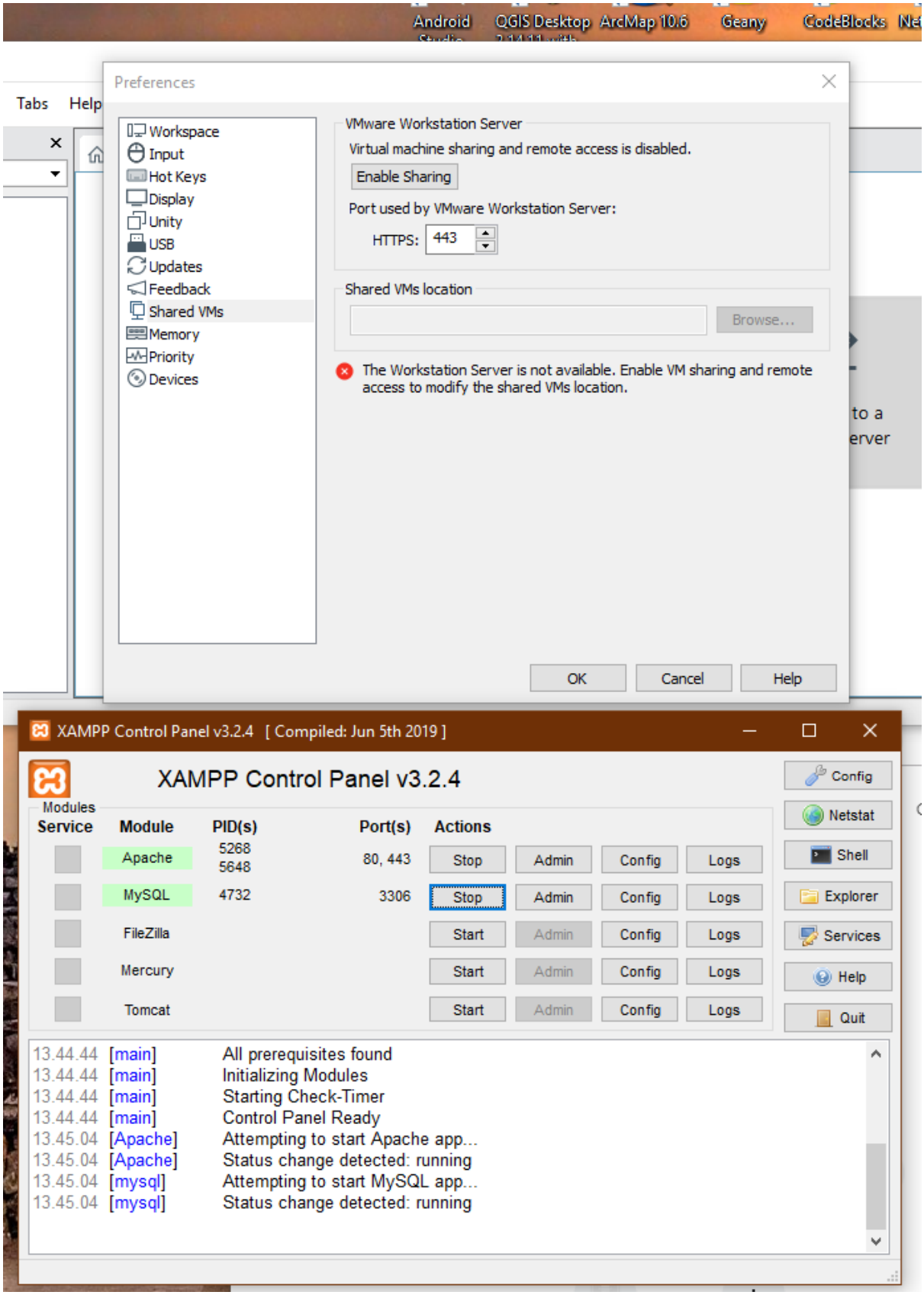
Klik sub menu edit -> Preference



Jika RAM yang digunakan tidak cukup, maka akan dipindahkan



Secara default, hasil instalasi VMWare W jika mengalami error di bagian XAMPP mengalami error maka untuk memperbaikinya, matikan fitur Shared VMs pada menu konfigurasi VMWare W dengan cara klik change setting terlebih dahulu lalu klik disable sharing.


Android
QGIS Desktop
ArcMap 10.6
Geany
CodeBlocks
Tabs
Help
Preferences
Workspace
Input
Hot Keys
Display
Unity
USB
Updates
Feedback
Shared VMs
Memory
Priority
Devices
VMware Workstation Server
Virtual machine sharing and remote access is disabled.
Enable Sharing
Port used by VMware Workstation Server:
HTTPS: 443
Shared VMs location
Browse...
The Workstation Server is not available. Enable VM sharing and remote access to modify the shared VMs location.
OK
Cancel
Help
XAMPP Control Panel v3.2.4 [Compiled: Jun 5th 2019]
XAMPP Control Panel v3.2.4
Modules
Service
Module
PID(s)
Port(s)
Actions
Apache
5268
5648
80, 443
Stop
Admin
Config
Logs
MySQL
4732
3306
Stop
Admin
Config
Logs
FileZilla
Start
Admin
Config
Logs
Mercury
Start
Admin
Config
Logs
Tomcat
Start
Admin
Config
Logs
Config
Netstat
Shell
Explorer
Services
Help
Quit
13.44.44 [main] All prerequisites found
13.44.44 [main] Initializing Modules
13.44.44 [main] Starting Check-Timer
13.44.44 [main] Control Panel Ready
13.45.04 [Apache] Attempting to start Apache app...
13.45.04 [Apache] Status change detected: running
13.45.04 [mysql] Attempting to start MySQL app...
13.45.04 [mysql] Status change detected: running

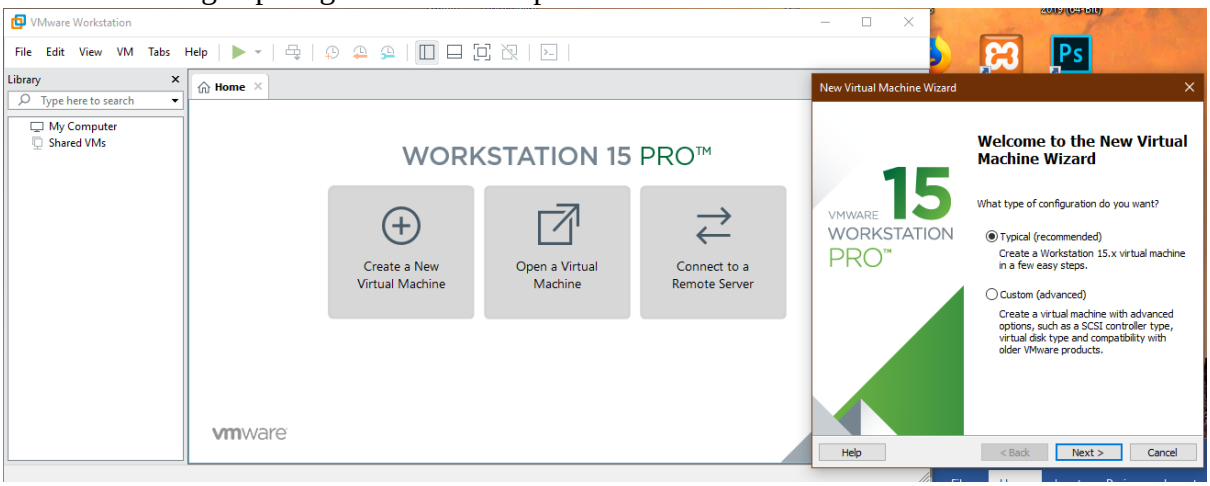
Linux OS (Ubuntu)

Kebutuhan:

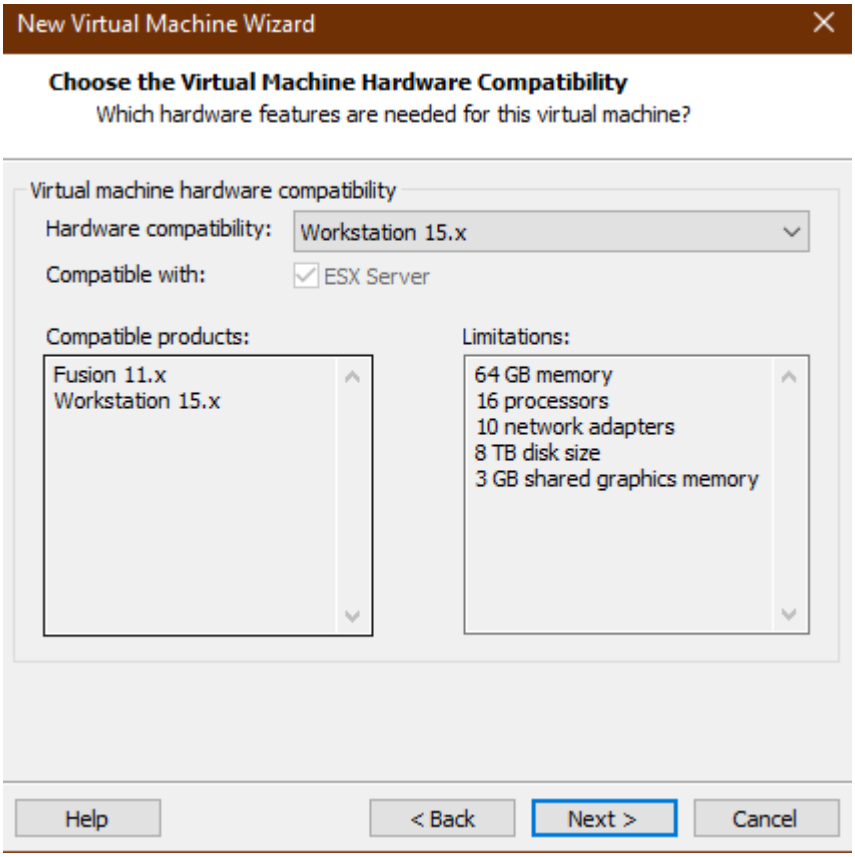
- Linux OS
- Periksa di komputer jika ada file installer

Cara install Ubuntu:

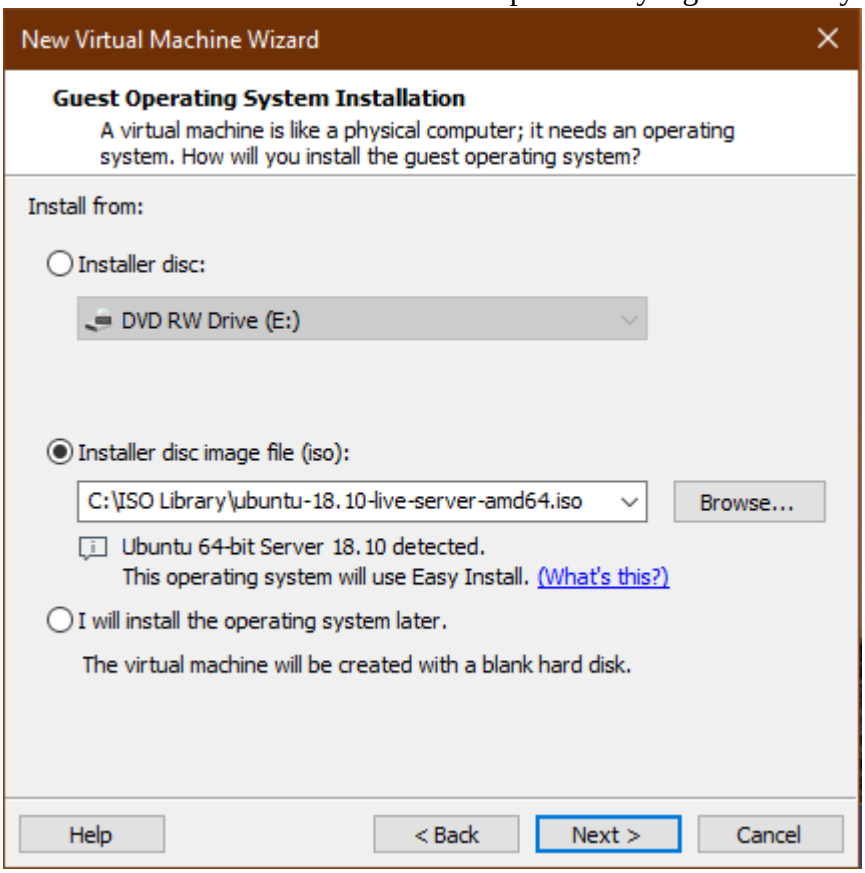
1. Sebelum install, harus di cek terlebih dahulu apakah ISO installer ubuntu ada di PC.
2. Klik new di baigan paling kanan dari tampilan VMWare



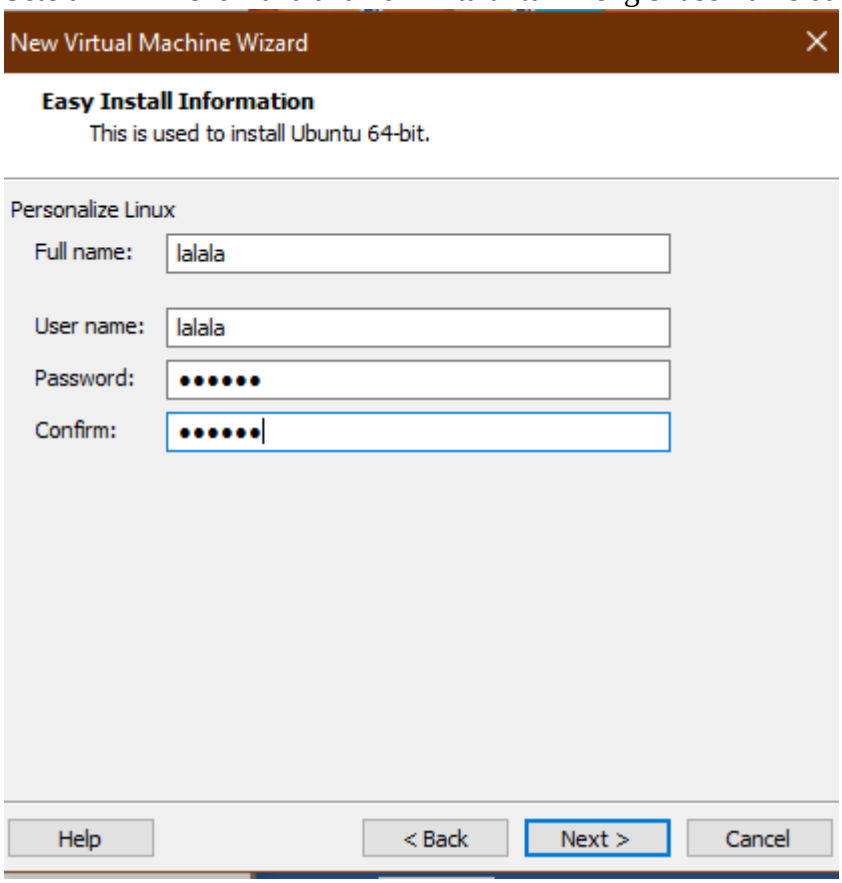
3. Modenya pilih yang **custom (advanced)**, button radio kedua yang ada di bawah. Setelah itu klik Next.
4. Pilih kompatibilitas hardware tertinggi untuk SO VM modern (keluaran terbaru). Jika hendak menginstall dengan keluaran lama, maka kompatibilitas harus diturunkan dari yang semula Workstation 15. **Disesuaikan dengan OS yang diinstall**.



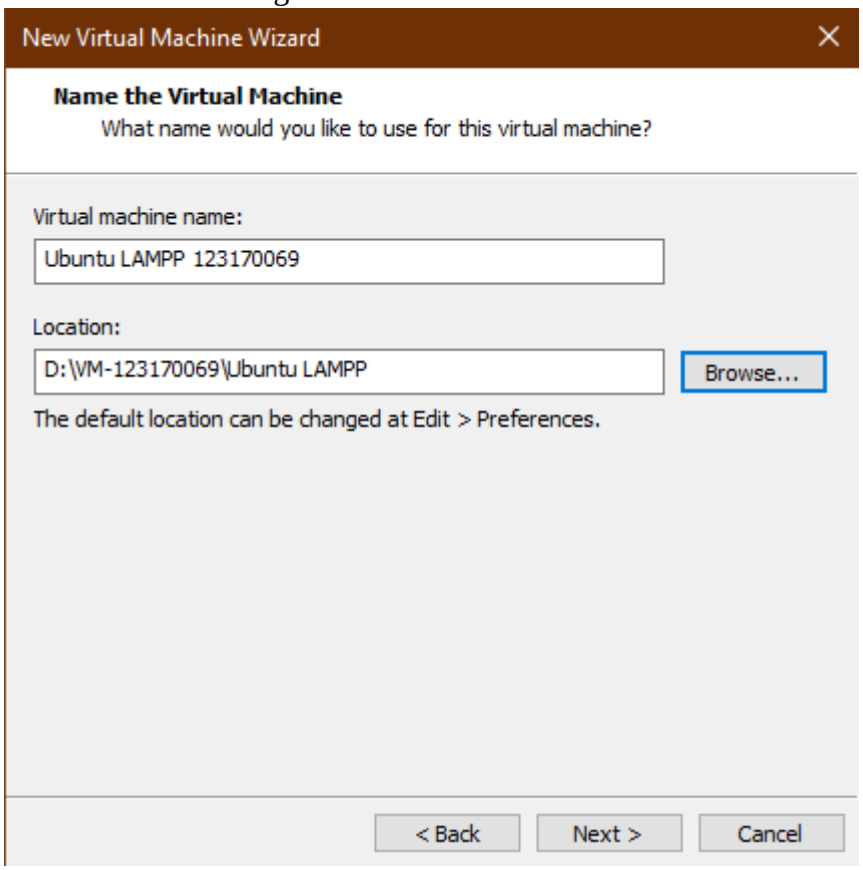
5. Pilih berkas ISO sistem operasi untuk VM yang akan dibuat. Informasi mengenai nkompatibilitas Easy install akan muncul, namun untuk sistem operasi Ubuntu 18.10 masih berkendala. Klik browse->ISO->pilih ISO yang tadi awalnya hendak diinstall.



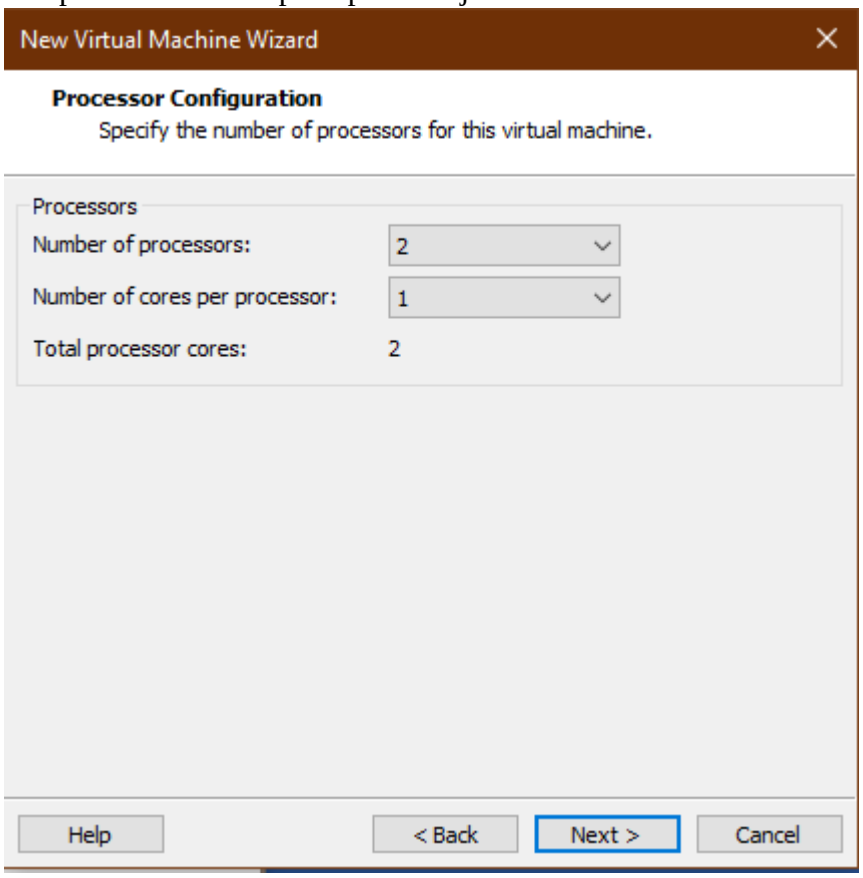
6. Setelah klik **Next** maka akan diminta untuk mengisi username dan password.



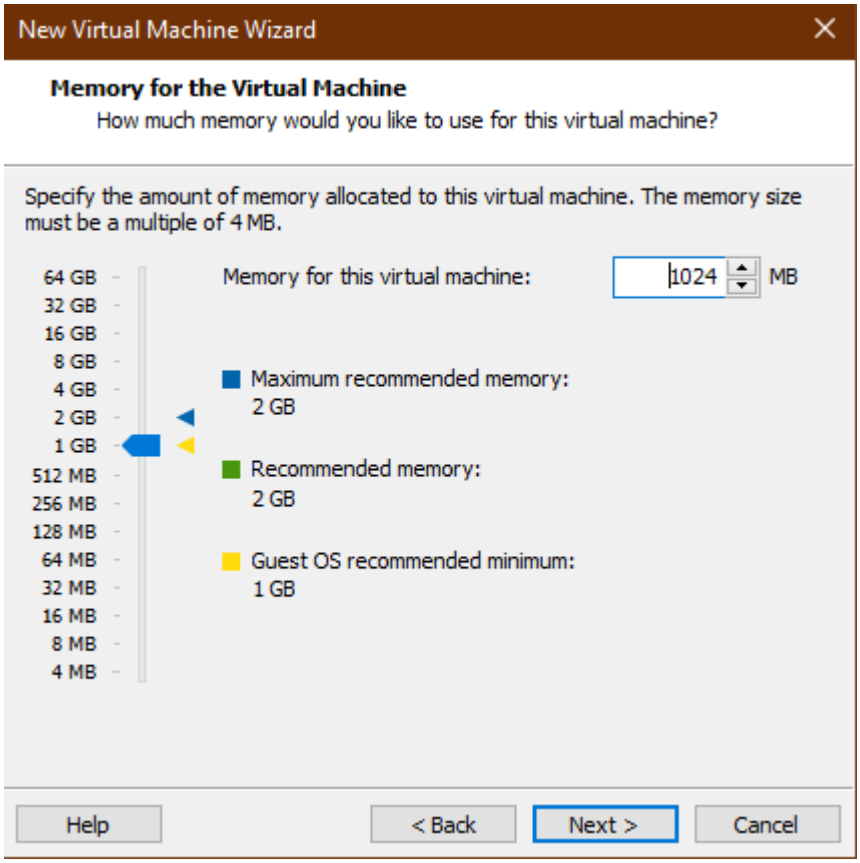
7. Isikan nama VM dengan format



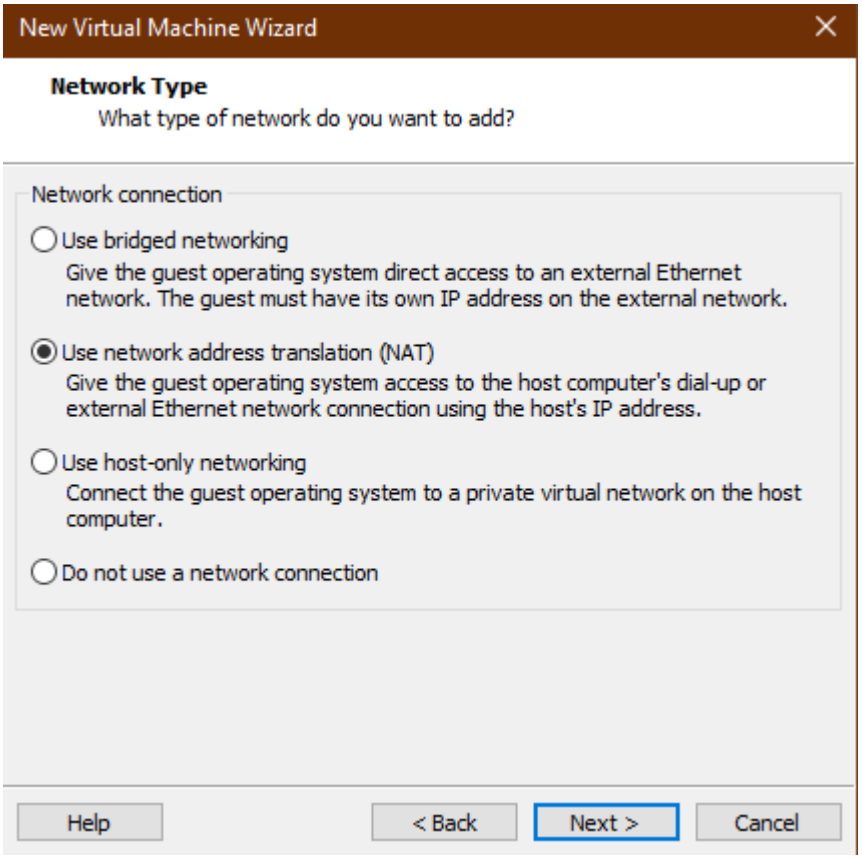
8. Gunakan parameter **processors** sebanyak 2 dan **cores per processors** tetap pada nilai 1. Opsi ini akan mempercepat kinerja VM.



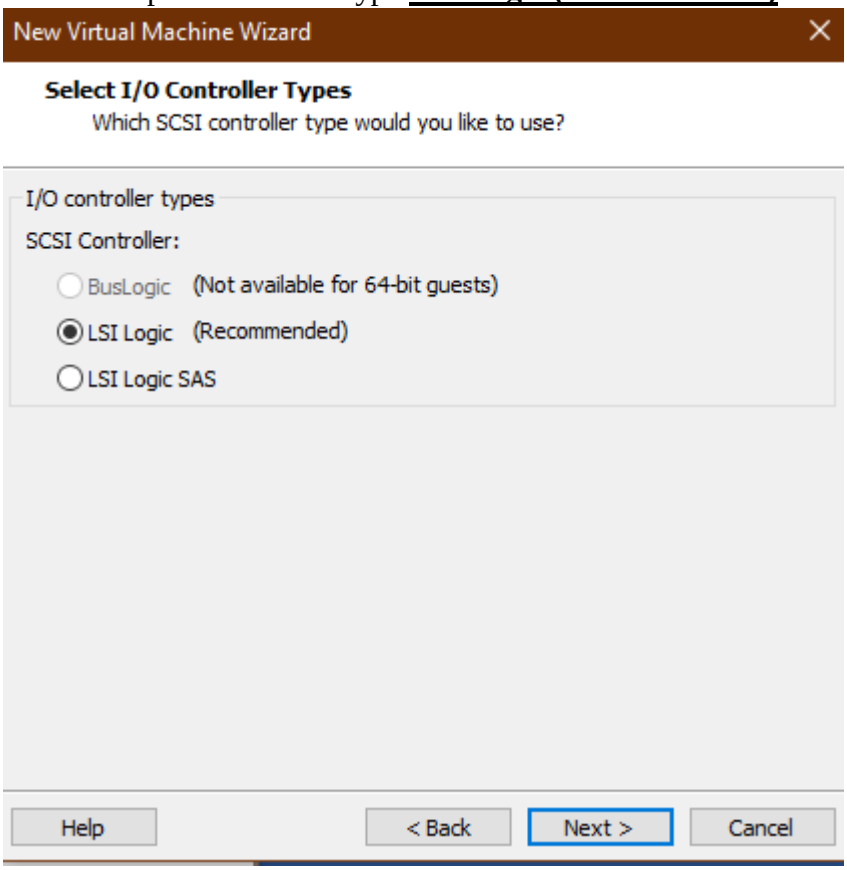
9. Cara selanjutnya yaitu mengatur RAM dengan parameter memory 1 GB atau 1024 MB. Ubuntu versi server pada umumnya tidak membutuhkan RAM yang terlalu banyak.



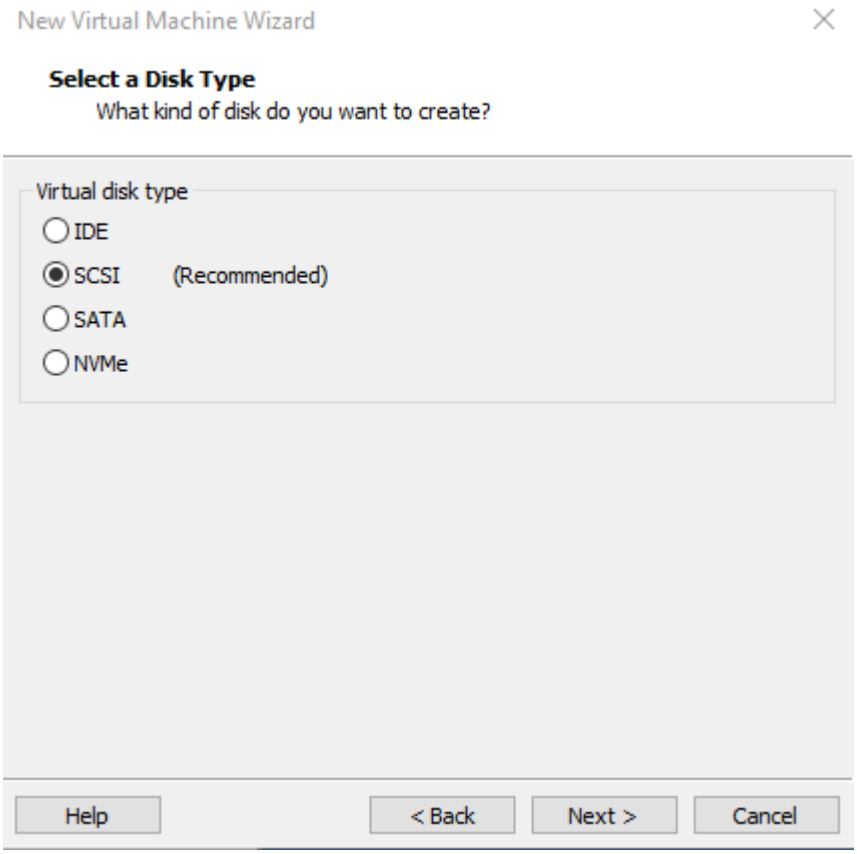
10. Setelah itu tentukan mode jaringan. Pada mode **network address translation (NAT)**.
    Mode bridged networking akan memberikan akses VM ke jaringan luar sehingga akan mendpaatkan IP eksternal.
    Mode NAT mirip seperti bridged namun tidak mudah untuk diakses dari eksternal. VM akan mendapatkan kelas IP yang berbeda dari VM.



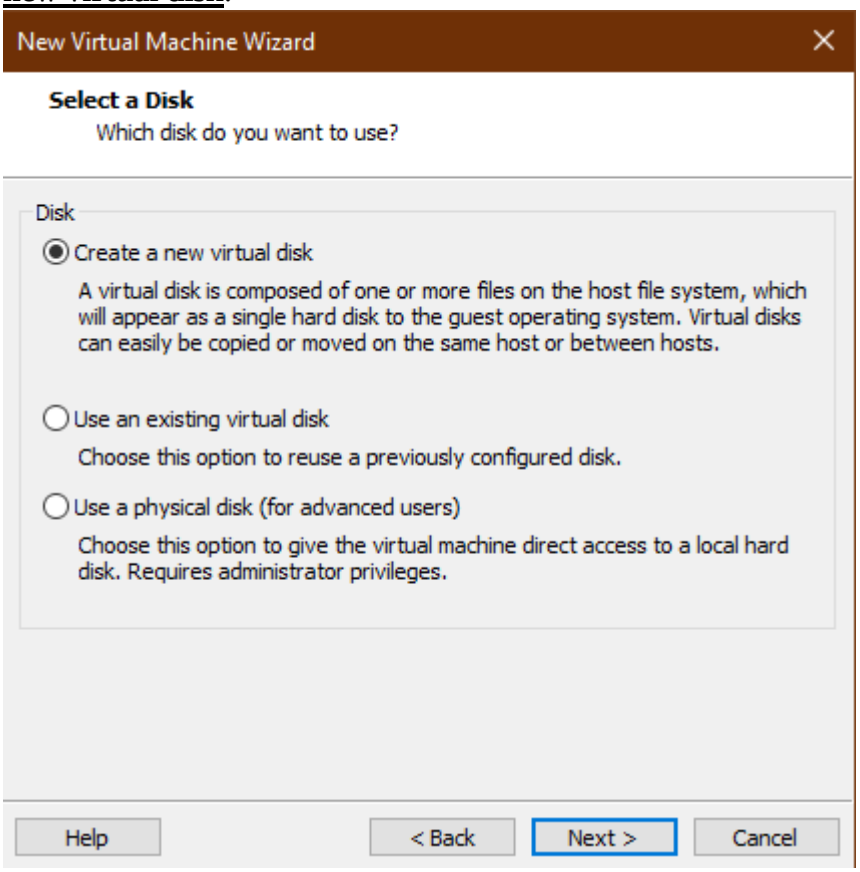
11. Setelah itu pilih controller type **LSI Logic (Recommended)**.



12. Pilih disk type **SCSI (Recommended)**.

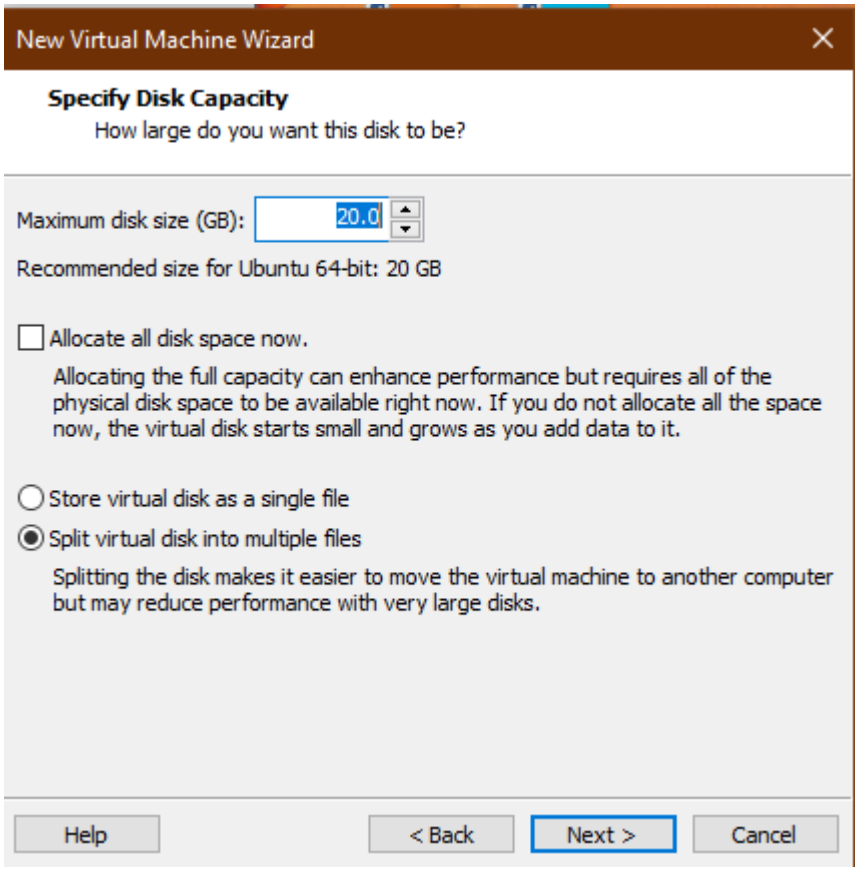


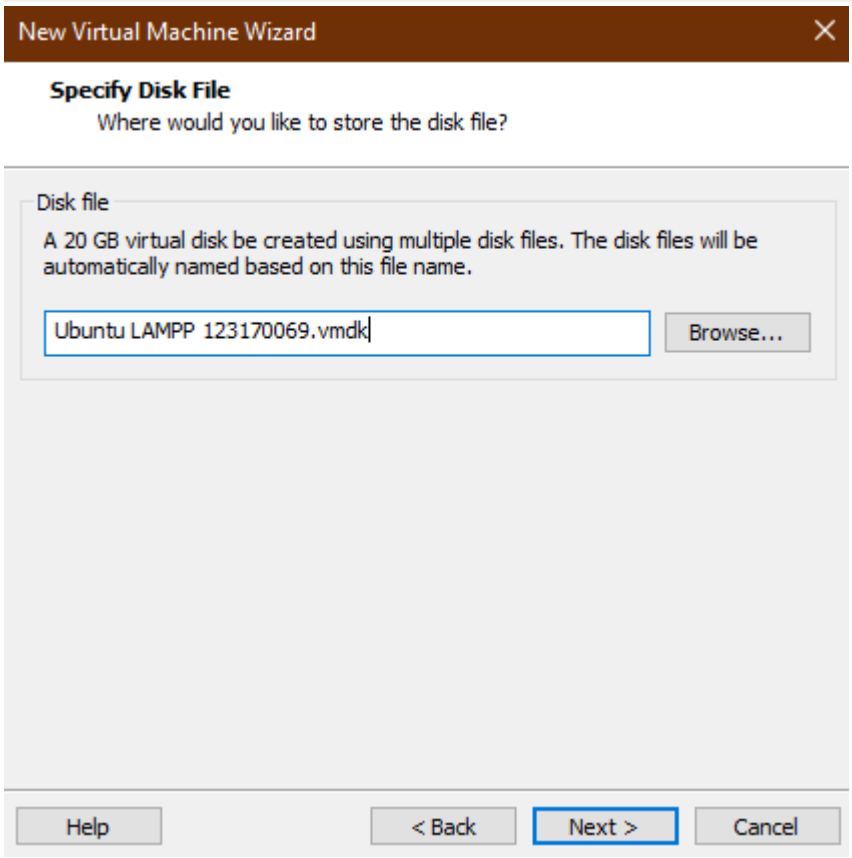
13. Dikarenakan sebelumnya belum pernah memiliki virtual disk, maka pilih **Create a new virtual disk**.

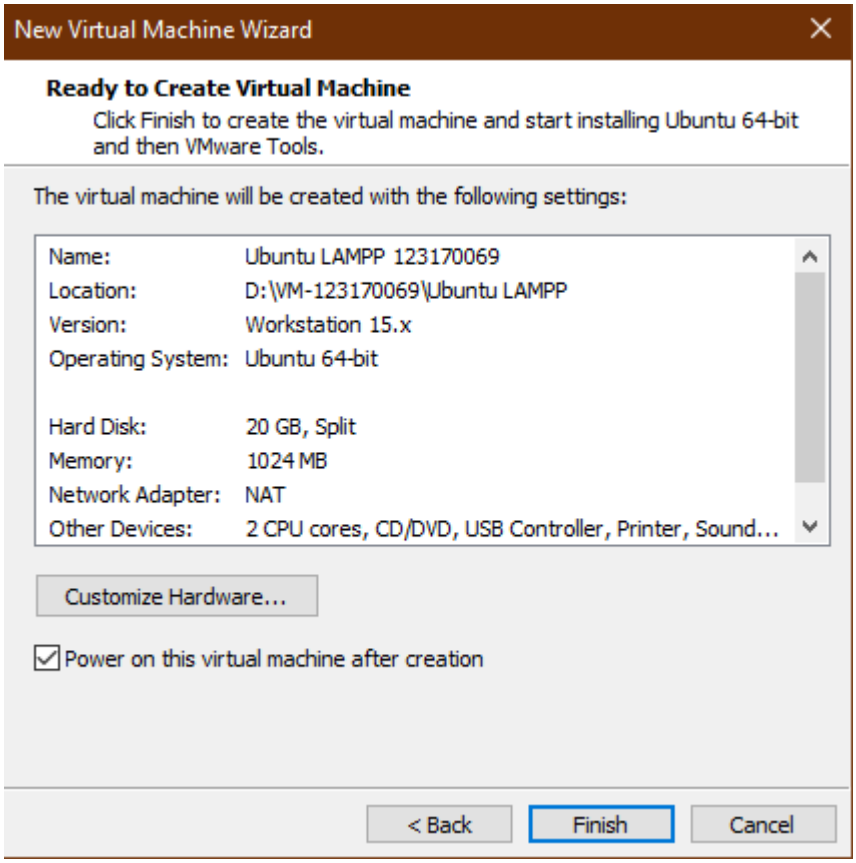


14. Gunakan ukuran default yang disarankan Ubuntu yaitu 20 GB.

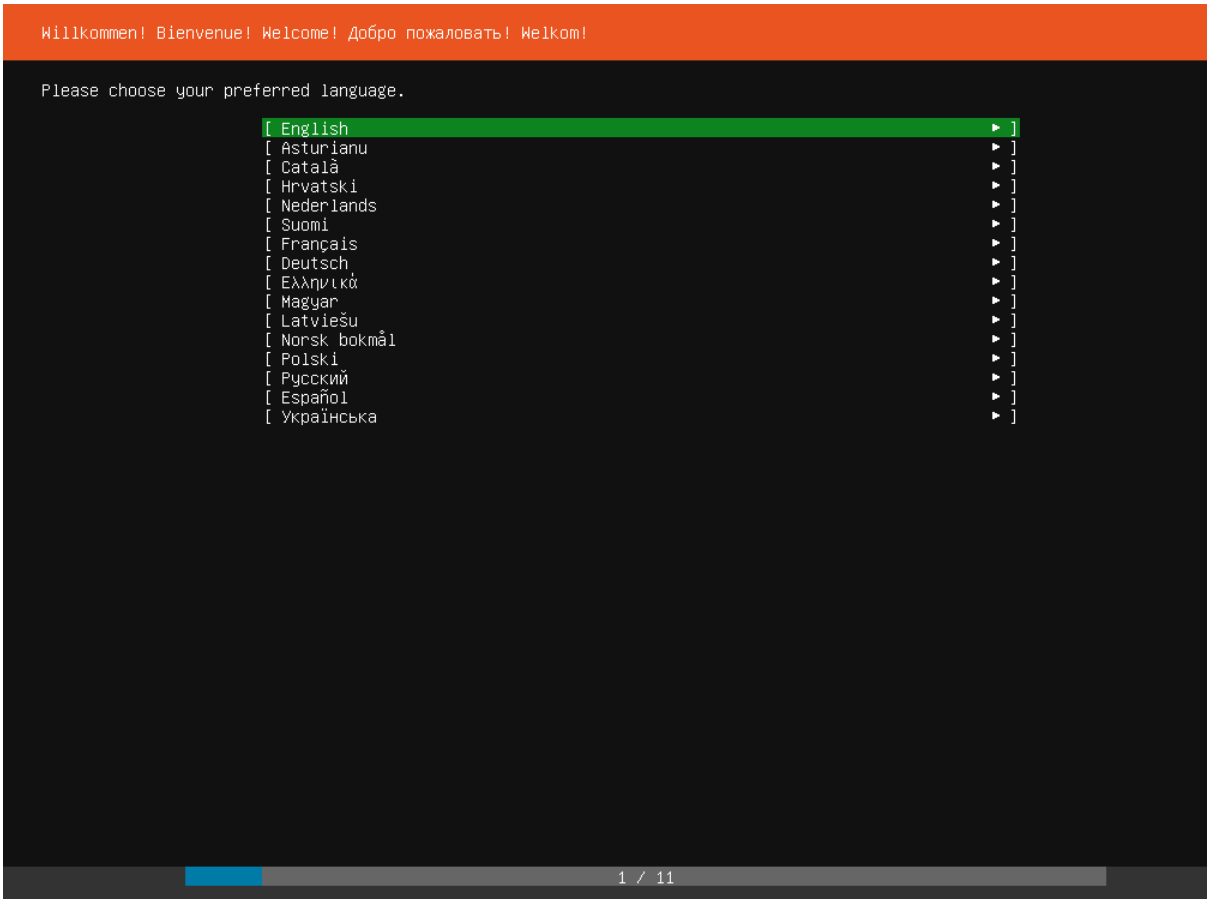
15.


New Virtual Machine Wizard
Specify Disk Capacity
How large do you want this disk to be?
Maximum disk size (GB):
20.0
Recommended size for Ubuntu 64-bit: 20 GB
Allocate all disk space now.
Allocating the full capacity can enhance performance but requires all of the physical disk space to be available right now. If you do not allocate all the space now, the virtual disk starts small and grows as you add data to it.
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

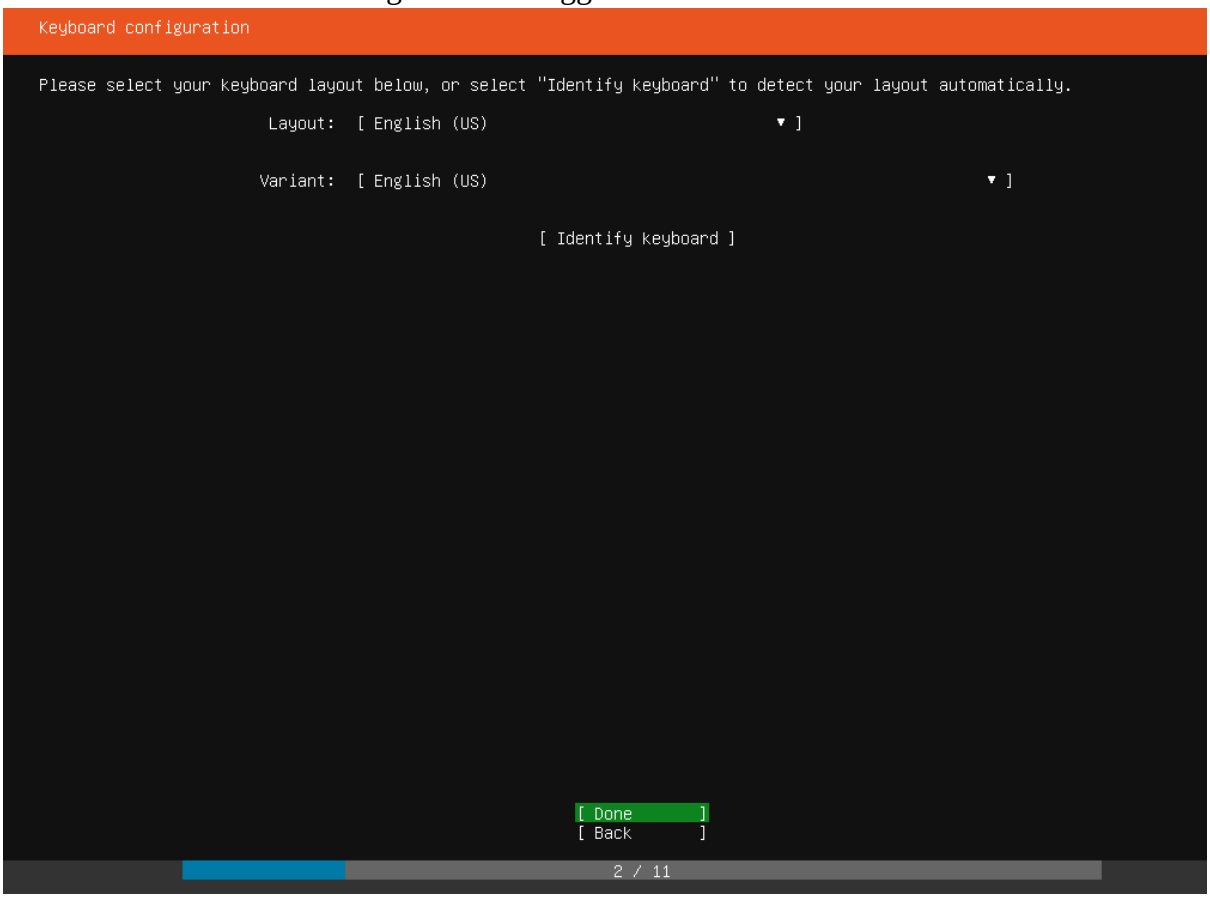

New Virtual Machine Wizard
Specify Disk File
Where would you like to store the disk file?
Disk file
A 20 GB virtual disk be created using multiple disk files. The disk files will be automatically named based on this file name.
Ubuntu LAMPP 123170069.vmdk
Browse...
Help
< Back
Next >
Cancel

16. 

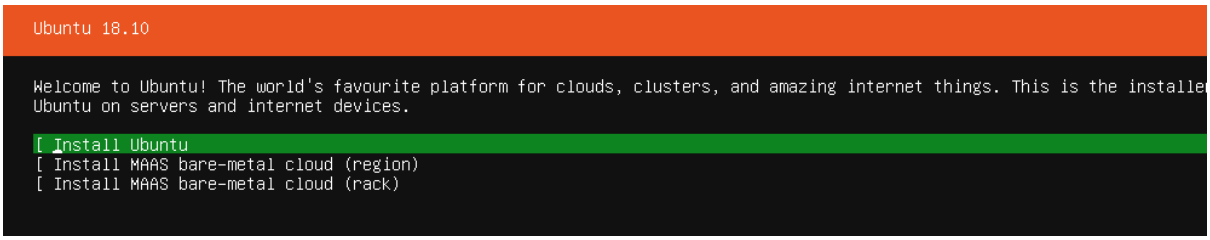
17. Selanjutnya klik **Finish**. Dan setelah itu akan muncul tampilan proses booting VM.
18. Untuk berinteraksi dengan VM, pertama klik pada layar VM yang berwarna hitam itu, setelah di klik kemudian mouse akan hilang. Untuk keluar dari tampilan interaksi dengan VM maka klik CTRL+ALT.



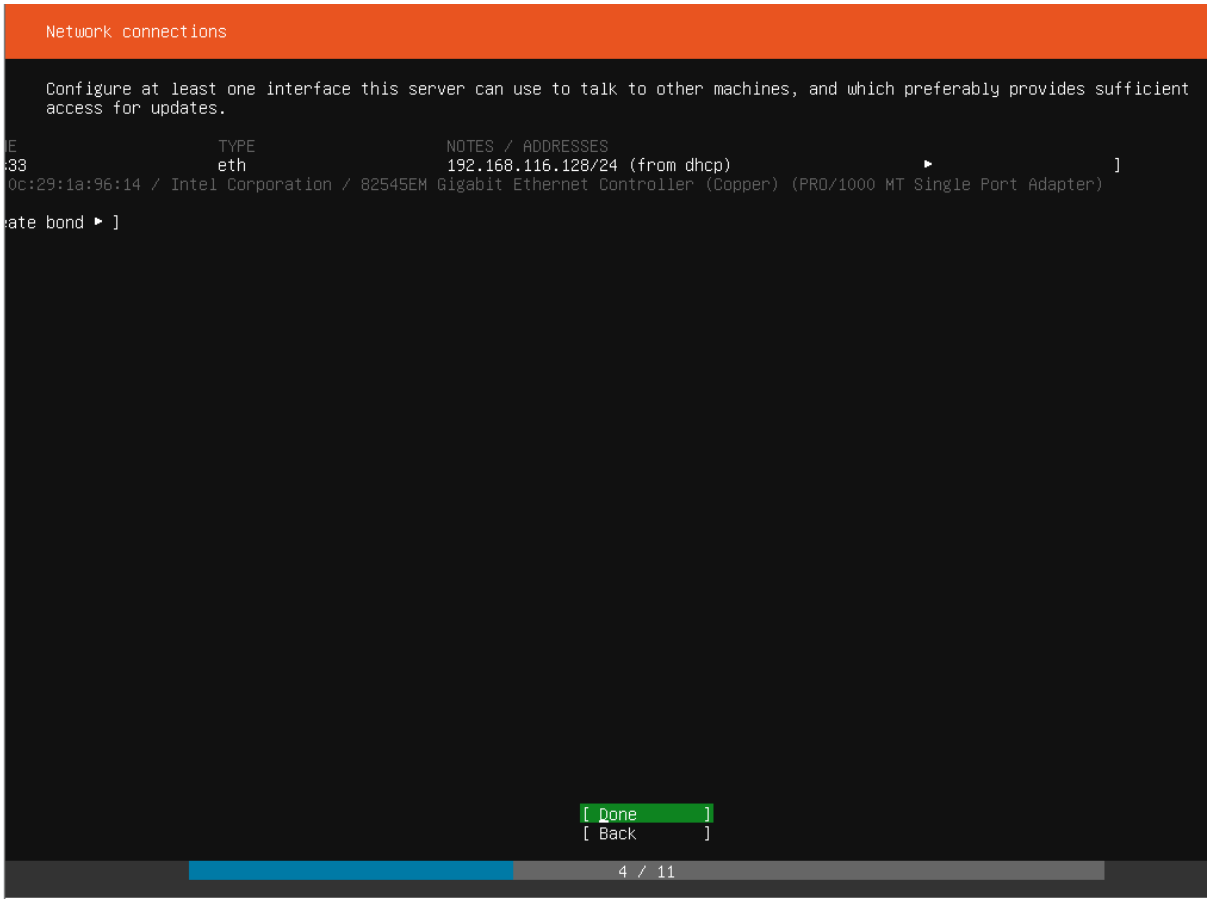
19. Tentukan bahasa instalasi dengan bahasa inggris.



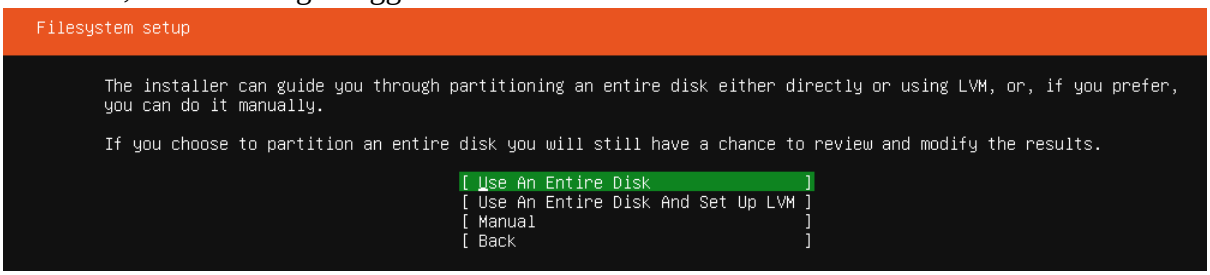
20. Klik install Ubuntu



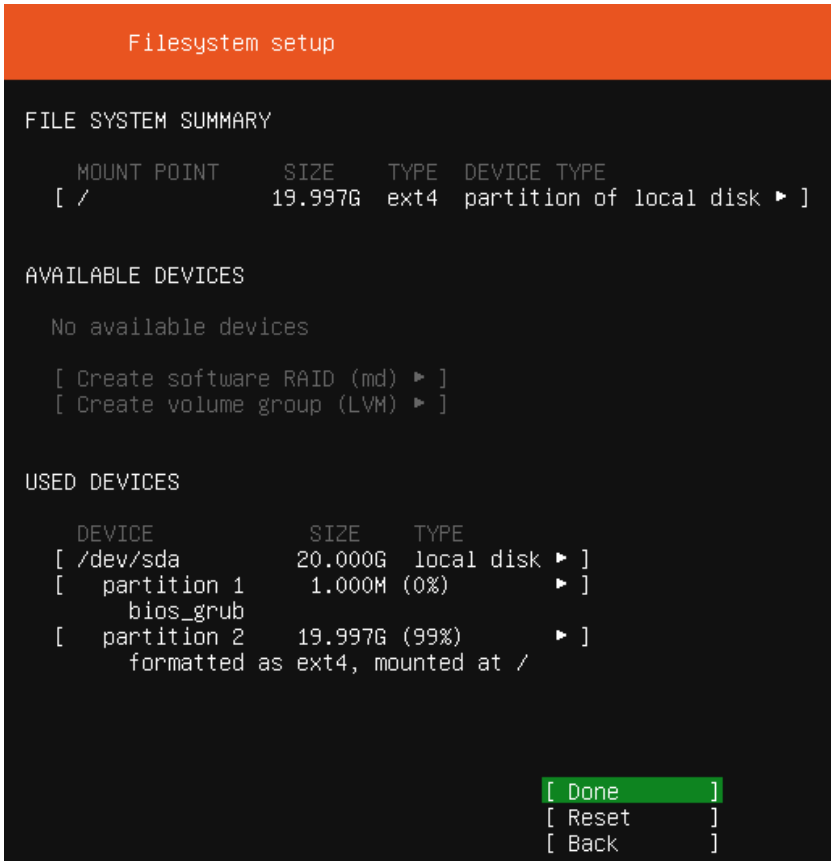
21. Kemudian setelah enter, muncul network connection.



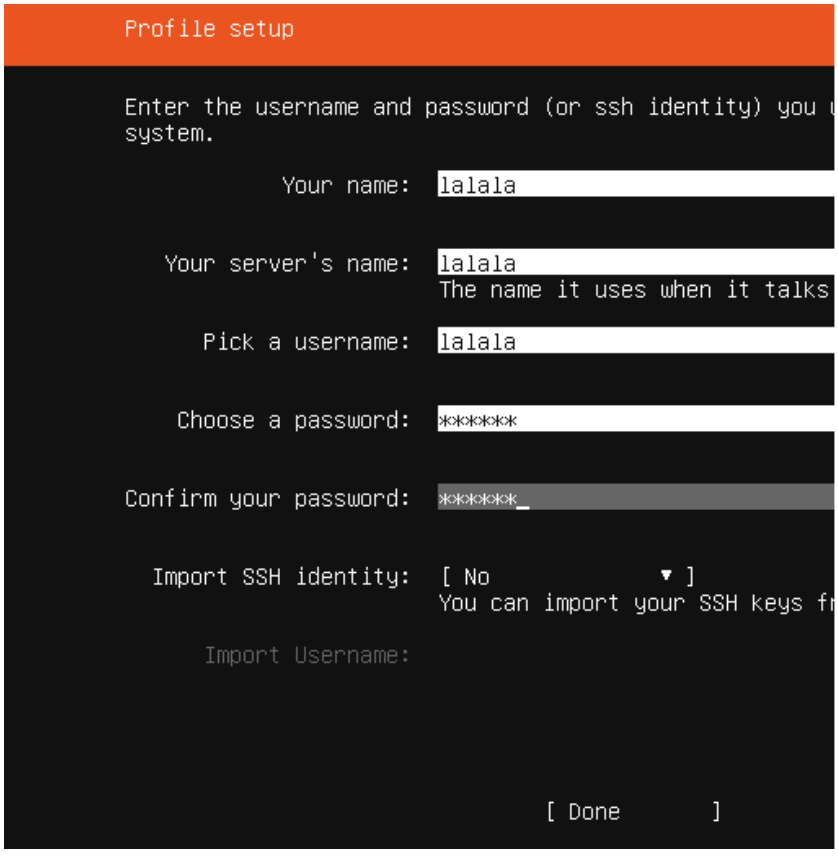
22. Klik next, terus next lagi hingga muncul halaman berikut. Pilih Use an Entire Disk.



23. Pilih lokasi Harddisk tujuan untuk melakukan instal ubuntu server

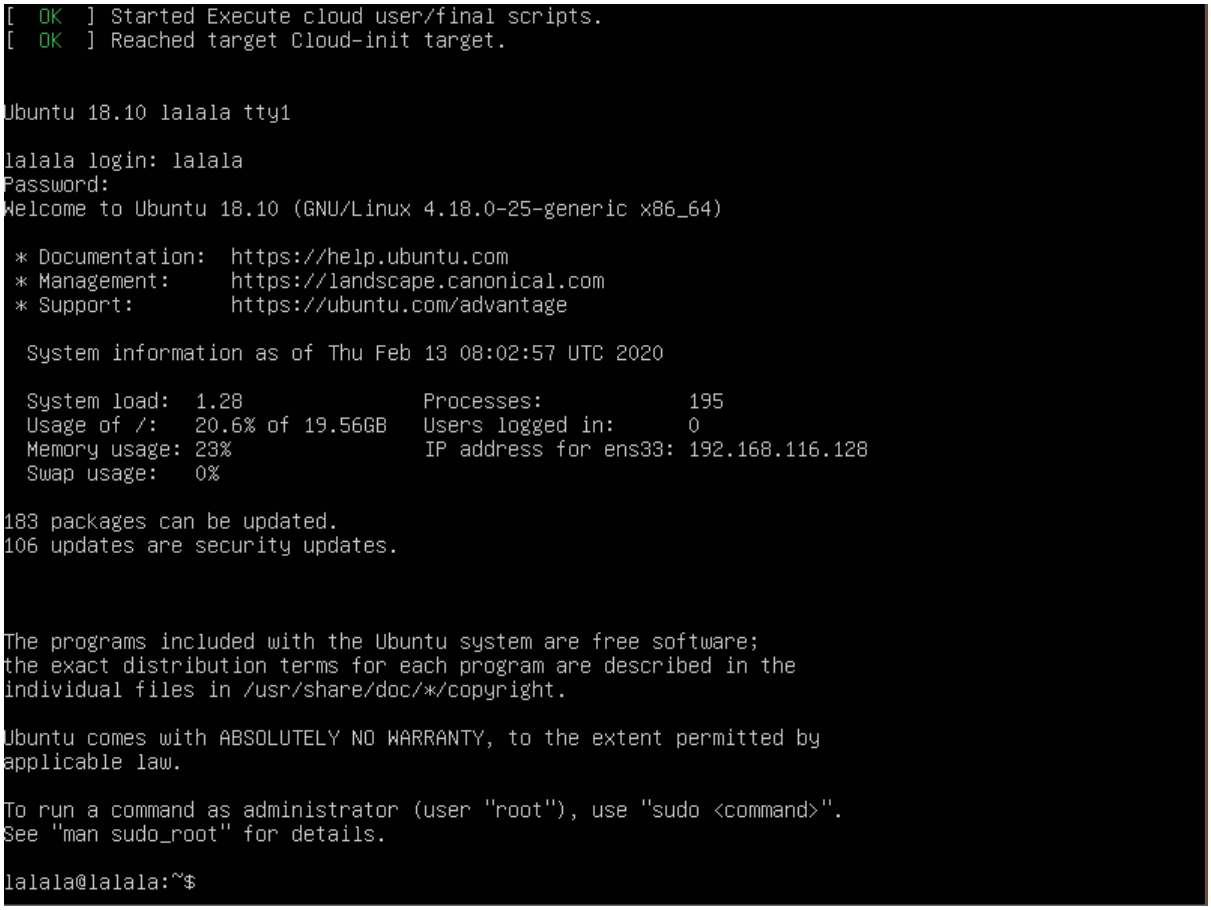


24.



25. Kemudian klik Reboot.

26. Login dengan username dan password.
27. Ketik sudo su.
28. Masukkan password lagi.
29. Untuk mengubah pesan welcome, ketik nano /et /motd.
30. Tulis note, kemudian simpan CTRL+O+ENTER
31. Cara exit: CTRL+X->exit->exit
32. Lihat IP Address Ubuntu, copy dan paste di software PuTTY


[OK] Started Execute cloud user/final scripts.
[OK] Reached target Cloud-init target.
Ubuntu 18.10 lalala tty1
lalala login: lalala
Password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
System information as of Thu Feb 13 08:02:57 UTC 2020
System load: 1.28
Usage of /: 20.6% of 19.56GB
Memory usage: 23%
Swap usage: 0%
Processes: 195
Users logged in: 0
IP address for ens33: 192.168.116.128
183 packages can be updated.
106 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.
lalala@lalala:~$

Evaluasi

***Nb: nomornya rada rancu**

1. Not found

```
lalala@lalala:~$ ls
lalala@lalala:~$ ls
lalala@lalala:~$
```

2. Mkdir pertemuan-2

```
lalala@lalala:~$ mkdir pertemuan-2
lalala@lalala:~$
```

3. Ls -l

```
lalala@lalala:~$ ls -l
total 4
drwxrwxr-x 2 lalala lalala 4096 Feb 13 08:05 pertemuan-2
lalala@lalala:~$
```

4. Cp

```
lalala@lalala:~$ cp -r pertemuan-2 pertemuan-1
lalala@lalala:~$
```

5. Ls

```
lalala@lalala:~$ ls
pertemuan-1  pertemuan-2
lalala@lalala:~$
```

6. Mv

```
lalala@lalala:~$ mv pertemuan-2 "pertemuan 2 LAMPP"
lalala@lalala:~$
```

7. Ls

```
lalala@lalala:~$ ls
 pertemuan-1  'pertemuan 2 LAMPP'
lalala@lalala:~$
```

8. Cd

```
lalala@lalala:~$ cd "pertemuan 2 LAMPP"/
lalala@lalala:~/pertemuan 2 LAMPP$
```

9. Nano biodata.txt

```
lalala@lalala:~$ nano biodata.txt
lalala@lalala:~$ nano biodata.txt
```

10. Cat biodata.txt

```
lalala@lalala:~$ cat biodata.txt
123170069
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
lalala@lalala:~$
```

11.
```
lalala@lalala:~$ nano biodata.txt
lalala@lalala:~$ nano biodata.txt
```
12. Tail biodata.txt

```
lalala@lalala:~$ tail biodata.txt
11
12
13
14
15
16
17
18
19
20
lalala@lalala:~$
```