



LEMBAR KERJA PRAKTIKUM CLOUD COMPUTING

INSTALASI DAN KONFIGURASI LAYANAN FILE SHARING DENGAN FREENAS

IDENTITAS:

Nama:	Qurrotu'ain Hanifah
NIM:	123170030
Kelas:	A
Hari, Tanggal:	Kamis. 5 Maret 2020

CONTOH ISIAN DAN PETUNJUK:

1. **[Contoh]** Gunakan ISO FreeNAS-11.2-U5 di folder ISO Library



2. **[Contoh]** Deskripsikan parameter yang digunakan untuk keluar dari akun root

```
$ exit
```

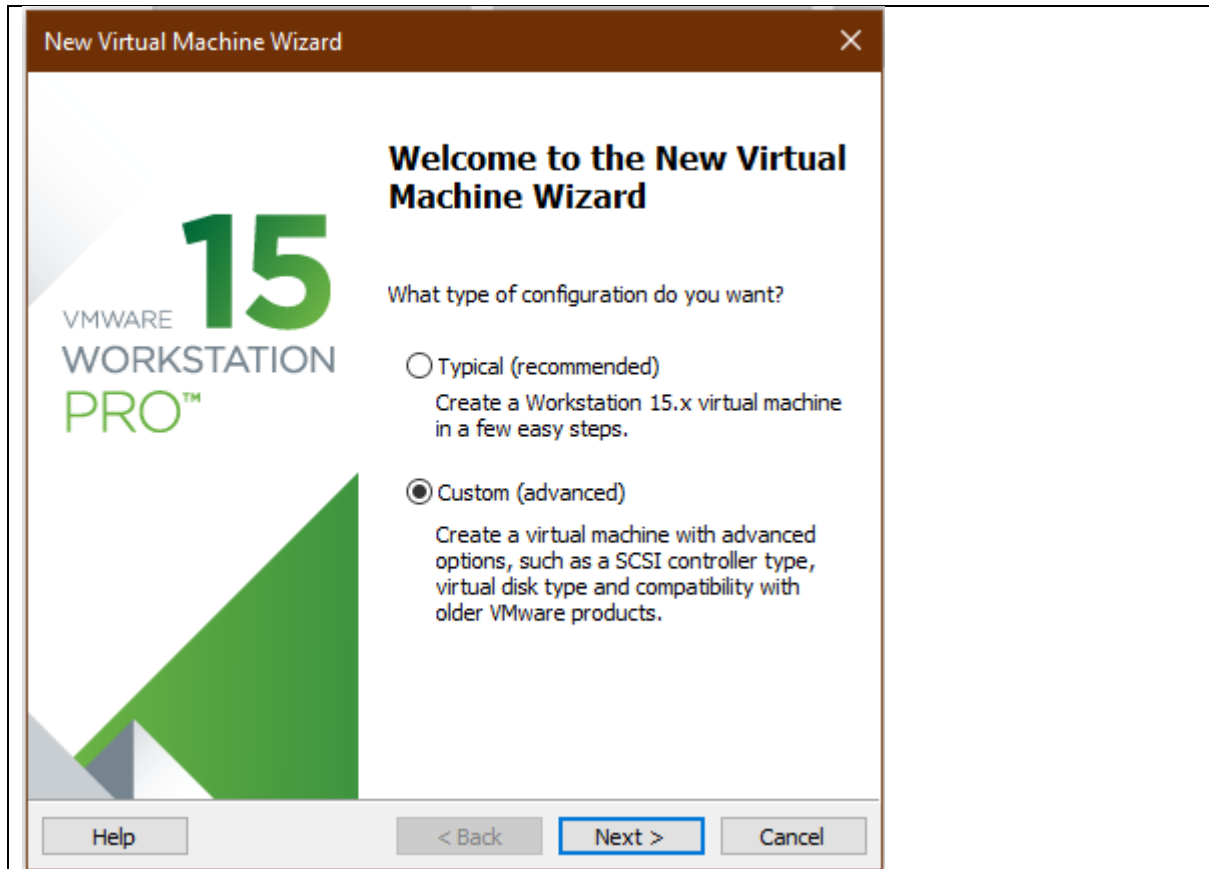
Perintah exit digunakan untuk keluar dari sesi akun aktif

3. **[Contoh]** Tampilkan pesan kesalahan pada saat login PHPMYAdmin

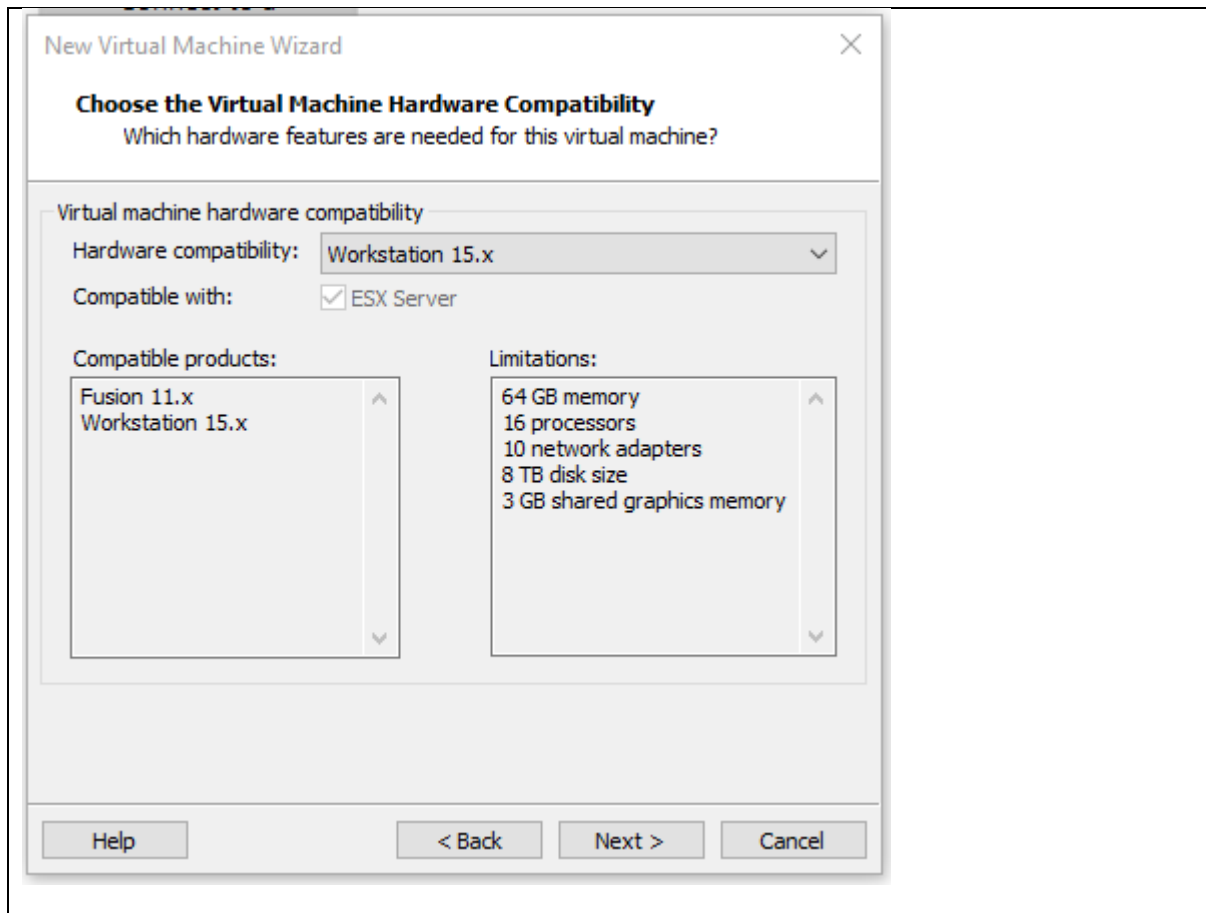


TUGAS BAGIAN PERTAMA – PEMBUATAN VM:

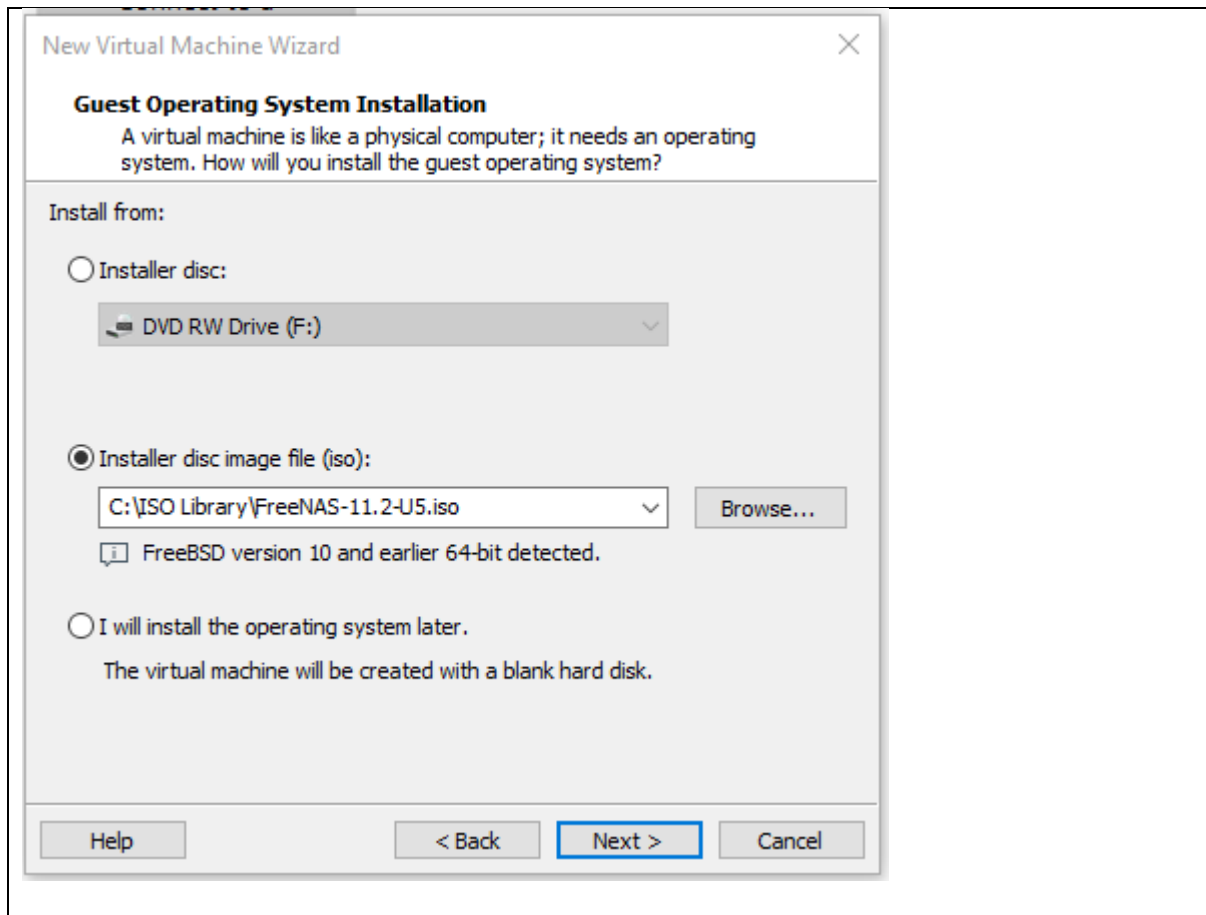
1. Gunakan opsi konfigurasi Custom



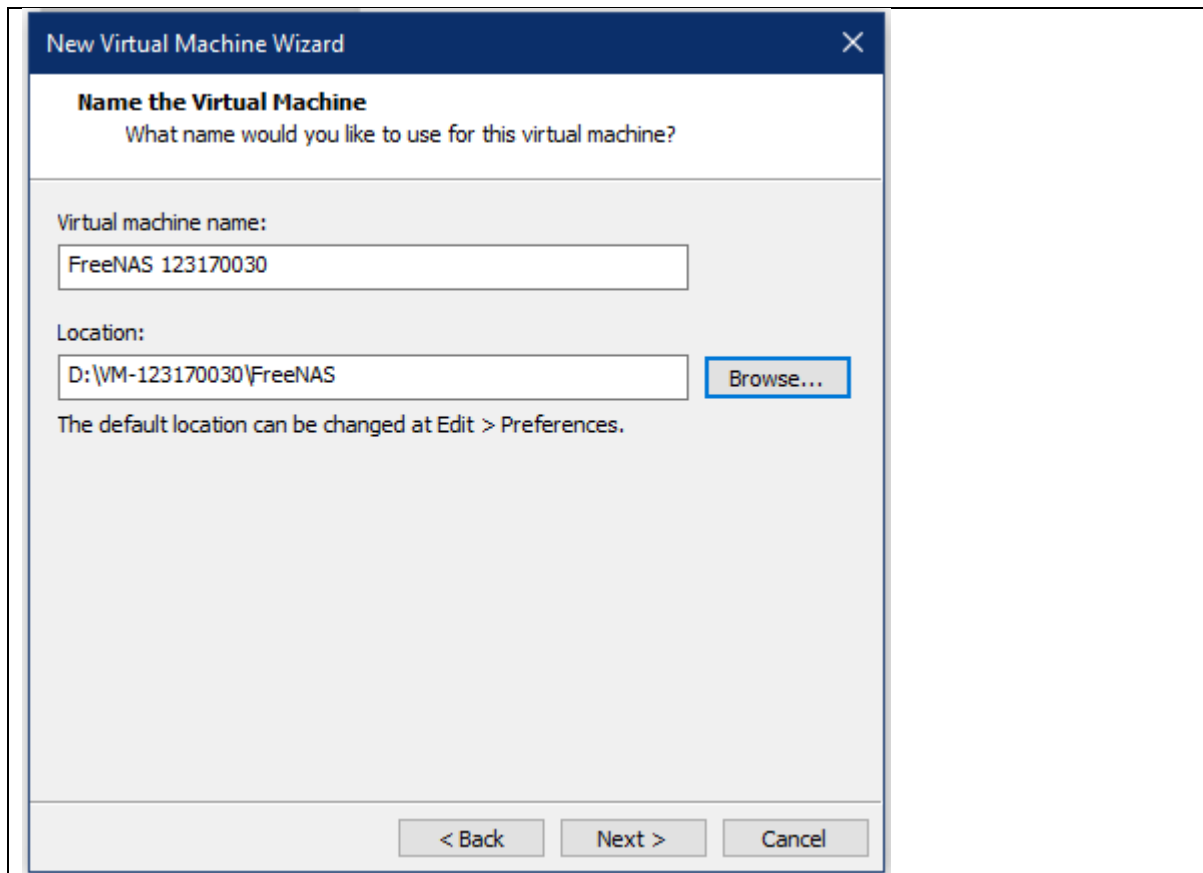
2. Gunakan compatibility Workstation 15.X



- Gunakan ISO FreeNAS-11.2-U5 di folder ISO Library



4. Format nama VM: **FreeNAS NIM** dan buat folder **FreeNAS** di dalam **VM-NIM**



New Virtual Machine Wizard [X]

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

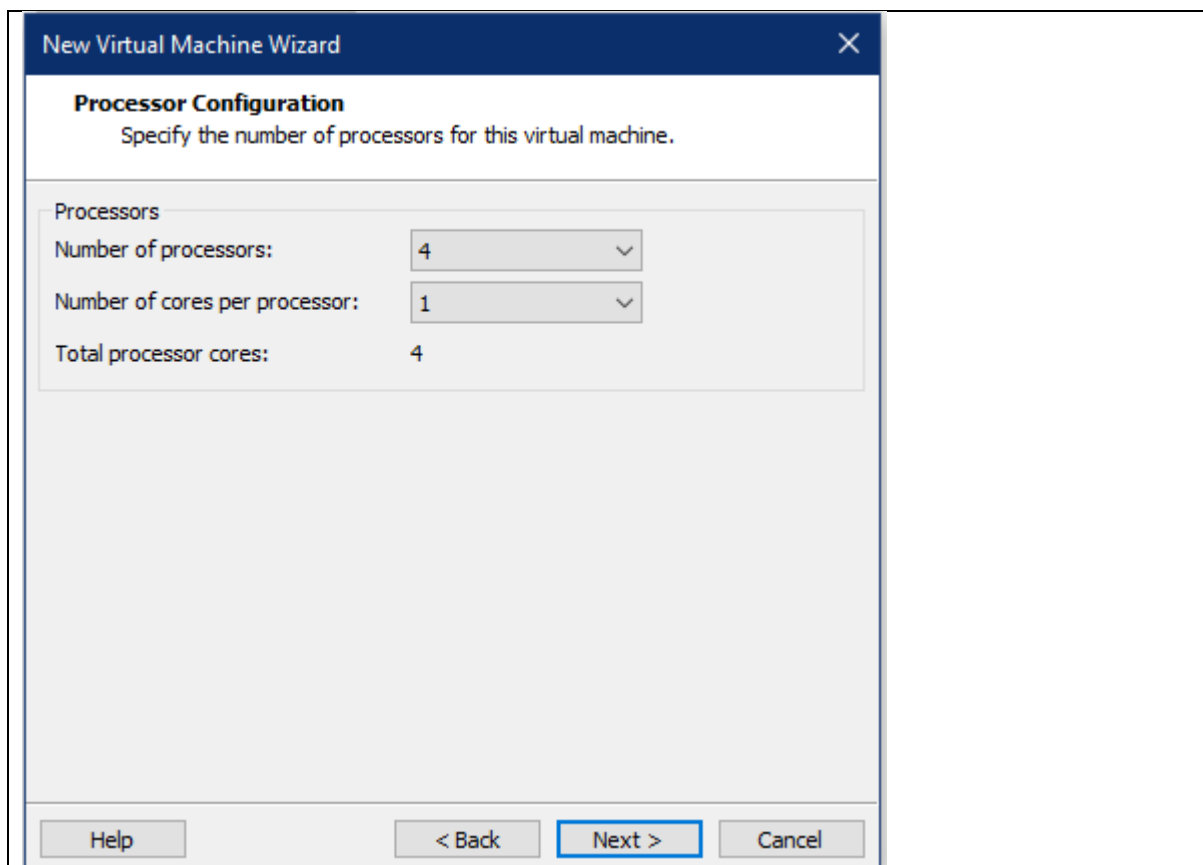
Virtual machine name:

Location:

The default location can be changed at Edit > Preferences.

< Back Next > Cancel

5. Gunakan 4 processor dan 1 core



New Virtual Machine Wizard [X]

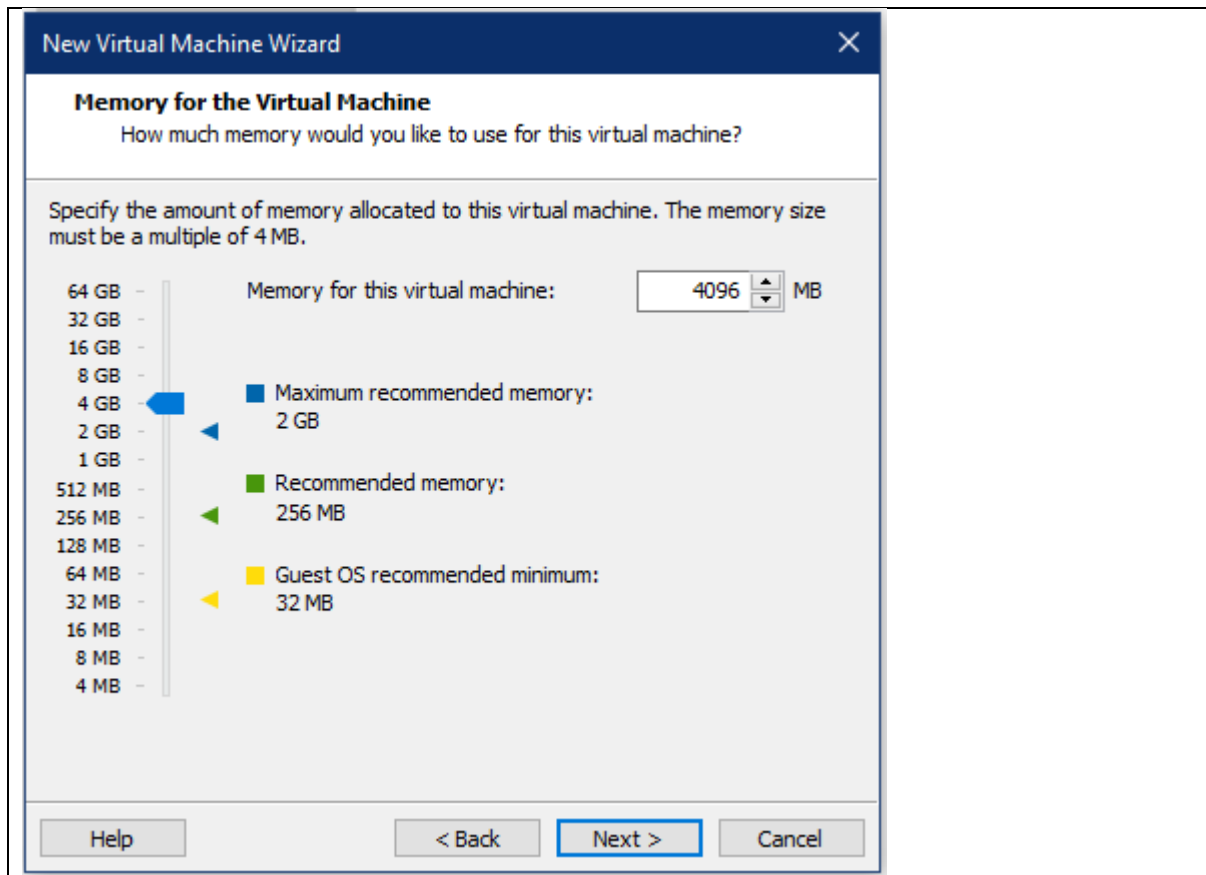
Processor Configuration
Specify the number of processors for this virtual machine.

Processors

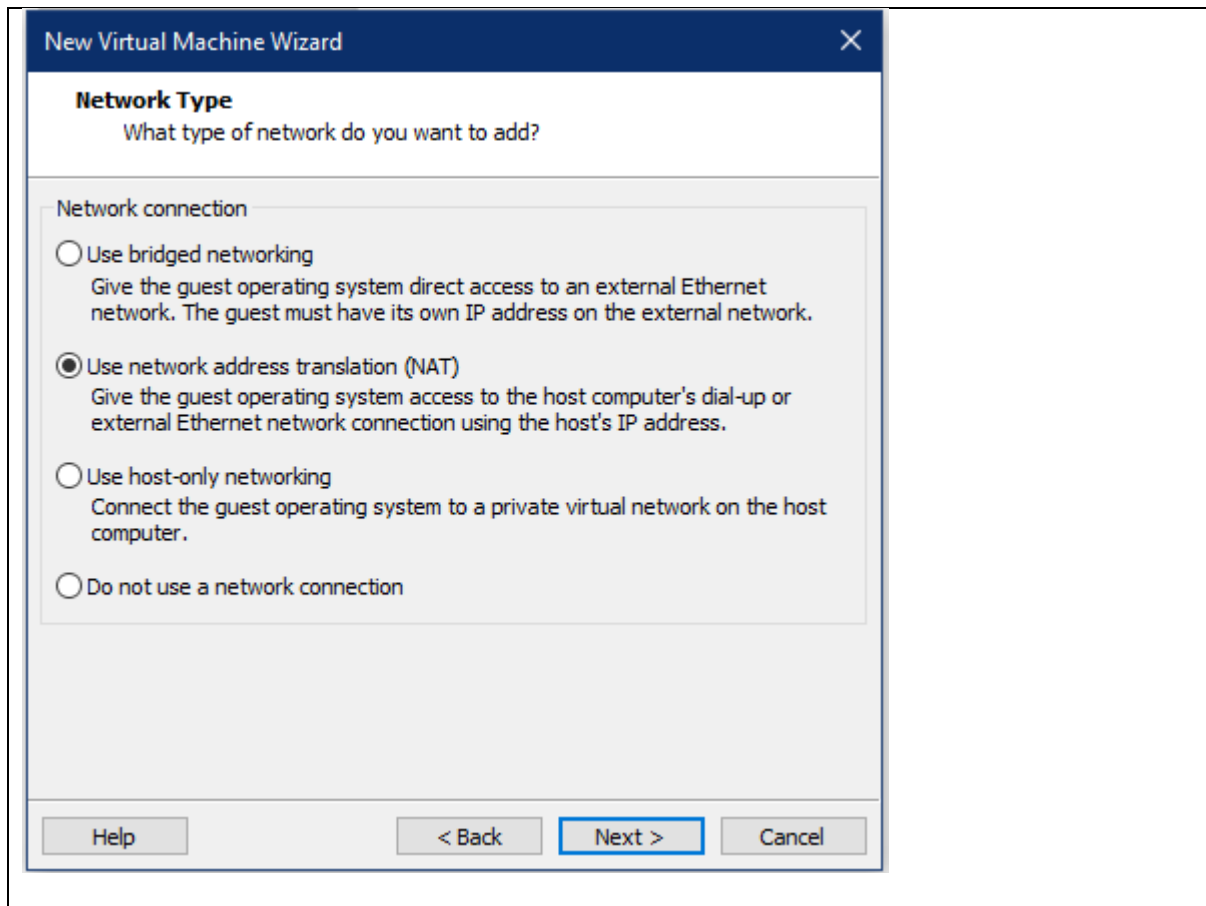
Number of processors:	<input type="text" value="4"/>
Number of cores per processor:	<input type="text" value="1"/>
Total processor cores:	4

Help < Back **Next >** Cancel

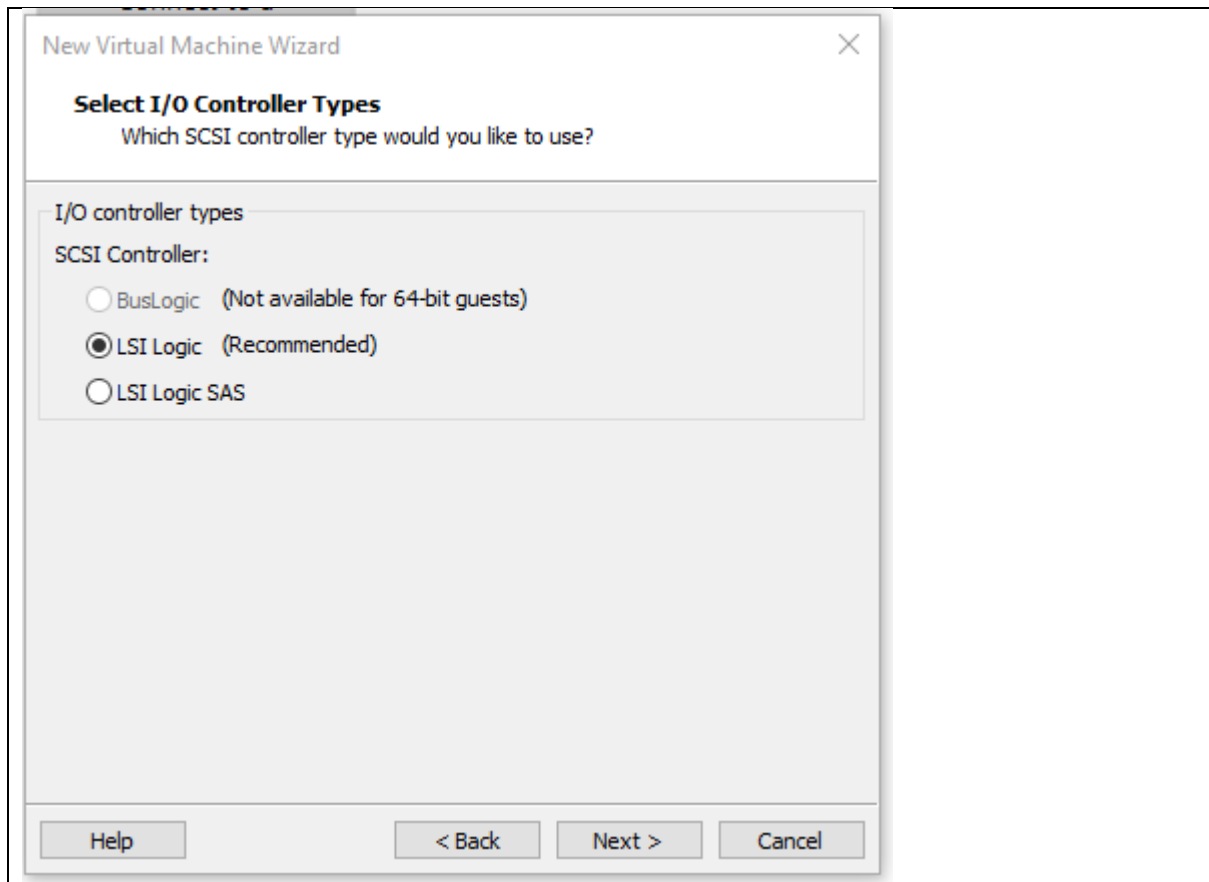
6. Gunakan RAM sebesar 4 GB



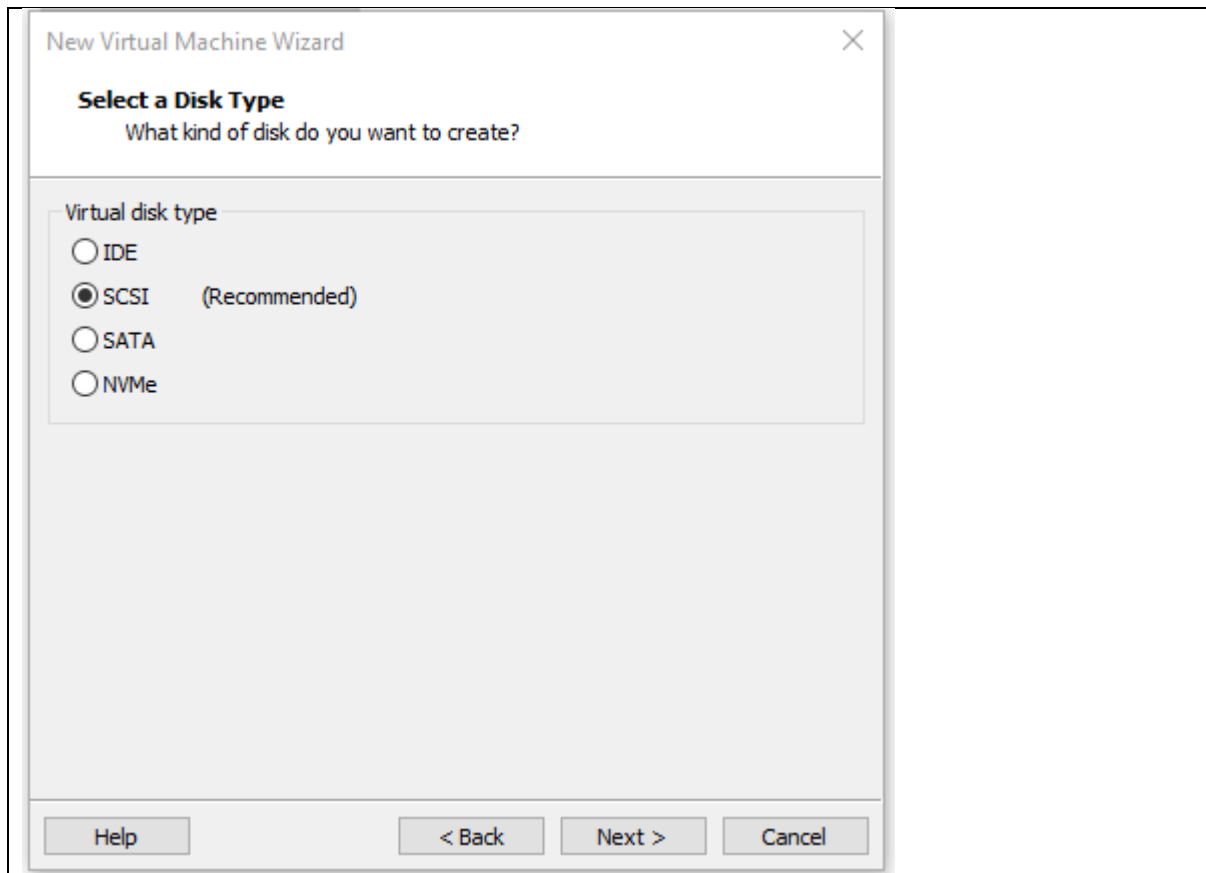
7. Gunakan mode jaringan NAT



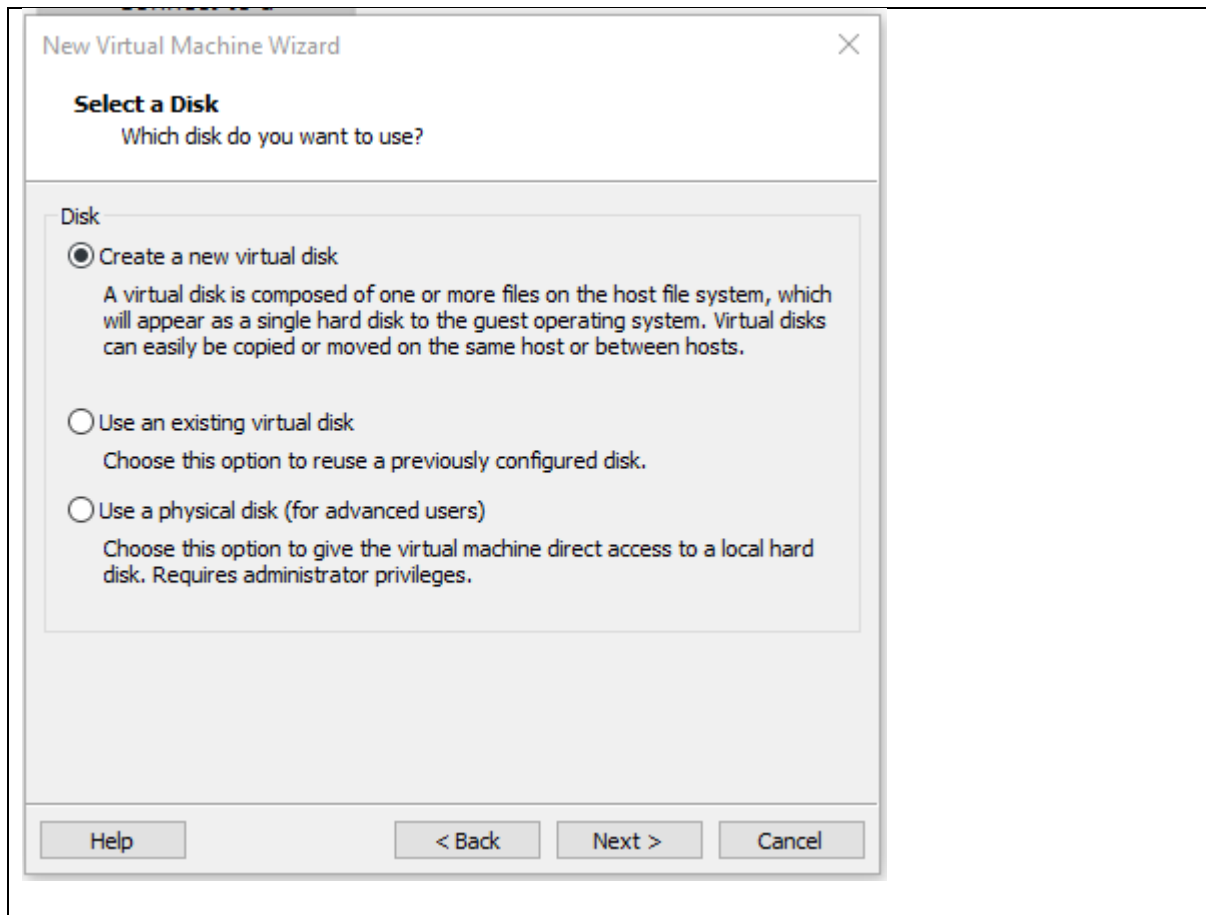
8. Gunakan pengaturan default I/O Controller



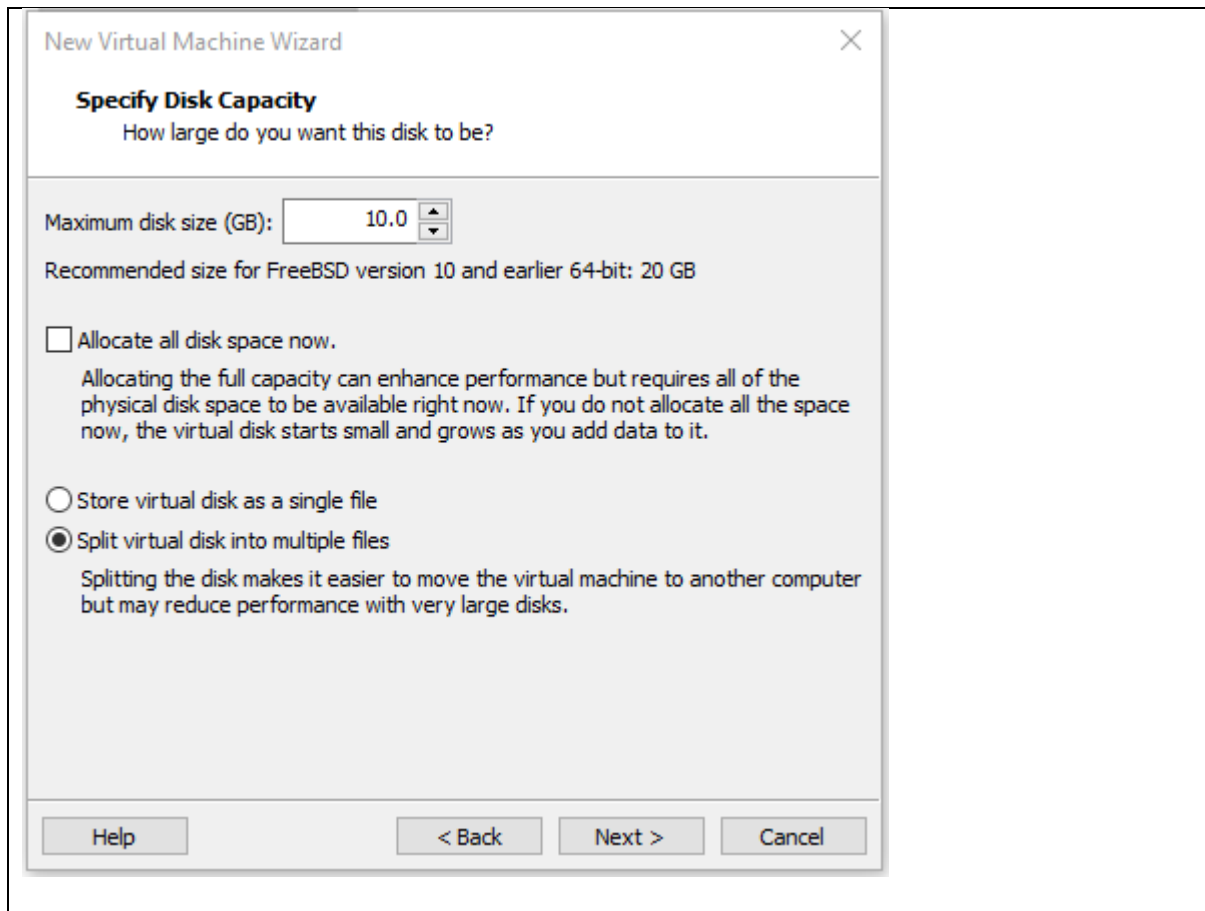
9. Gunakan pengaturan default Virtual Disk Type



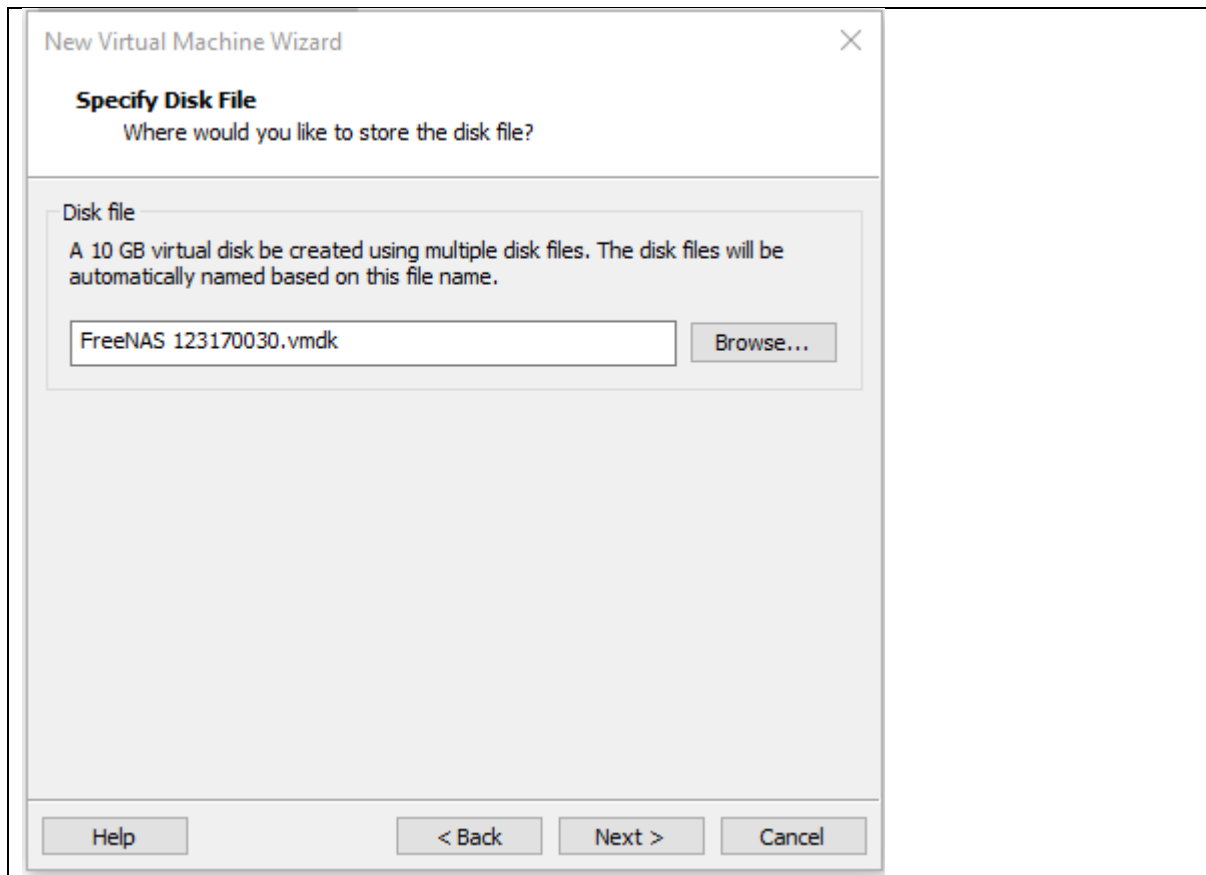
10. Pilih opsi buat virtual disk baru



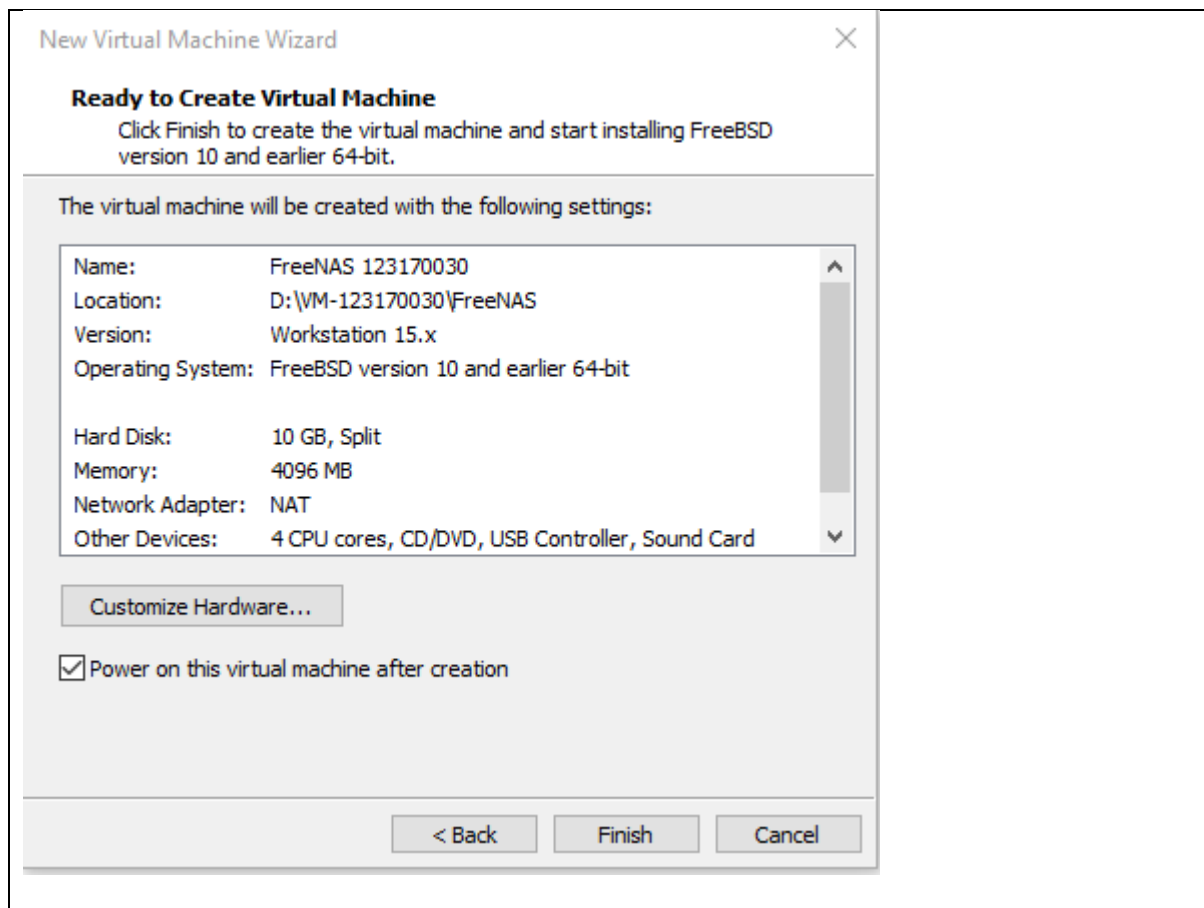
11. Buat disk untuk sistem sebesar 10 GB dengan mode Split dan hilangkan checklist allocate disk



12. Gunakan pengaturan default untuk nama disk

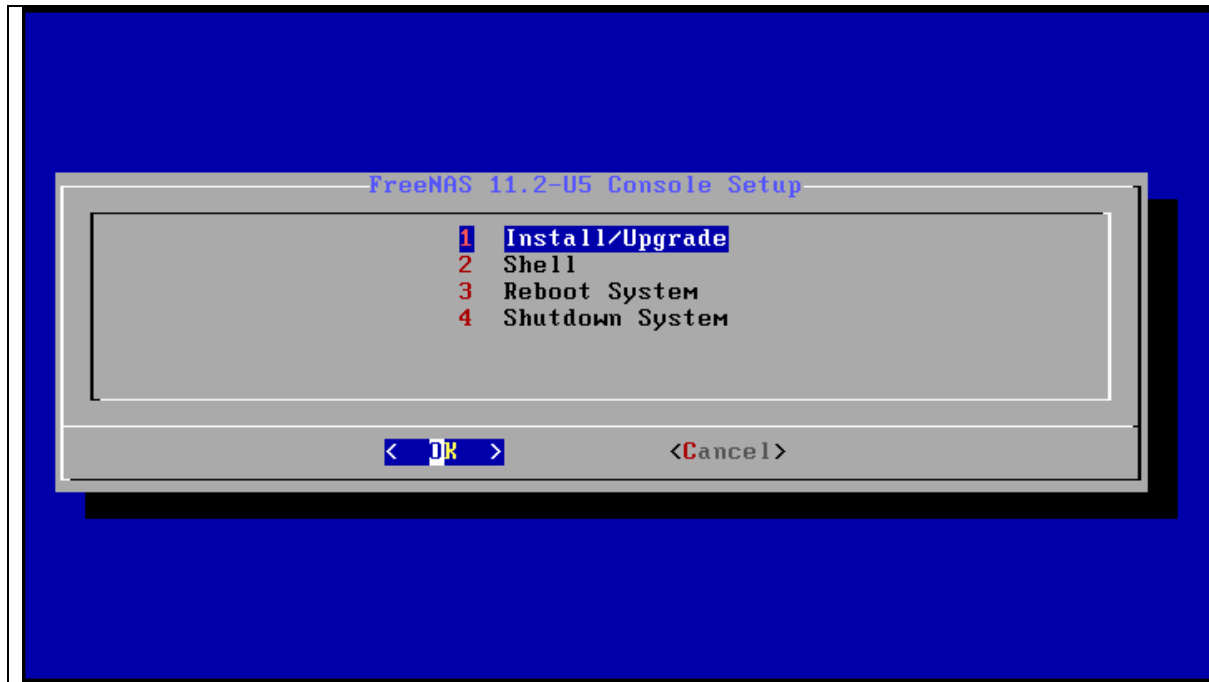


13. Tampilkan tangkapan layar dari ringkasan konfigurasi Virtual Machine (tahap akhir Wizard) lalu nyalakan VM

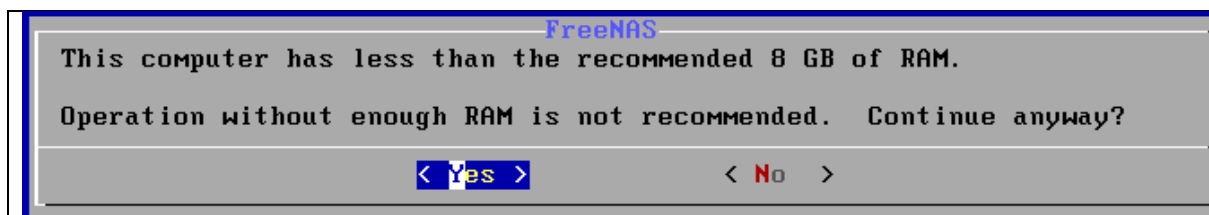


TUGAS BAGIAN KEDUA – INSTALASI FREENAS:

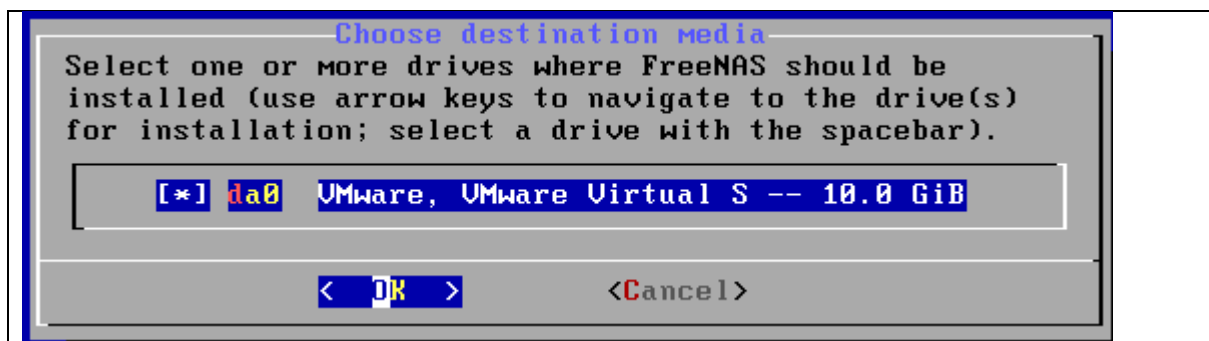
1. Tampilan awal tahap instalasi FreeNAS, pilih Install/Upgrade



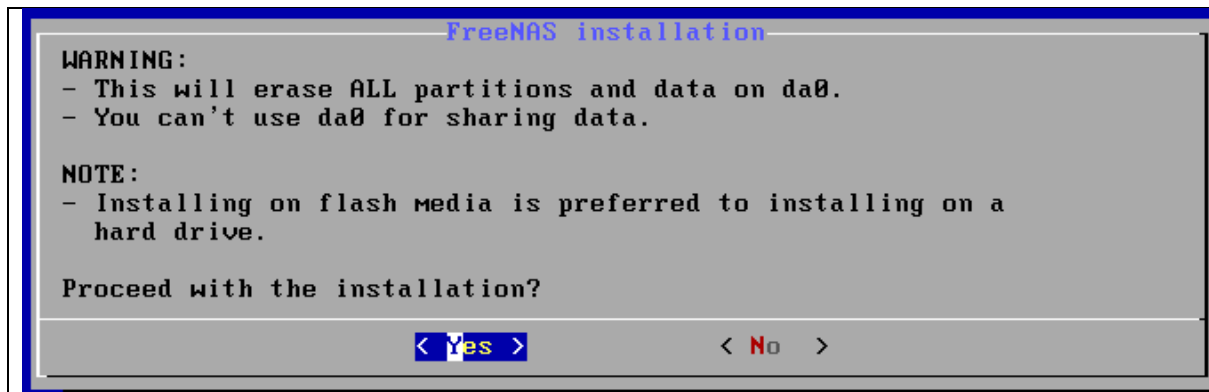
2. Tampilan warning RAM kurang dari 8GB, pilih Yes



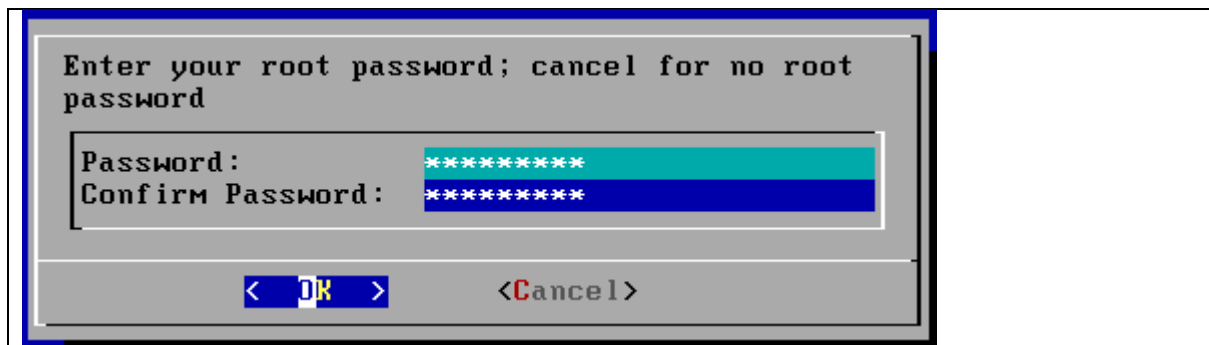
3. Tampilan pemilihan destination media untuk dipasang FreeNAS, pilih da0



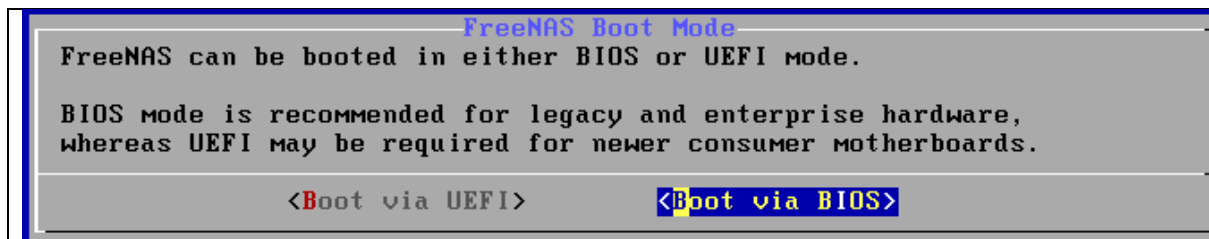
4. Tampilan konfirmasi penghapusan/format media yang terpilih, pilih Yes



5. Tampilan pengaturan kata sandi, gunakan NIM atau bebas



6. Tampilan mode boot dari FreeNAS, pilih BIOS



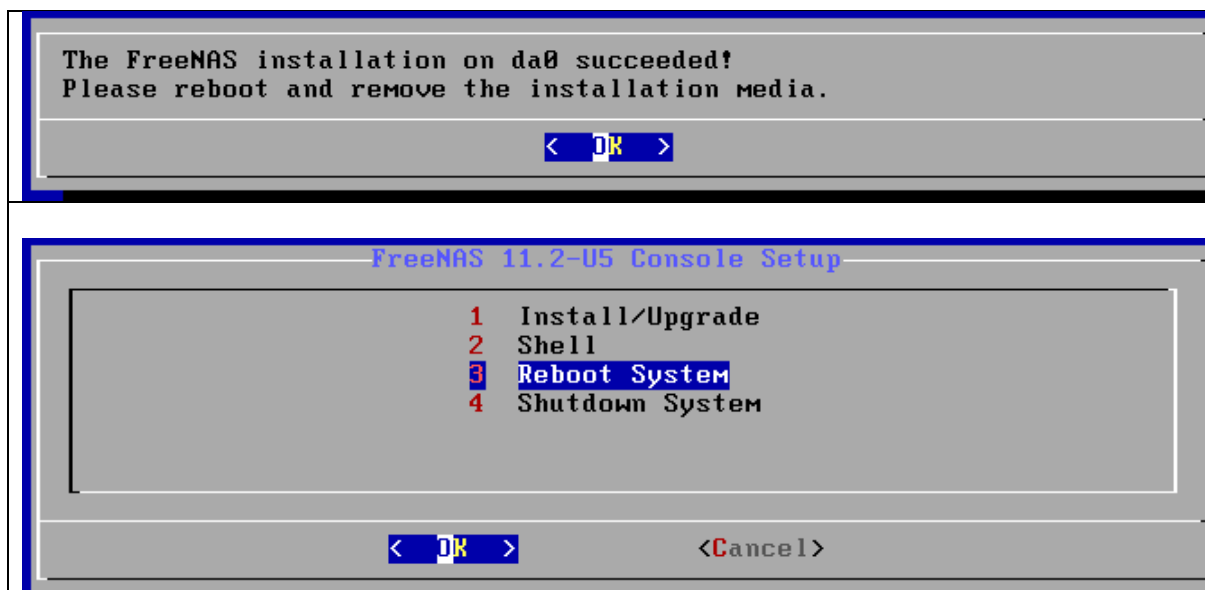
7. Tampilan proses instalasi FreeNAS


```

2+0 records in
2+0 records out
2097152 bytes transferred in 0.056817 secs (36910463 bytes/sec)
dd: /dev/da0: end of device
3+0 records in
2+0 records out
2097152 bytes transferred in 0.002746 secs (763783898 bytes/sec)
da0 created
da0p1 added
da0p2 added
gmirror: Invalid class name.
da0 destroyed
da0 created
da0p1 added
da0p2 added
active set on da0
random: unblocking device.
Installing base-os (1 of 4)
....10....20....30....40....

```

8. Tampilan hasil akhir proses instalasi FreeNAS, pilih OK kemudian pilih Reboot System



9. Tampilan proses booting menuju FreeNAS OS

```

Rebooting...
Waiting (max 60 seconds) for system process 'vnlr' to stop... done
Waiting (max 60 seconds) for system process 'bufdaemon' to stop... done
Waiting (max 60 seconds) for system process 'syncer' to stop...
Syncing disks, vnodes remaining... 0 0 done
All buffers synced.
Uptime: 8m23s

```

```
,0xdc000-0xdffff,0xe0000-0xe7fff on isa0
ZFS NOTICE: Prefetch is disabled by default if less than 4GB of RAM is present;
               to enable, add "vfs.zfs.prefetch_disable=0" to /boot/loader.conf.
ZFS filesystem version: 5
ZFS storage pool version: features support (5000)
Timecounters tick every 10.000 msec
freenas_sysctl: adding account.
freenas_sysctl: adding directoryservice.
freenas_sysctl: adding middlewared.
freenas_sysctl: adding network.
freenas_sysctl: adding services.
ipfw2 (+ipv6) initialized, divert enabled, nat enabled, default to accept, logging disabled
ugen0.1: <0x15ad UHCI root HUB> at usb0
ugen1.1: <0x15ad EHCI root HUB> at usb1
uhub0: <0x15ad UHCI root HUB, class 9/0, rev 1.00/1.00, addr 1> on usb0
uhub1: <0x15ad EHCI root HUB, class 9/0, rev 2.00/1.00, addr 1> on usb1
uhub0: 2 ports with 2 removable, self powered
ugen0.2: <VMware VMware Virtual USB Mouse> at usb0
ugen0.3: <vendor 0x0e0f VMware Virtual USB Hub> at usb0
uhub2 on uhub0
uhub2: <VMware Virtual USB Hub> on usb0
uhub1: 6 ports with 6 removable, self powered
uhub2: 7 ports with 7 removable, self powered
█
```

10. Tampilan hasil akhir booting yang menunjukkan Console Setup

```
Wed Mar  4 22:47:02 PST 2020

FreeBSD/amd64 (freenas.local) (ttyv0)

Console setup
-----

1) Configure Network Interfaces
2) Configure Link Aggregation
3) Configure VLAN Interface
4) Configure Default Route
5) Configure Static Routes
6) Configure DNS
7) Reset Root Password
8) Reset Configuration to Defaults
9) Shell
10) Reboot
11) Shut Down

The web user interface is at:

http://192.168.116.128

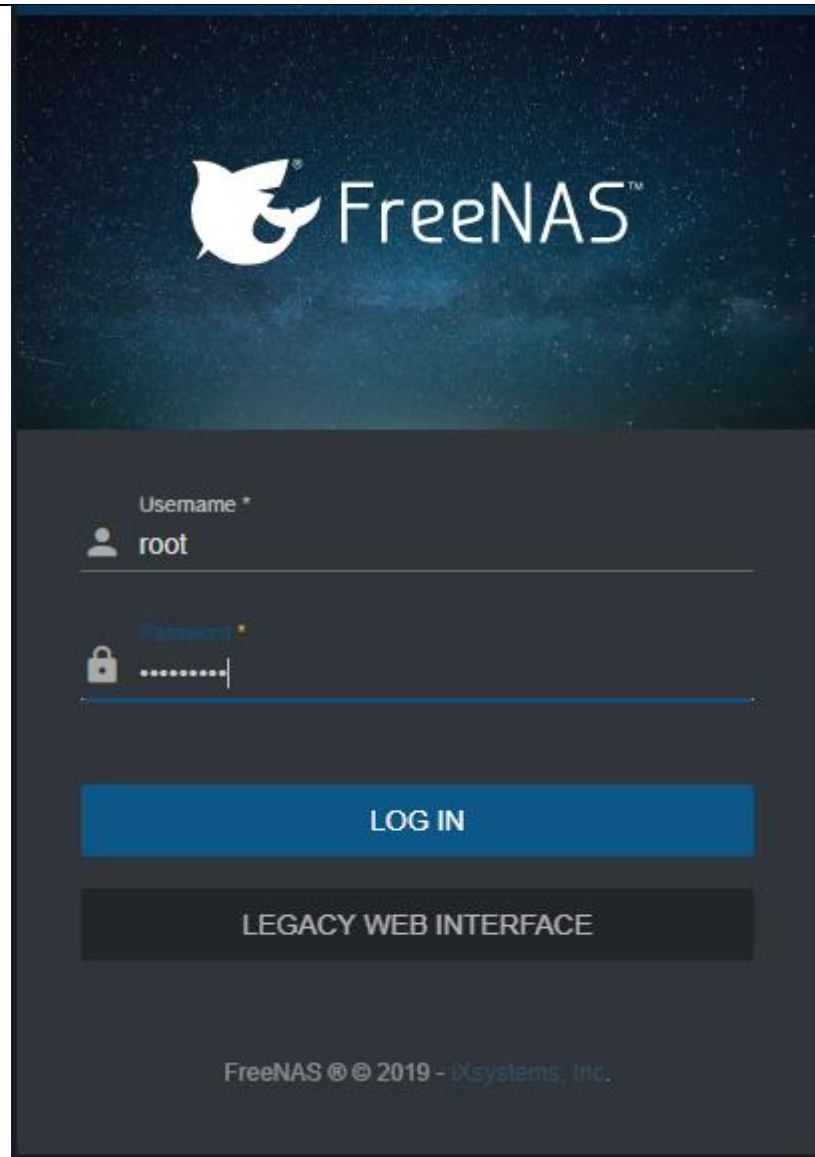
Enter an option from 1-11: █
```

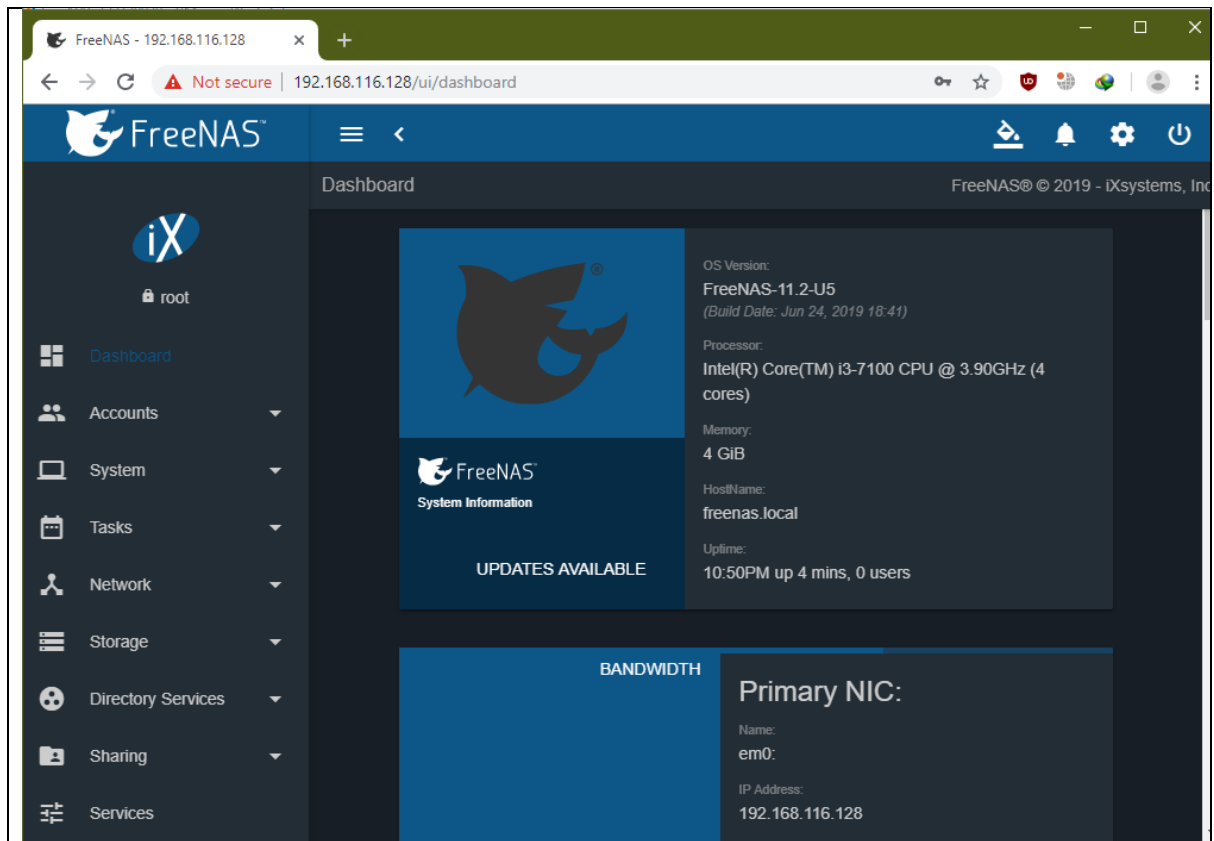
TUGAS BAGIAN KETIGA – KONFIGURASI FREENAS:

1. Tampilan dashboard setelah login FreeNAS

Username: root

Password: 123170030





2. Tampilan konfigurasi VM pada Eksperimen #1

Device	Summary
Memory	4 GB
Processors	4
Hard Disk (SCSI)	10 GB
New Hard Disk (SCSI)	8 GB
New Hard Disk (SCSI)	15 GB
New Hard Disk (SCSI)	5 GB
New Hard Disk (SCSI)	3 GB
CD/DVD (IDE)	Using file C:\ISO Library\Fre...
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Display	Auto detect

3. Tampilan IP pada dashboard Console Setup pada Eksperimen #2

The image shows two screenshots. The top screenshot is a 'Hardware' configuration window for a virtual machine, specifically the 'Options' tab. It lists various hardware components and their settings. The 'Network Adapter' is set to 'NAT'. The 'Device status' section shows 'Connect at power on' is checked. The 'Network connection' section shows 'Bridged: Connected directly to the physical network' is selected, with 'VMnet0' chosen from the dropdown menu. The bottom screenshot is a terminal window showing the FreeBSD console setup process. It displays the date and time, the system name 'FreeBSD/amd64 (freenas.local) (ttyv0)', and a list of configuration options numbered 1 to 11. The user is prompted to enter an option from 1-11.

Device	Summary
Memory	4 GB
Processors	4
Hard Disk (SCSI)	10 GB
New Hard Disk (SCSI)	8 GB
New Hard Disk (SCSI)	15 GB
New Hard Disk (SCSI)	5 GB
New Hard Disk (SCSI)	3 GB
CD/DVD (IDE)	Using file C:\ISO Library\Fre...
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Display	Auto detect

Device status

☐ Connected

☒ Connect at power on

Network connection

☒ Bridged: Connected directly to the physical network

☐ Replicate physical network connection state

☐ NAT: Used to share the host's IP address

☐ Host-only: A private network shared with the host

☐ Custom: Specific virtual network

VMnet0

☐ LAN segment:

LAN Segments... Advanced...

```

Wed Mar  4 23:00:20 PST 2020

FreeBSD/amd64 (freenas.local) (ttyv0)

Console setup
-----

1) Configure Network Interfaces
2) Configure Link Aggregation
3) Configure VLAN Interface
4) Configure Default Route
5) Configure Static Routes
6) Configure DNS
7) Reset Root Password
8) Reset Configuration to Defaults
9) Shell
10) Reboot
11) Shut Down

The web user interface is at:

http://192.168.64.111

Enter an option from 1-11: █
  
```

4. Tampilkan hasil dari pembuatan pools tambahan pada menu Storage -> Pools

Pools		ADD
data-cloud	✓ HEALTHY: 8.46 MiB (0%) Used / 2.62 GiB Free	▼
data-jaringan	✓ HEALTHY: 316 KiB (0%) Used / 5.33 GiB Free	▼
data-komputasi	✓ HEALTHY: 376 KiB (0%) Used / 12.11 GiB Free	▼
data-sisdig	✓ HEALTHY: 508 KiB (0%) Used / 831.09 MiB Free	▼

5. Tampilkan hasil dari pembuatan user tambahan pada menu Accounts -> Users

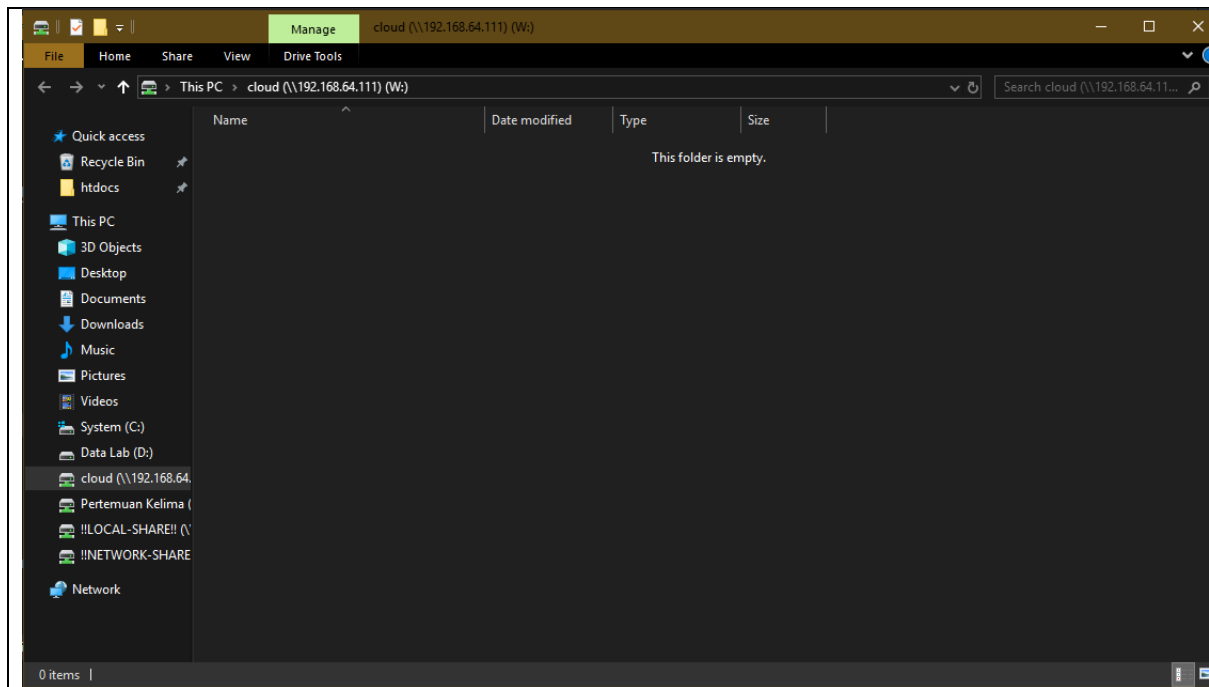
Users						Filter Users	COLUMNS ▼	ADD
Username	Home directory	Shell	Full Name	Lock User				
cloud	/nonexistent	/bin/csh	Lab Cloud	no	⋮			
jaringan	/nonexistent	/bin/csh	Lab Jaringan	no	⋮			
komputasi	/nonexistent	/bin/csh	Lab Komputasi	no	⋮			
sisdig	/nonexistent	/bin/csh	Lab Sisdig	no	⋮			
root	/root	/usr/local/bin/zsh	root	no	⋮			

6. Tampilkan hasil dari pembuatan shares tambahan untuk 4 lab pada menu Sharing -> Windows (SMB) Shares

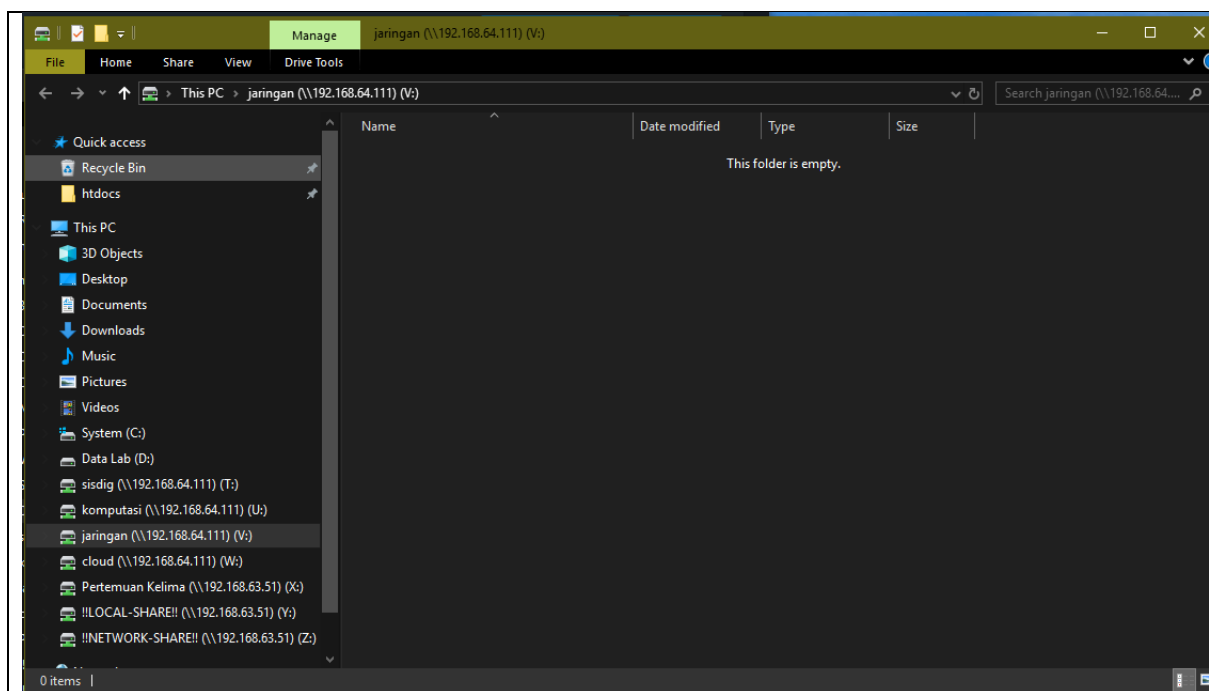
Samba			Filter Samba	COLUMNS ▼	ADD
Name	Path				
cloud	/mnt/data-cloud	⋮			
jaringan	/mnt/data-jaringan	⋮			
komputasi	/mnt/data-komputasi	⋮			
sisdig	/mnt/data-sisdig	⋮			

1 - 4 of 4

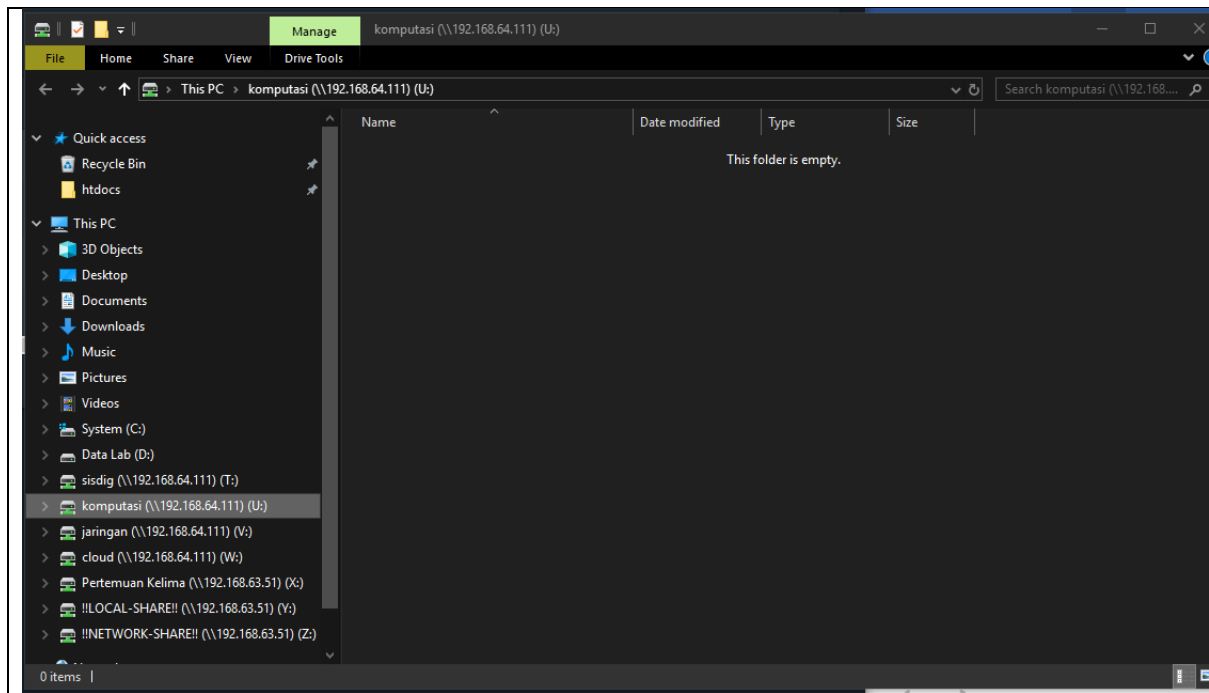
7. Tampilkan hasil akses shares pada Windows Explorer (hasil mapping) untuk Lab Cloud (yang pertama kali dibuat)



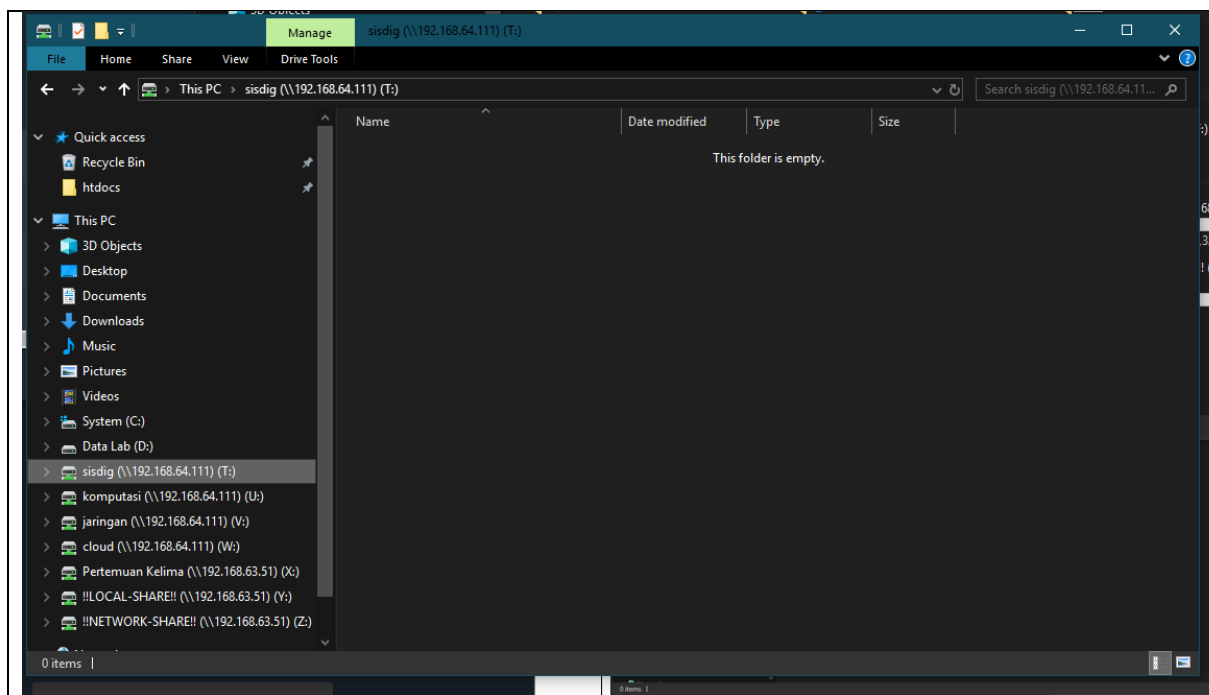
8. Tampilkan hasil akses shares untuk Lab Jaringan



9. Tampilkan hasil akses shares untuk Lab Komputasi



10. Tampilkan hasil akses shares untuk Lab Sisdig



DOKUMENTASI PERTEMUAN KELIMA (BILA ADA)