



LEMBAR KERJA PRAKTIKUM CLOUD COMPUTING

INSTALASI DAN KONFIGURASI LAYANAN FILE SHARING DENGAN FREENAS

IDENTITAS:

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NIM:	123170029
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
```

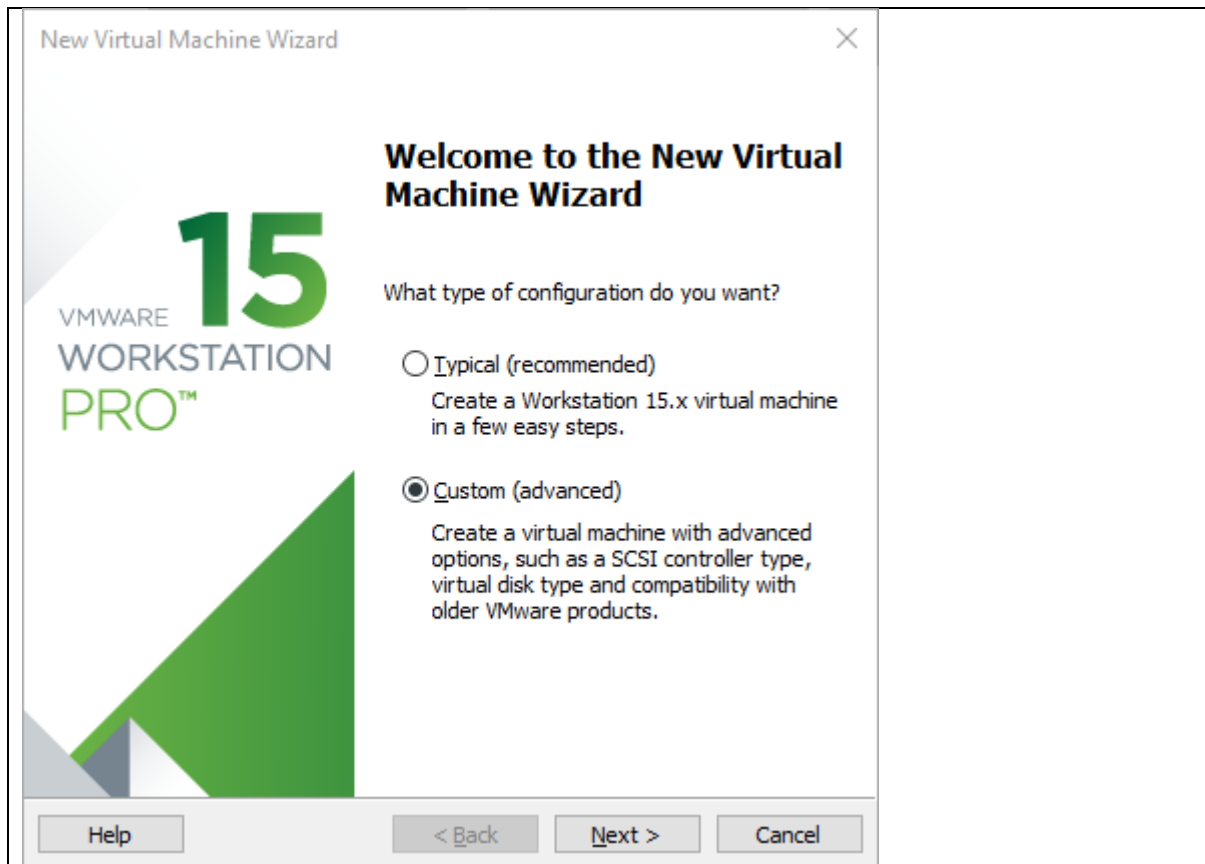
Perintah exit digunakan untuk keluar dari sesi akun aktif

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

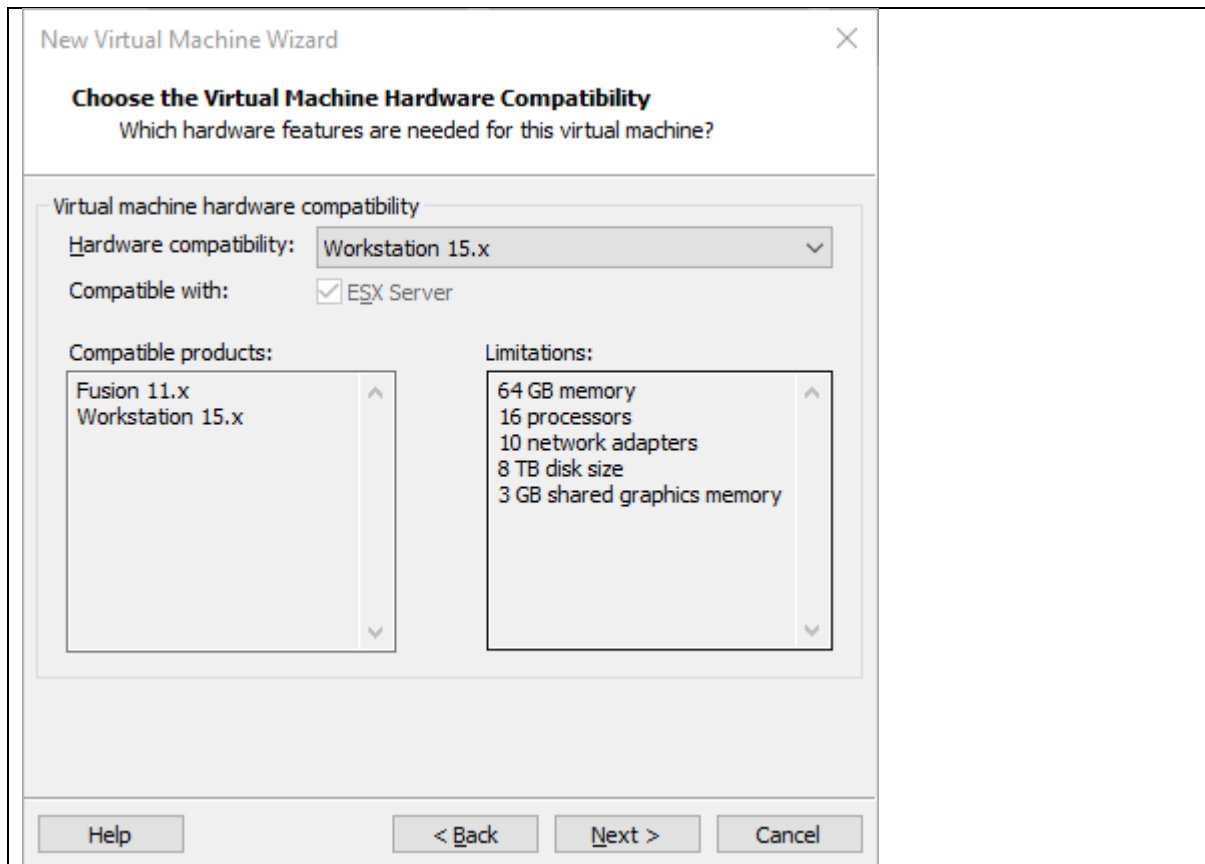


TUGAS BAGIAN PERTAMA – PEMBUATAN VM:

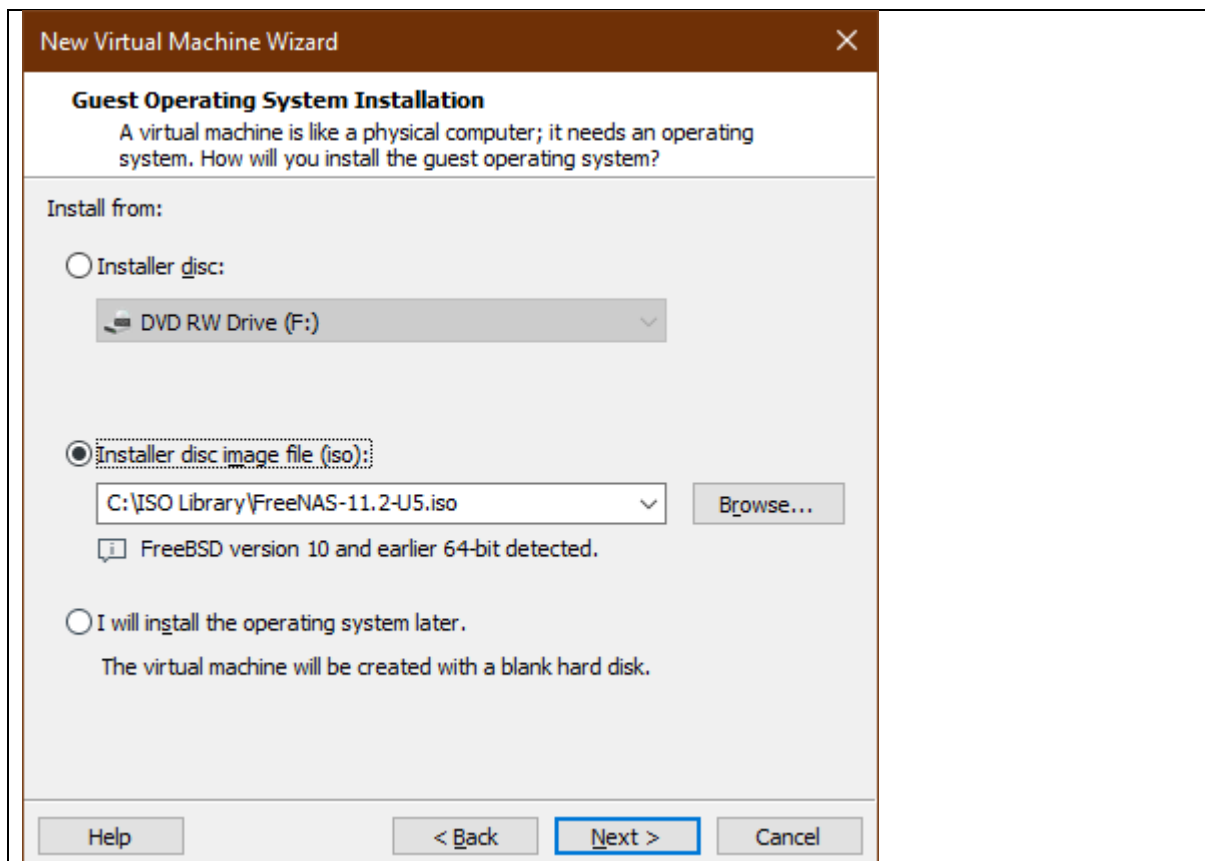
1. Gunakan opsi konfigurasi Custom



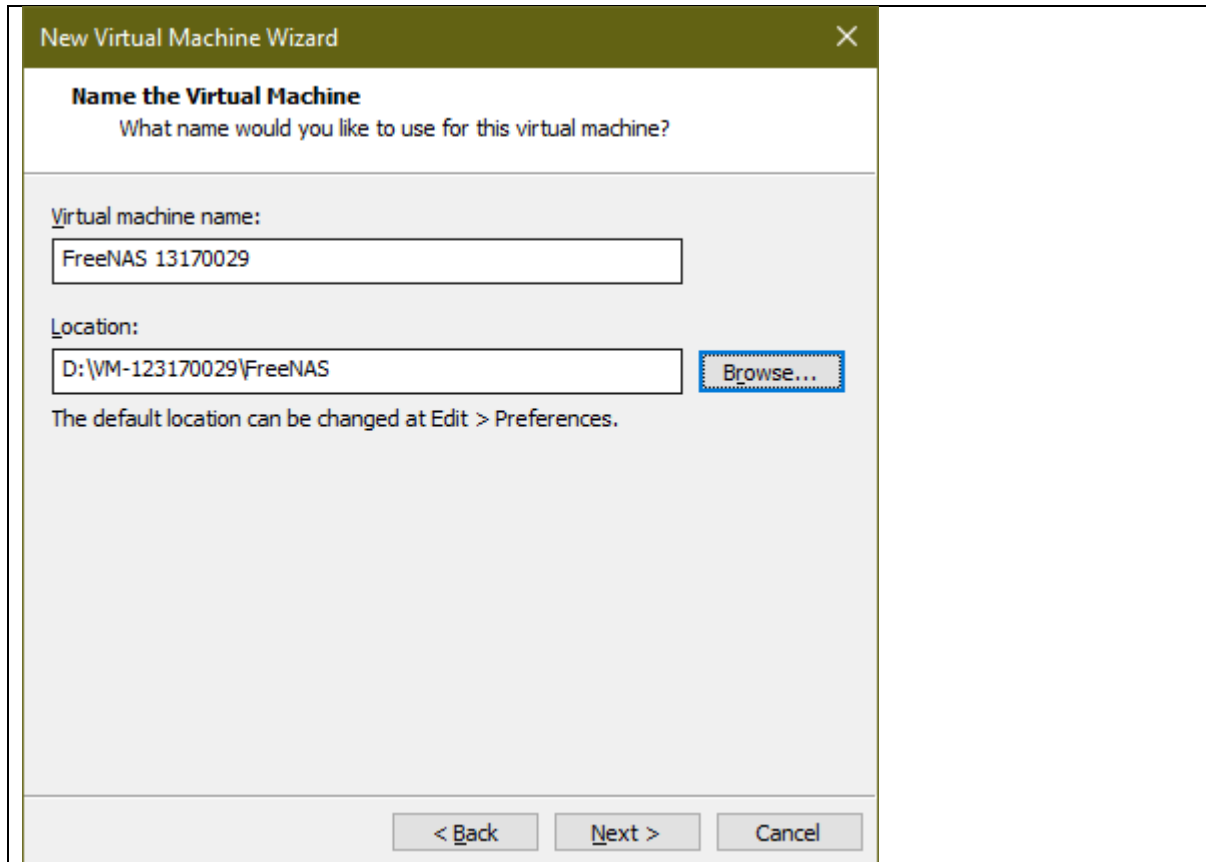
2. Gunakan compatibility Workstation 15.X



3. 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

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

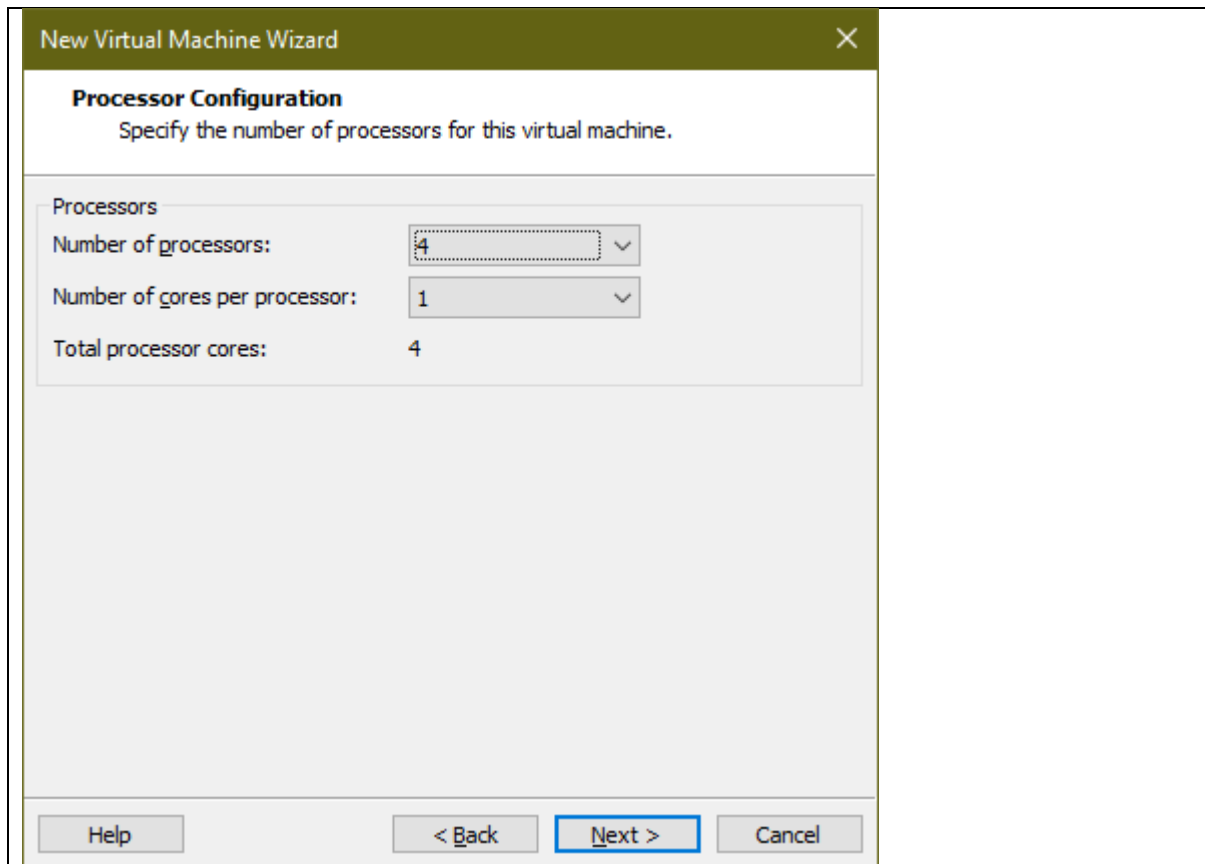
Virtual machine name:
FreeNAS 13170029

Location:
D:\VM-123170029\FreeNAS [Browse...](#)

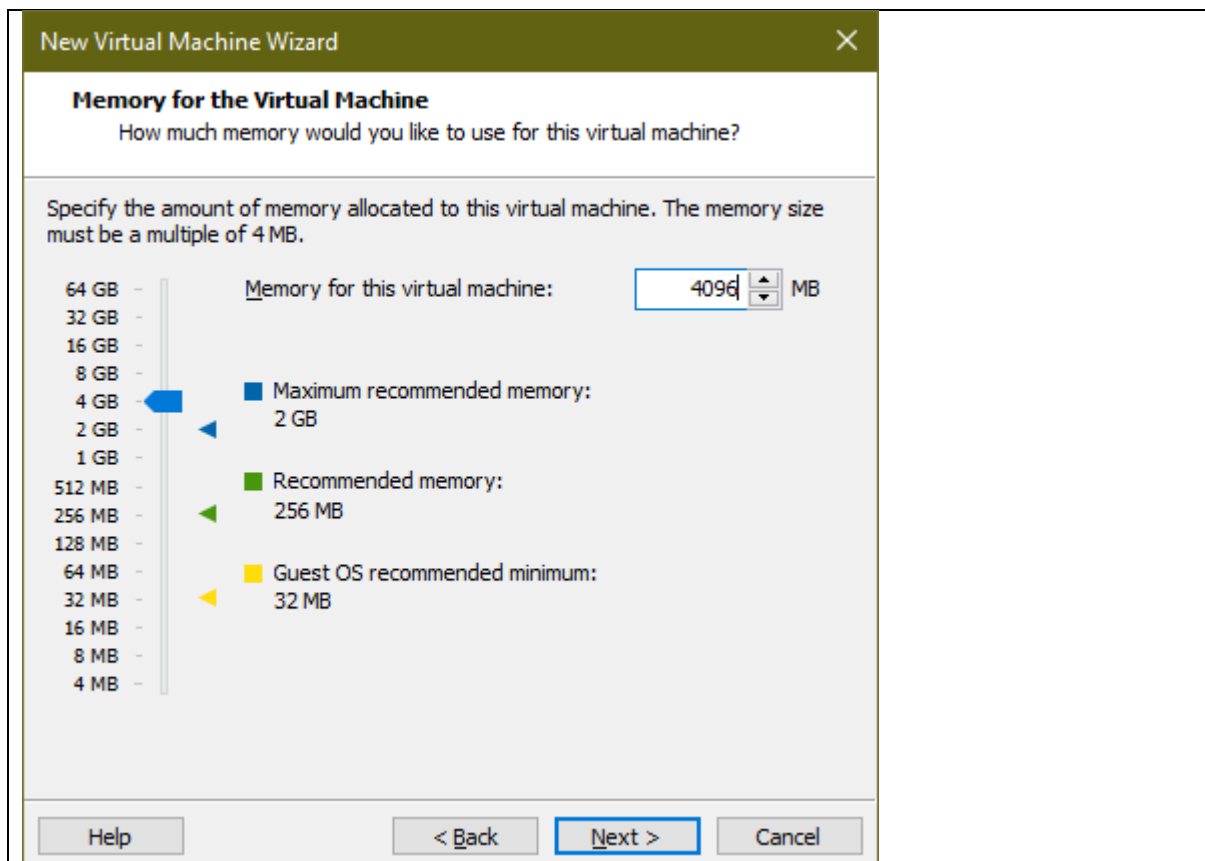
The default location can be changed at Edit > Preferences.

< Back Next > Cancel

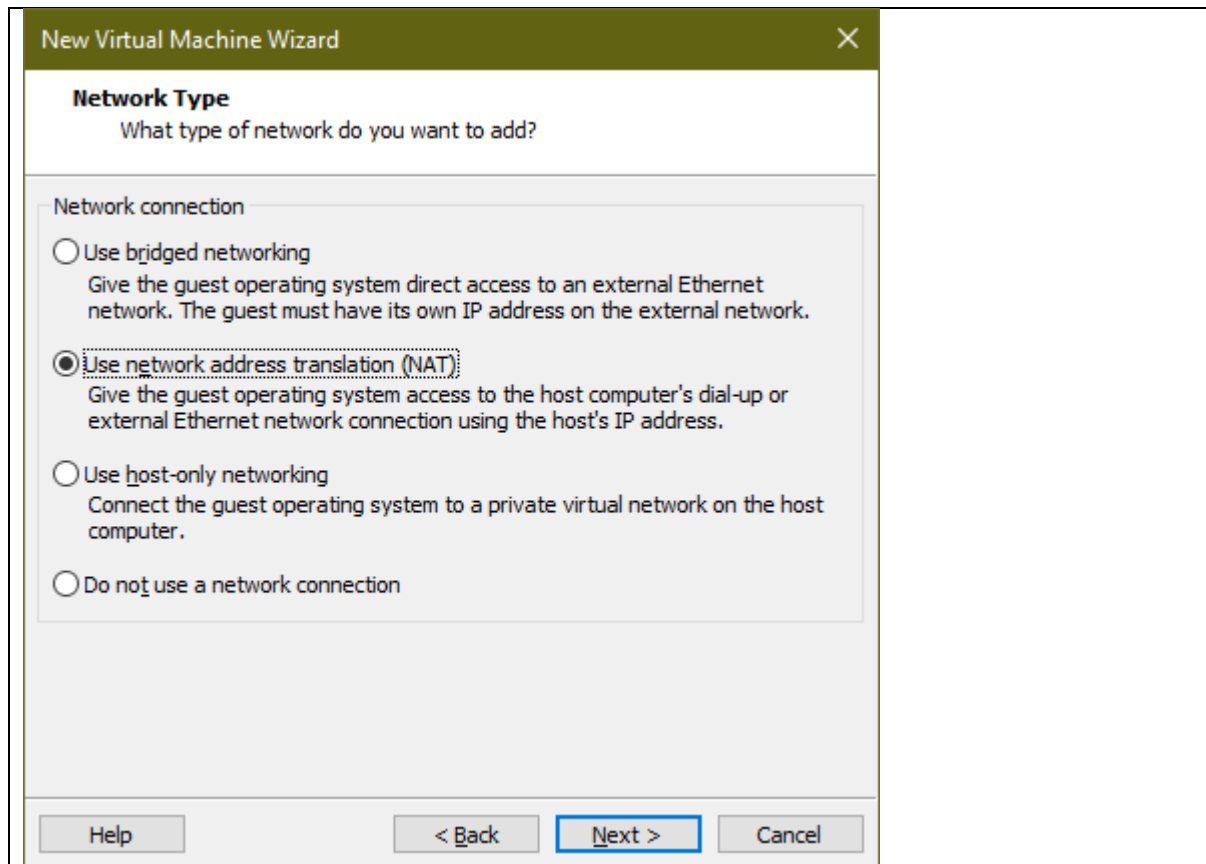
5. Gunakan 4 processor dan 1 core



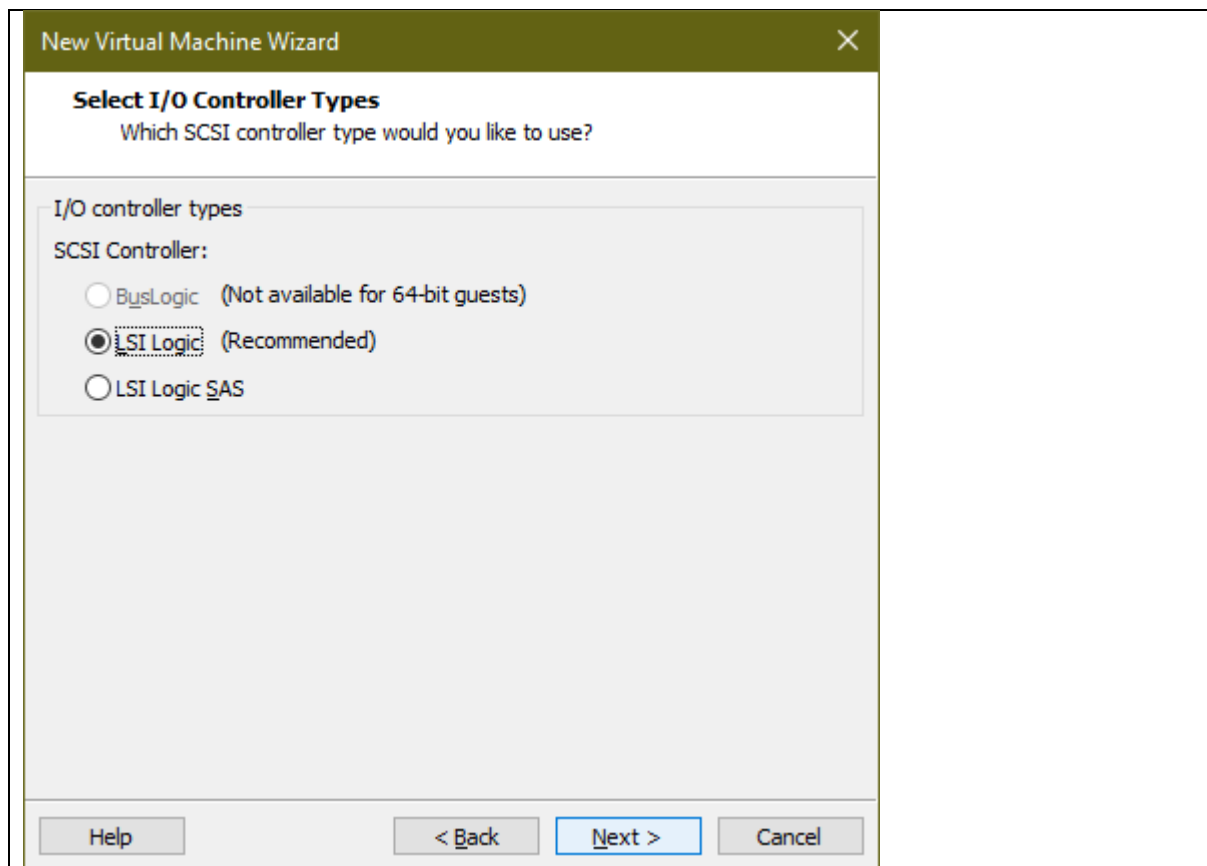
6. Gunakan RAM sebesar 4 GB



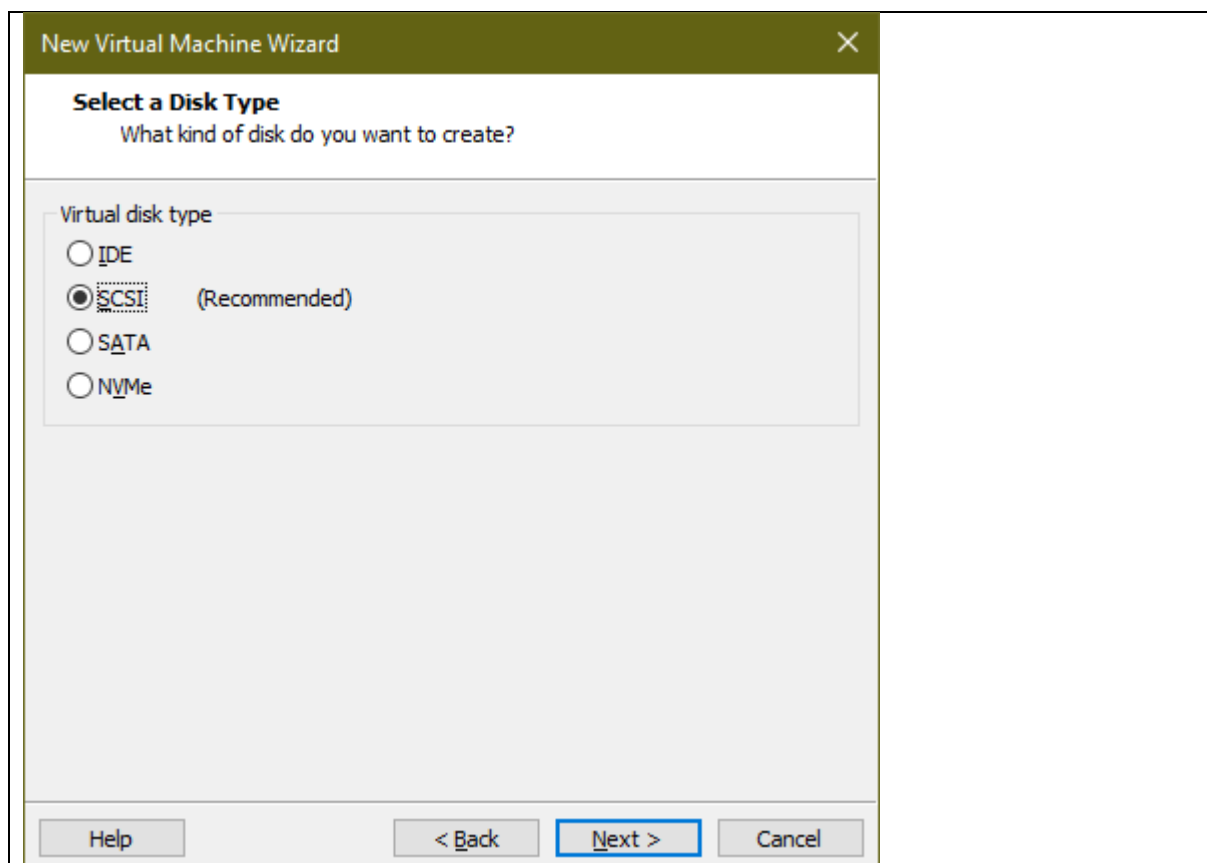
7. Gunakan mode jaringan NAT



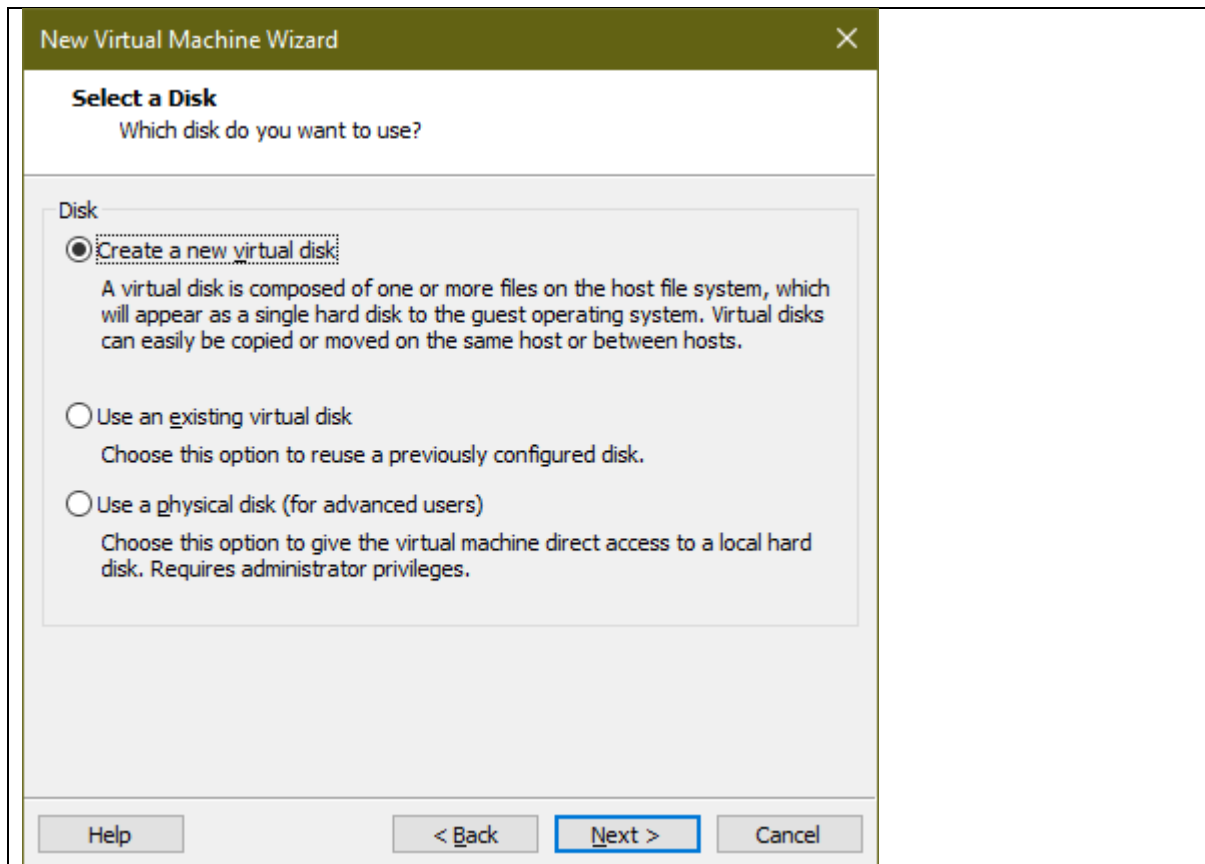
8. Gunakan pengaturan default I/O Controller



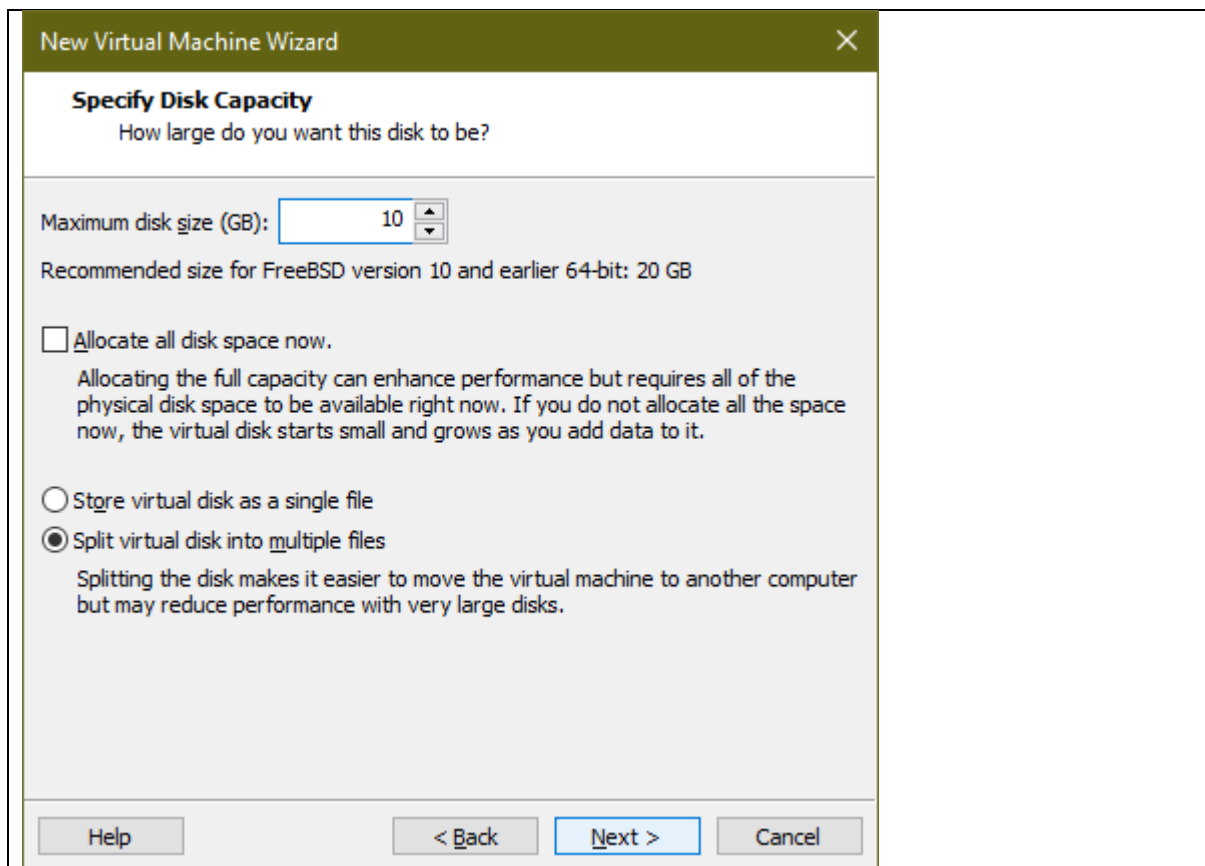
9. Gunakan pengaturan default Virtual Disk Type



10. Pilih opsi buat virtual disk baru



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



The screenshot shows the 'Specify Disk Capacity' step of the 'New Virtual Machine Wizard'. The title bar is green with a close button. The main title is 'Specify Disk Capacity' and the subtitle is 'How large do you want this disk to be?'. There is a text input field for 'Maximum disk size (GB)' with the value '10' and a small up/down arrow. Below it, a note says 'Recommended size for FreeBSD version 10 and earlier 64-bit: 20 GB'. There are two radio button options: 'Allocate all disk space now.' (unchecked) and 'Split virtual disk into multiple files' (checked). A descriptive text explains that allocating full capacity enhances performance but requires all physical disk space, while splitting the disk makes it easier to move but may reduce performance. At the bottom are buttons for 'Help', '< Back', 'Next >', and 'Cancel'.

New Virtual Machine Wizard

Specify Disk Capacity
How large do you want this disk to be?

Maximum disk size (GB):

Recommended size for FreeBSD version 10 and earlier 64-bit: 20 GB

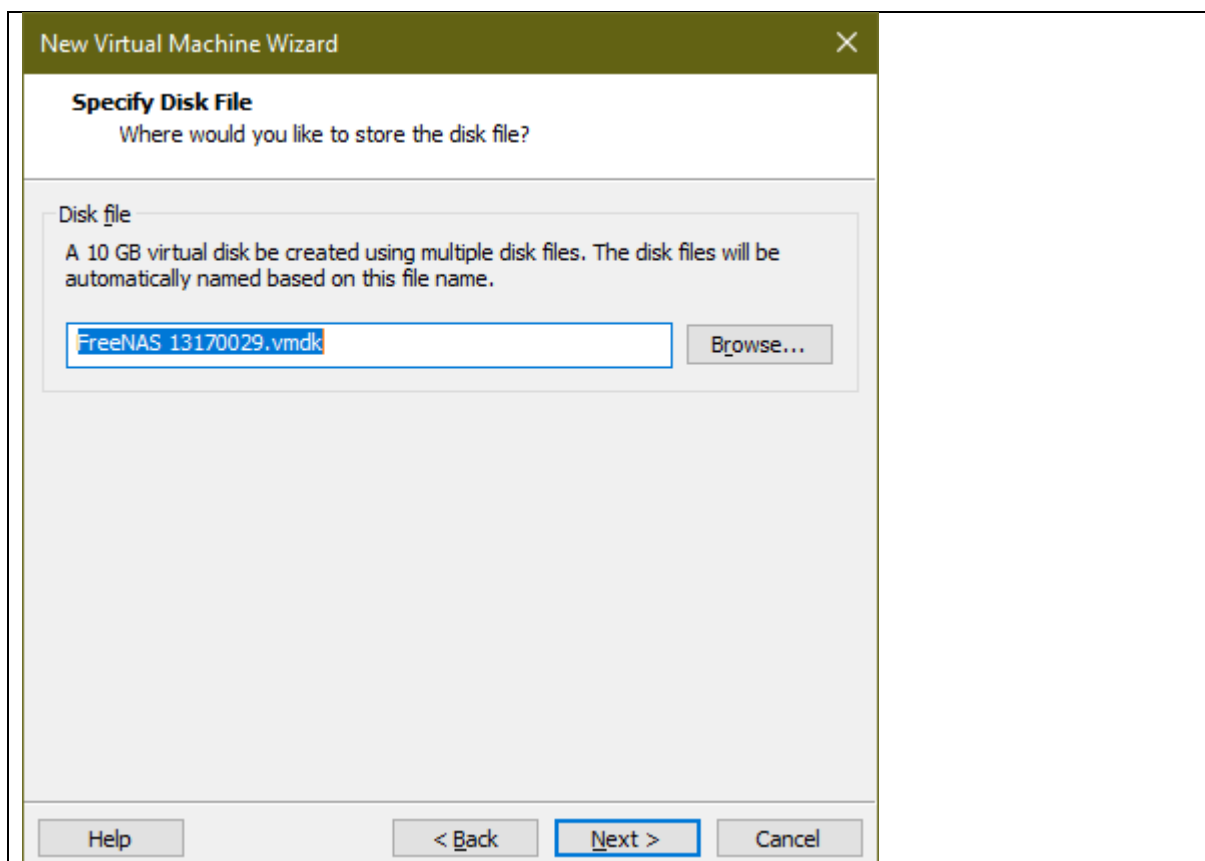
☐ Allocate all disk space now.
Allocating the full capacity can enhance performance but requires all of the physical disk space to be available right now. If you do not allocate all the space now, the virtual disk starts small and grows as you add data to it.

☐ 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

12. Gunakan pengaturan default untuk nama disk



The screenshot shows the 'Specify Disk File' step of the 'New Virtual Machine Wizard'. The title bar is green with a close button. The main title is 'Specify Disk File' and the subtitle is 'Where would you like to store the disk file?'. There is a section titled 'Disk file' with a text box containing 'FreeNAS 13170029.vmdk' and a 'Browse...' button. A note explains that a 10 GB virtual disk will be created using multiple disk files, named based on the file name. At the bottom are buttons for 'Help', '< Back', 'Next >', and 'Cancel'.

New Virtual Machine Wizard

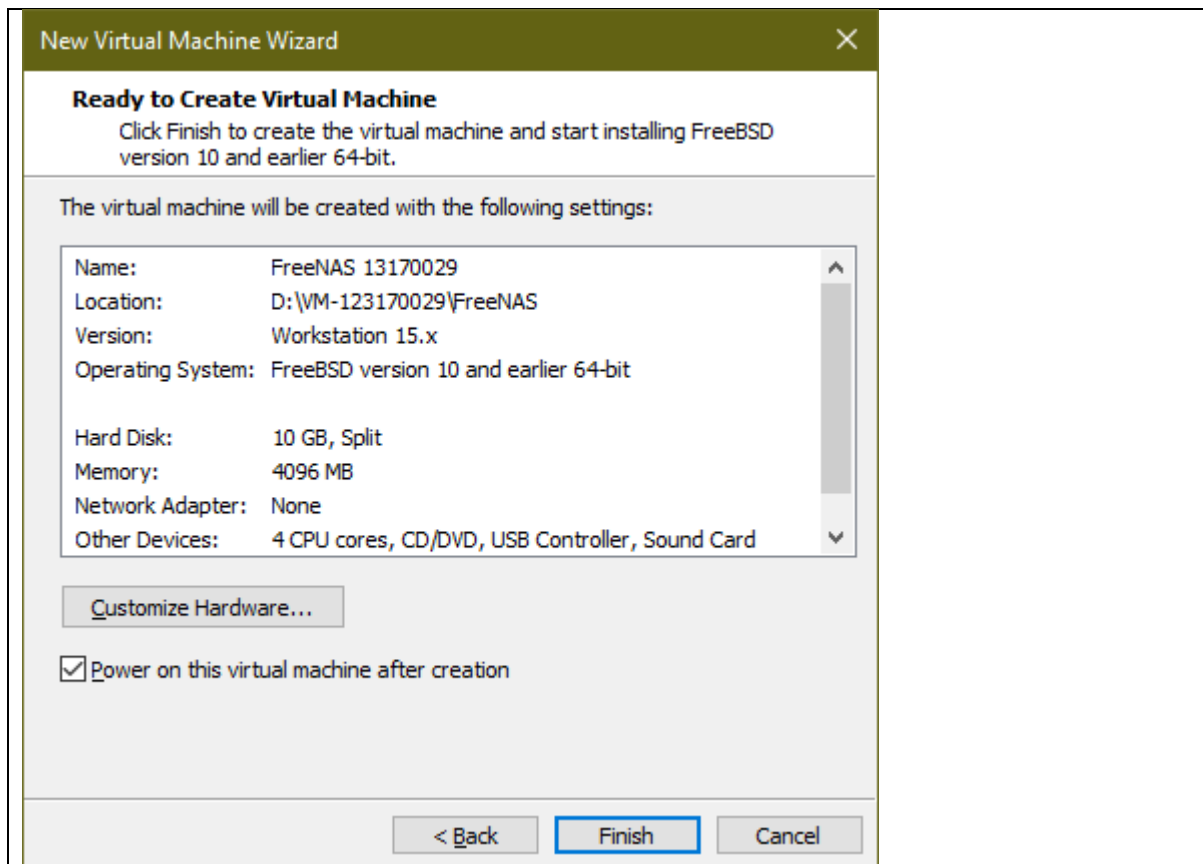
Specify Disk File
Where would you like to store the disk file?

Disk file
A 10 GB virtual disk will be created using multiple disk files. The disk files will be automatically named based on this file name.

Browse...

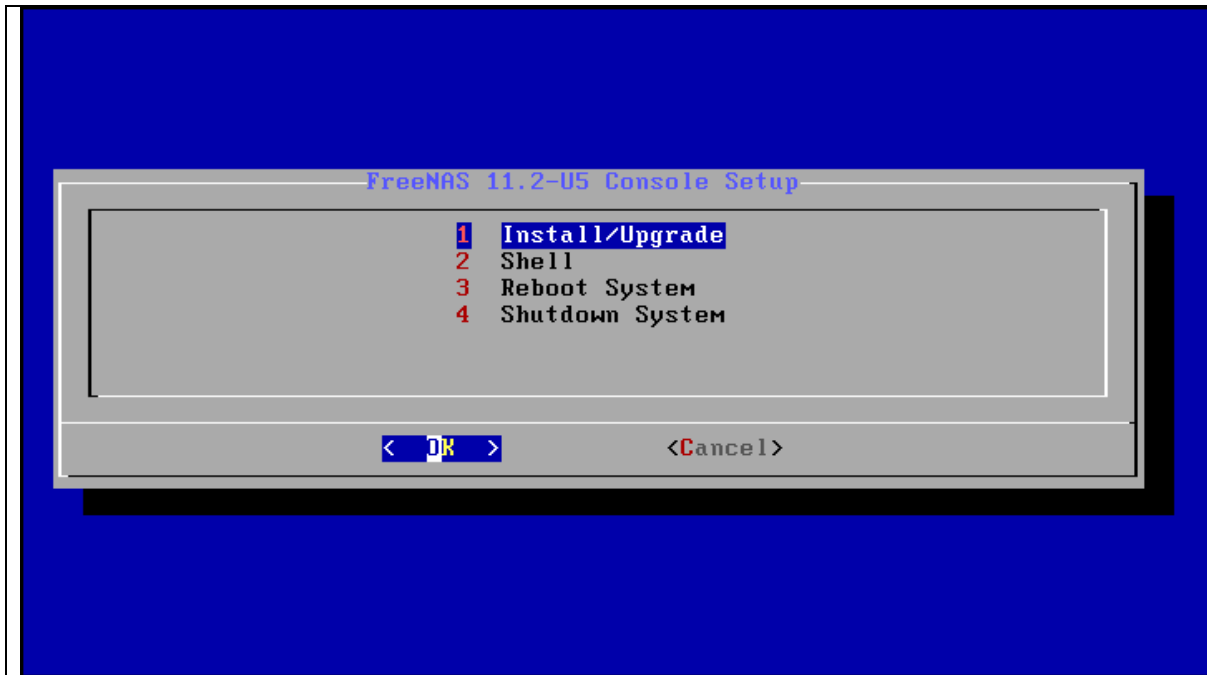
Help < Back Next > Cancel

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

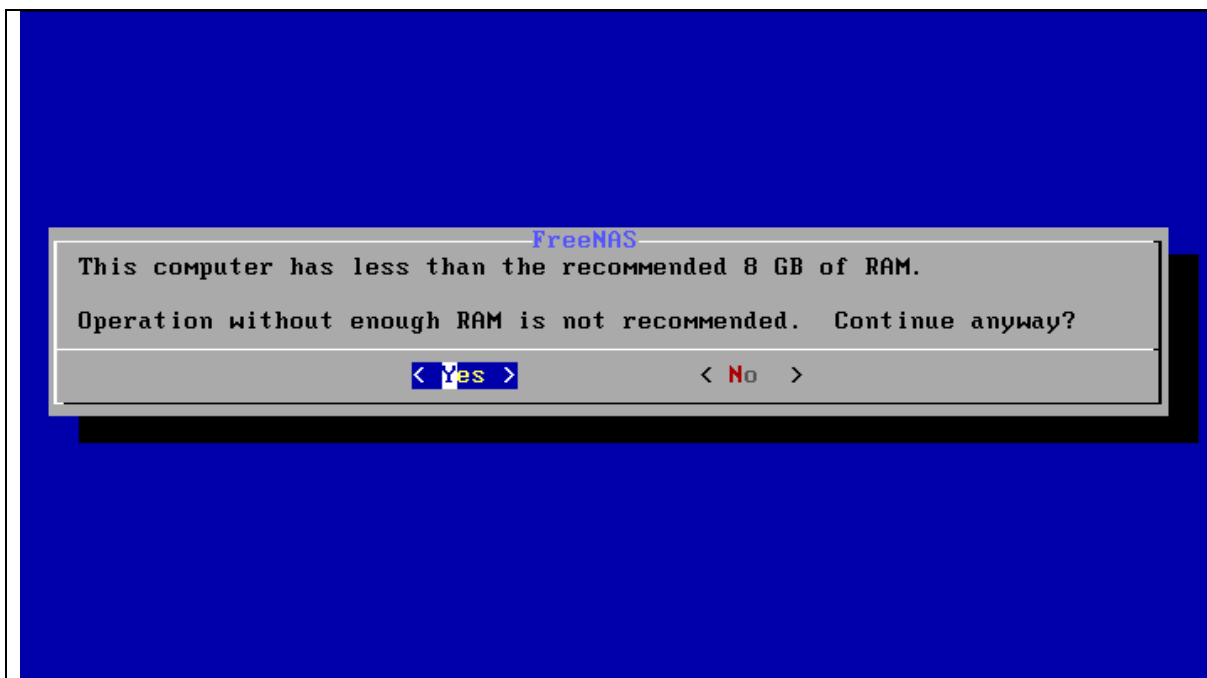


TUGAS BAGIAN KEDUA – INSTALASI FREENAS:

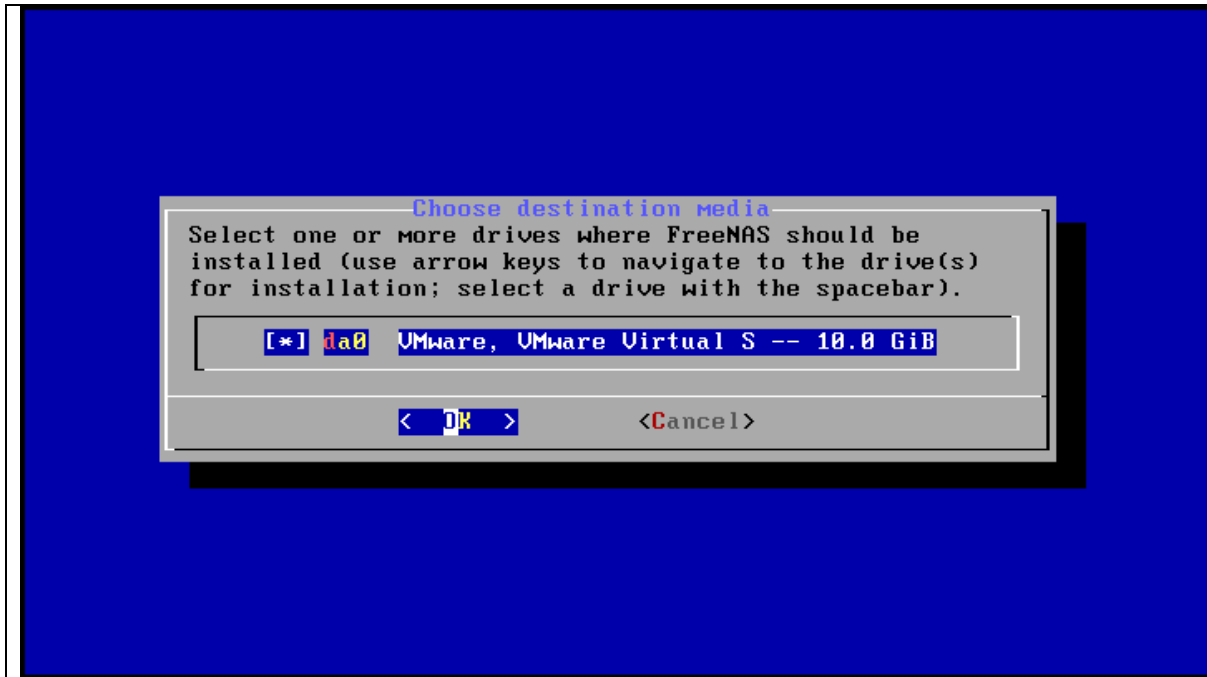
1. Tampilan awal tahap instalasi FreeNAS, pilih Install/Upgrade



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



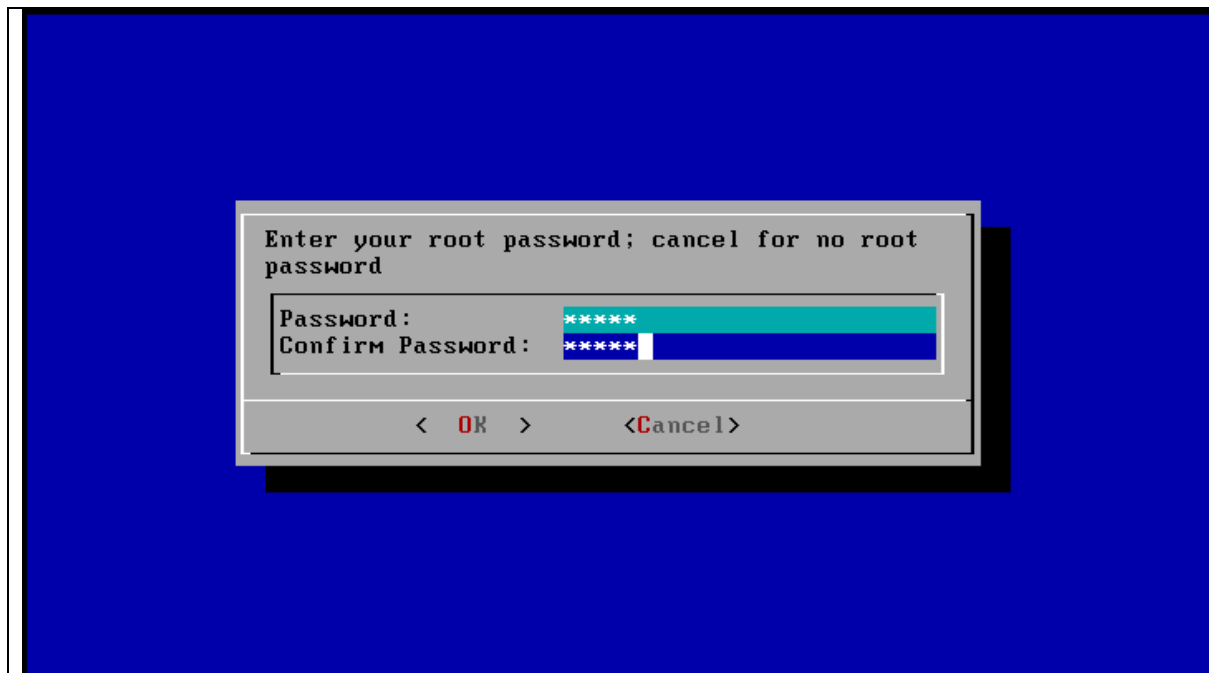
3. Tampilan pemilihan destination media untuk dipasang FreeNAS, pilih da0



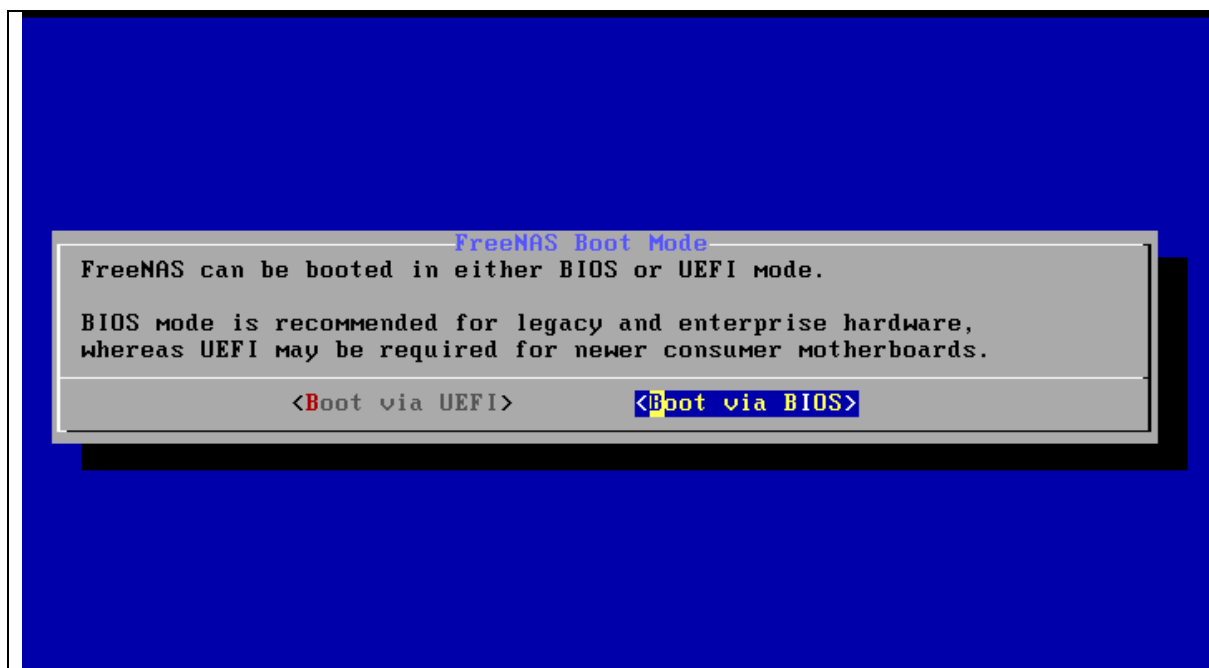
4. Tampilan konfirmasi penghapusan/format media yang terpilih, pilih Yes



5. Tampilan pengaturan kata sandi, gunakan NIM atau bebas



6. Tampilan mode boot dari FreeNAS, pilih BIOS



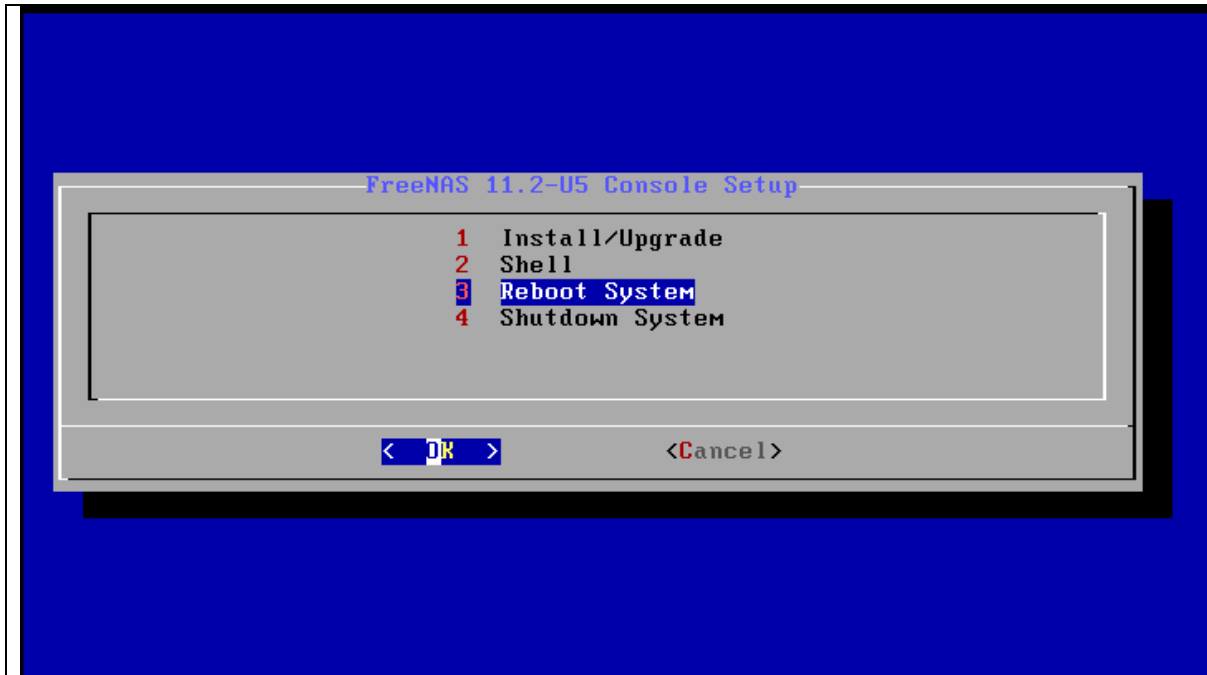
7. Tampilan proses instalasi FreeNAS

```
2+0 records in
2+0 records out
2097152 bytes transferred in 0.049000 secs (42799070 bytes/sec)
dd: /dev/da0: end of device
3+0 records in
2+0 records out
2097152 bytes transferred in 0.002937 secs (714121973 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.
```

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

The FreeNAS installation on da0 succeeded!
Please reboot and remove the installation media.

< OK >



9. Tampilan proses booting menuju FreeNAS OS

```
,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 middleware.
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

Thu Mar 5 05:44:09 PST 2020

FreeBSD/amd64 (freenas.local) (ttyv0)

Console setup

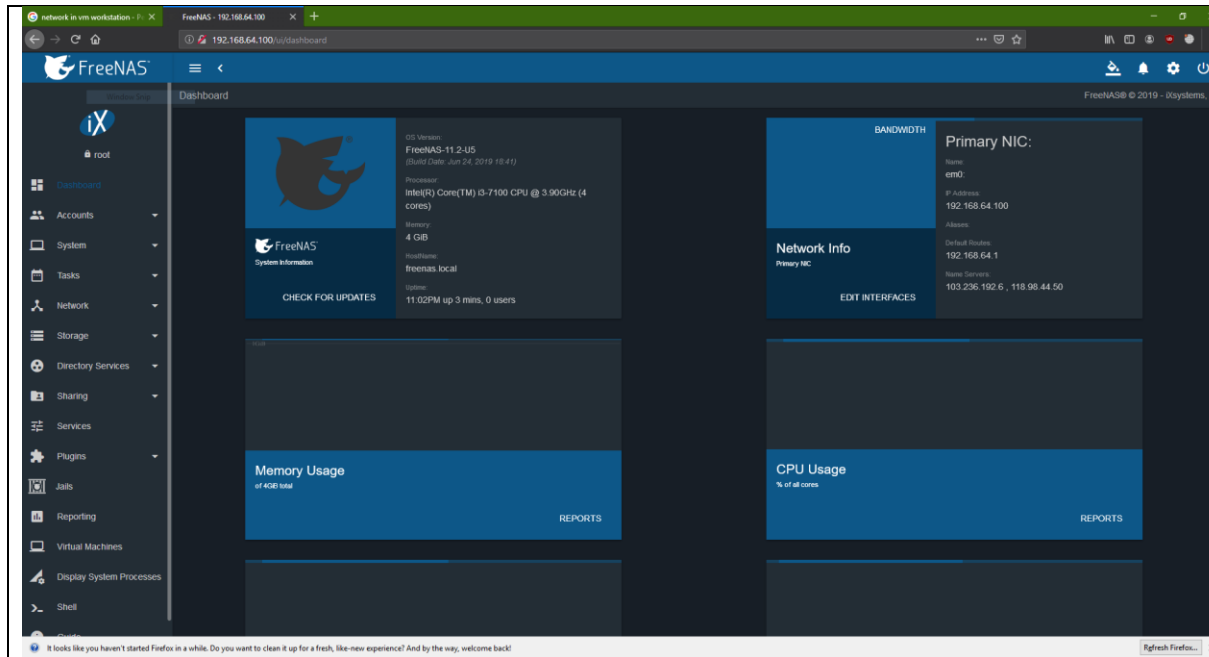
- 1) Configure Network Interfaces
- 2) Configure Link Aggregation
- 3) Configure VLAN Interface
- 4) Configure Default Route
- 5) Configure Static Routes
- 6) Configure DNS
- 7) Reset Root Password
- 8) Reset Configuration to Defaults
- 9) Shell
- 10) Reboot
- 11) Shut Down

The web interface could not be accessed.
Please check network configuration.

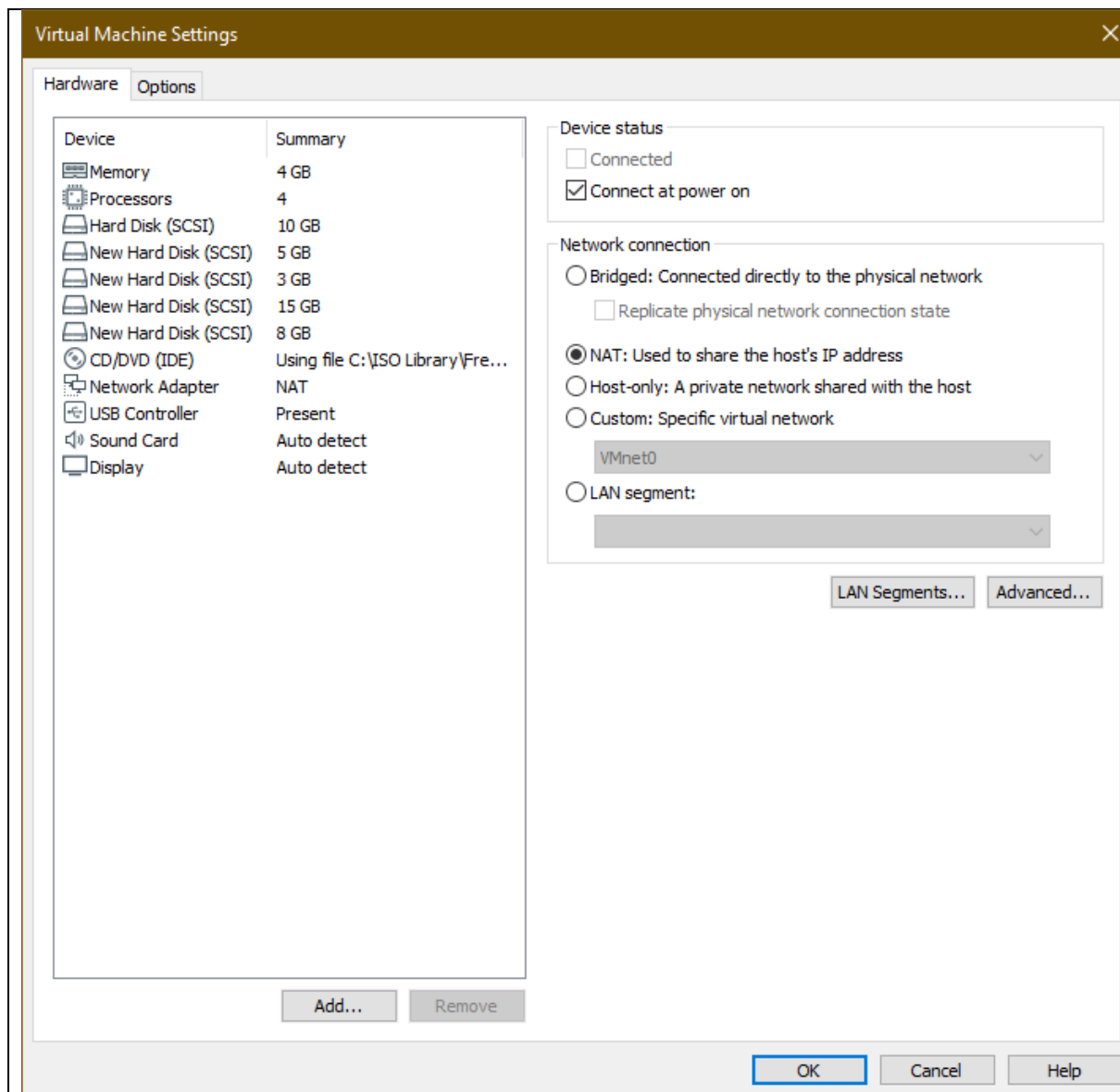
Enter an option from 1-11: █

TUGAS BAGIAN KETIGA – KONFIGURASI FREENAS:

1. Tampilan dashboard setelah login FreeNAS



2. Tampilan konfigurasi VM pada Eksperimen #1



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

```

Thu Mar  5 05:59:29 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

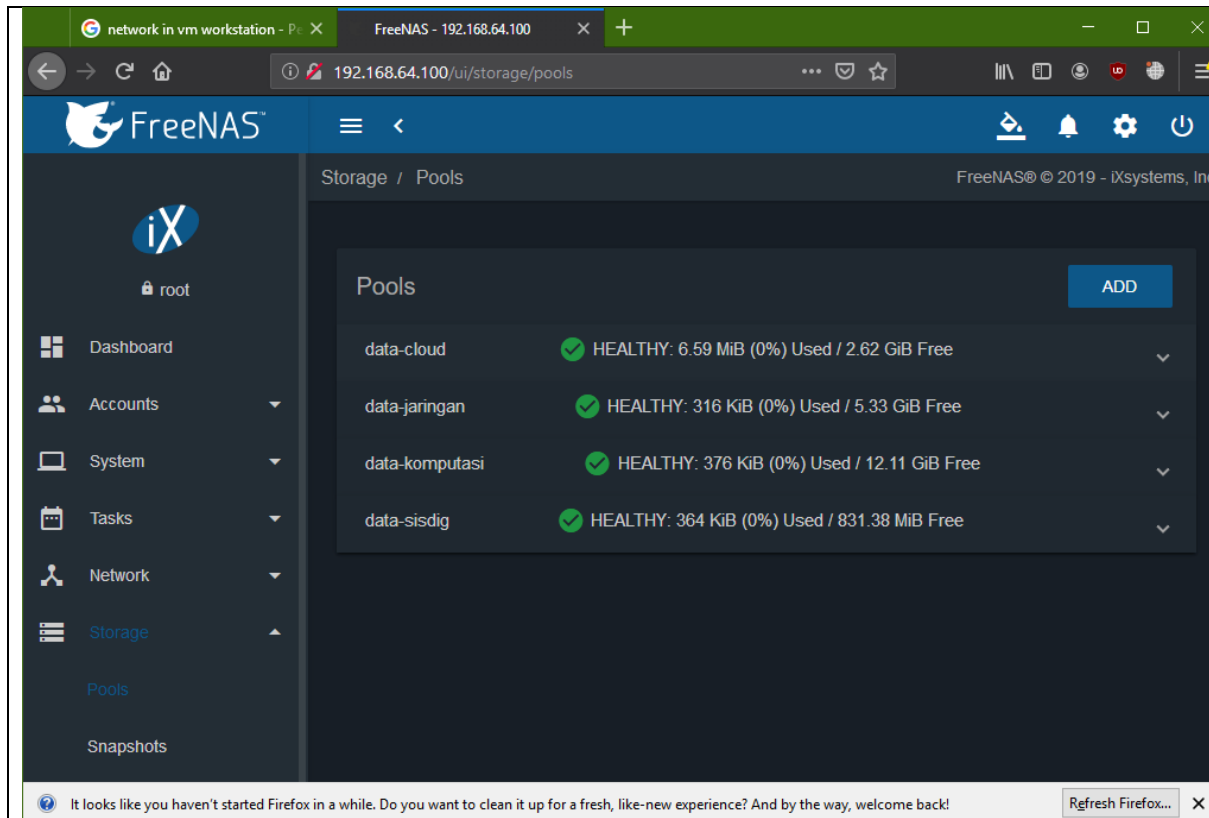
The web user interface is at:

http://192.168.64.100

Enter an option from 1-11: █

```

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



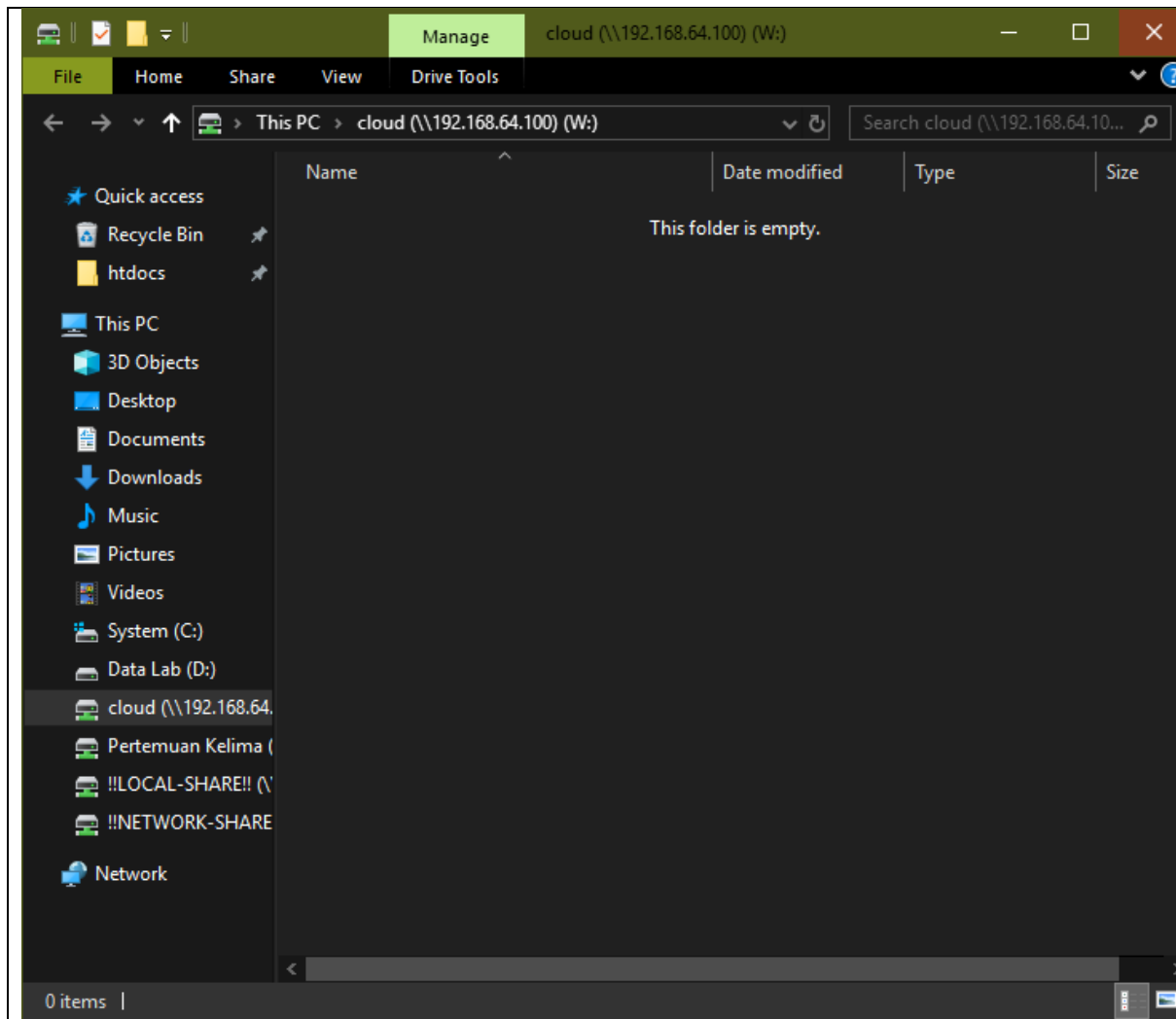
5. Tampilkan hasil dari pembuatan user tambahan pada menu Accounts -> Users

Users					
<div> <div>Filter Users</div> <div>COLUMNS</div> <div>ADD</div> </div>					
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	⋮

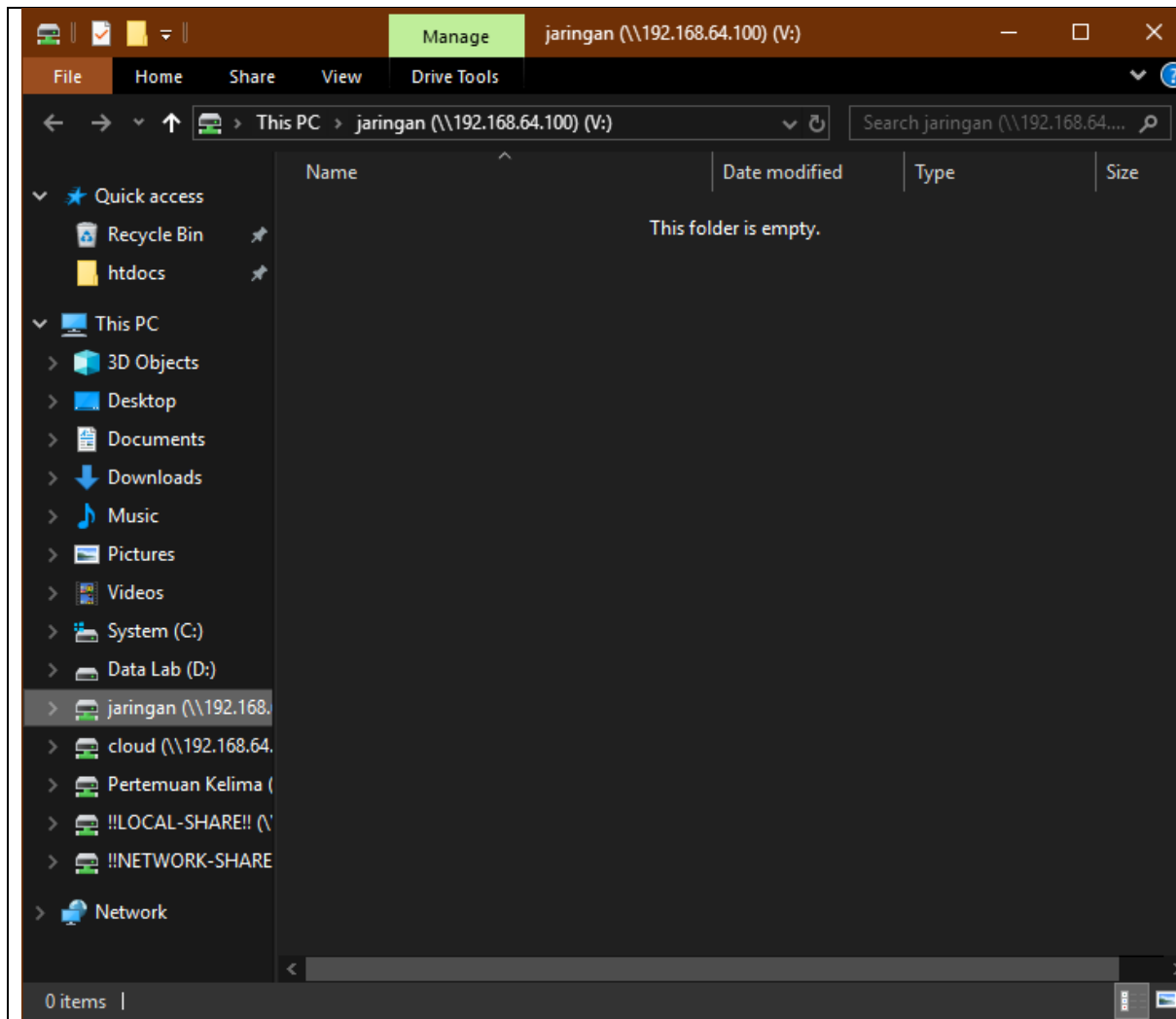
6. Tampilkan hasil dari pembuatan shares tambahan untuk 4 lab pada menu Sharing -> Windows (SMB) Shares

Samba		
<div> <div>Filter Samba</div> <div>COLUMNS</div> <div>ADD</div> </div>		
Name	Path	
cloud	/mnt/data-cloud	⋮
jaringan	/mnt/data-jaringan	⋮
komputasi	/mnt/data-komputasi	⋮
sisdig	/mnt/data-sisdig	⋮
1 - 4 of 4		

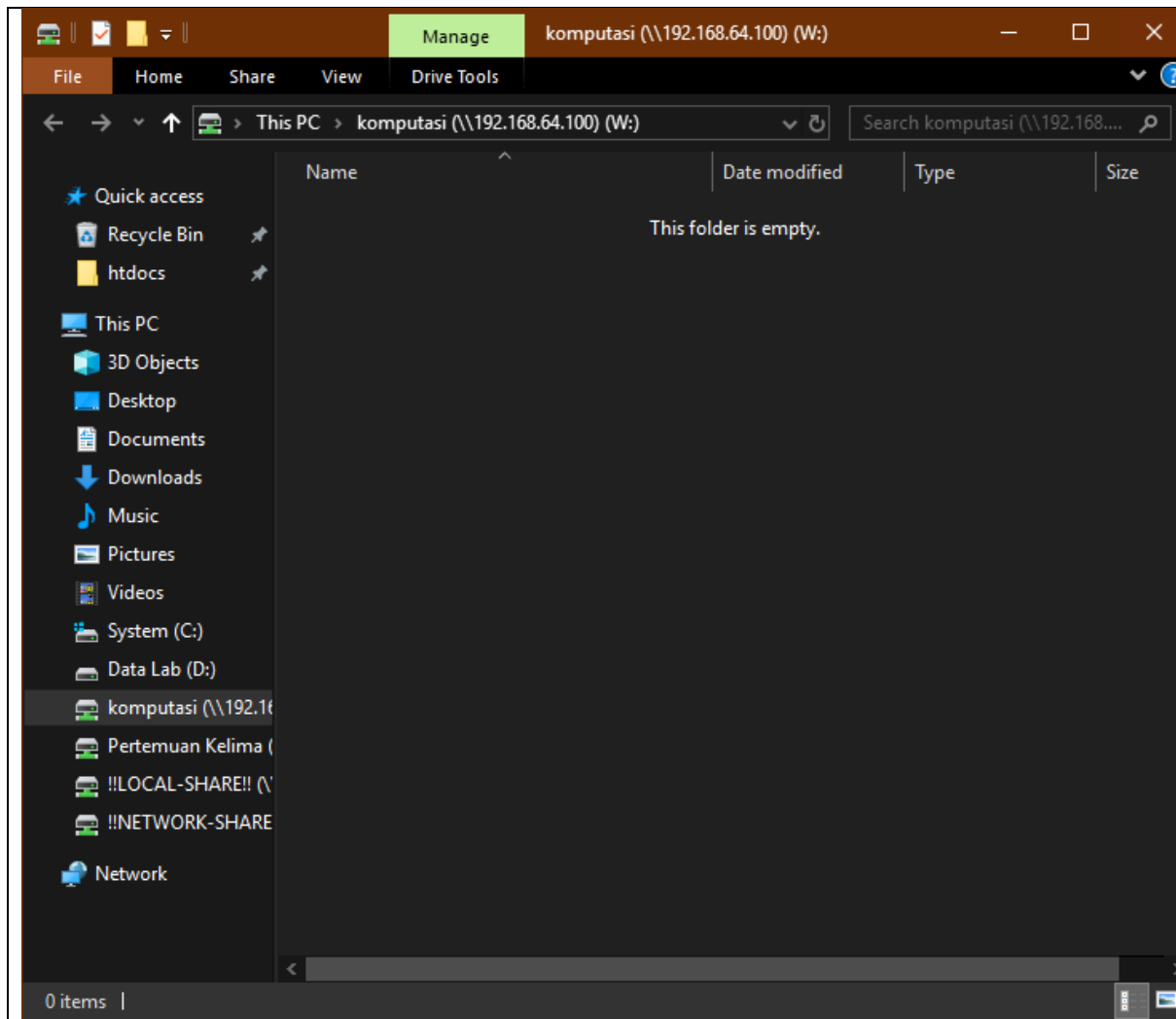
7. Tampilkan hasil akses shares pada Windows Explorer (hasil mapping) untuk Lab Cloud (yang pertama kali dibuat)



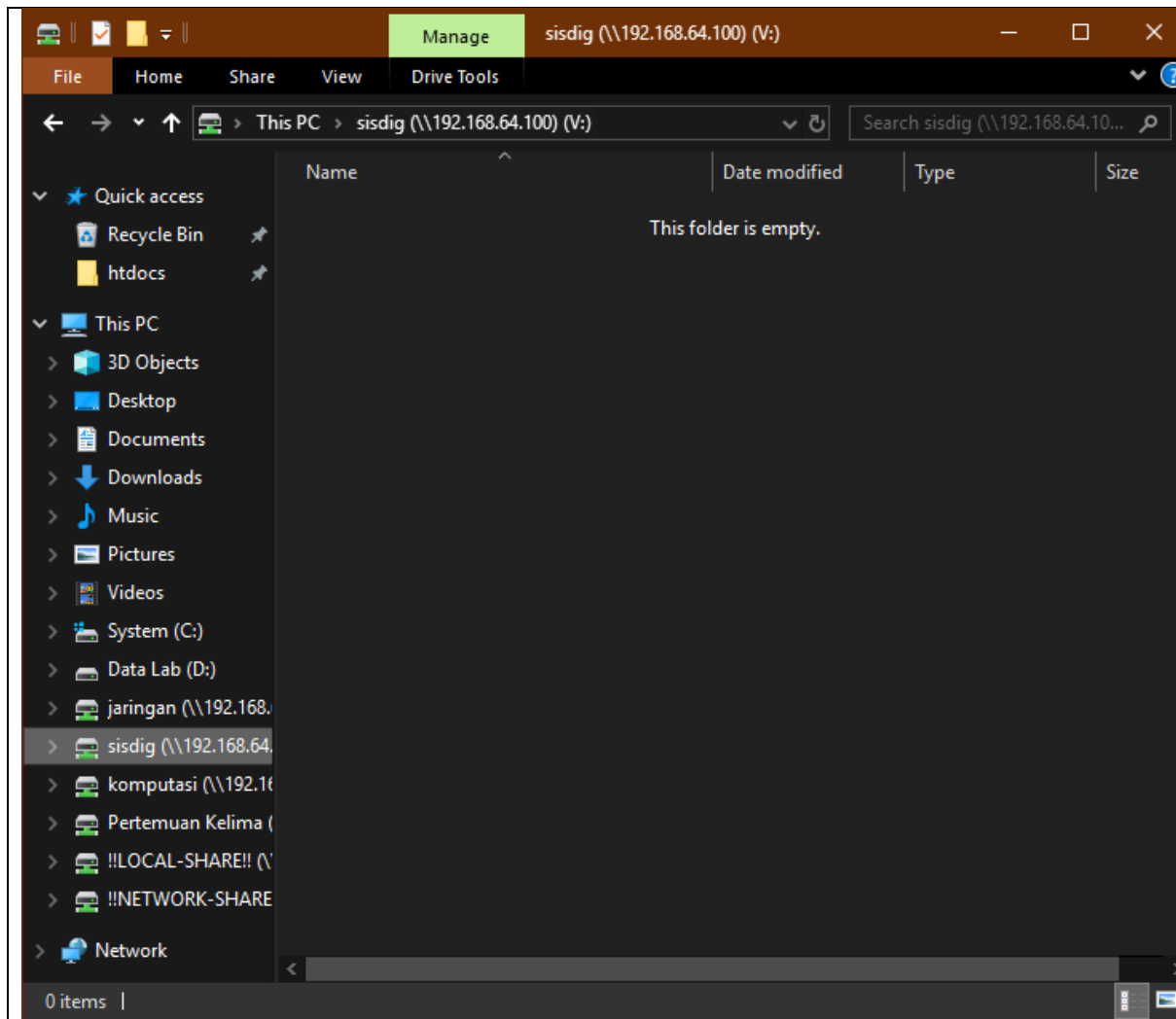
8. Tampilkan hasil akses shares untuk Lab Jaringan



9. Tampilkan hasil akses shares untuk Lab Komputasi



10. Tampilkan hasil akses shares untuk Lab Sisdig



DOKUMENTASI PERTEMUAN KELIMA (BILA ADA)