



## **LEMBAR KERJA PRAKTIKUM CLOUD COMPUTING**

### **INSTALASI DAN KONFIGURASI LAYANAN FILE SHARING DENGAN FREENAS**

#### **IDENTITAS:**

Nama:	<b>Habib Muhammad Thariq</b>
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Kelas:	<b>E</b>
Hari, Tanggal:	<b>04/03/2020</b>

#### **CONTOH ISIAN DAN PETUNJUK:**

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

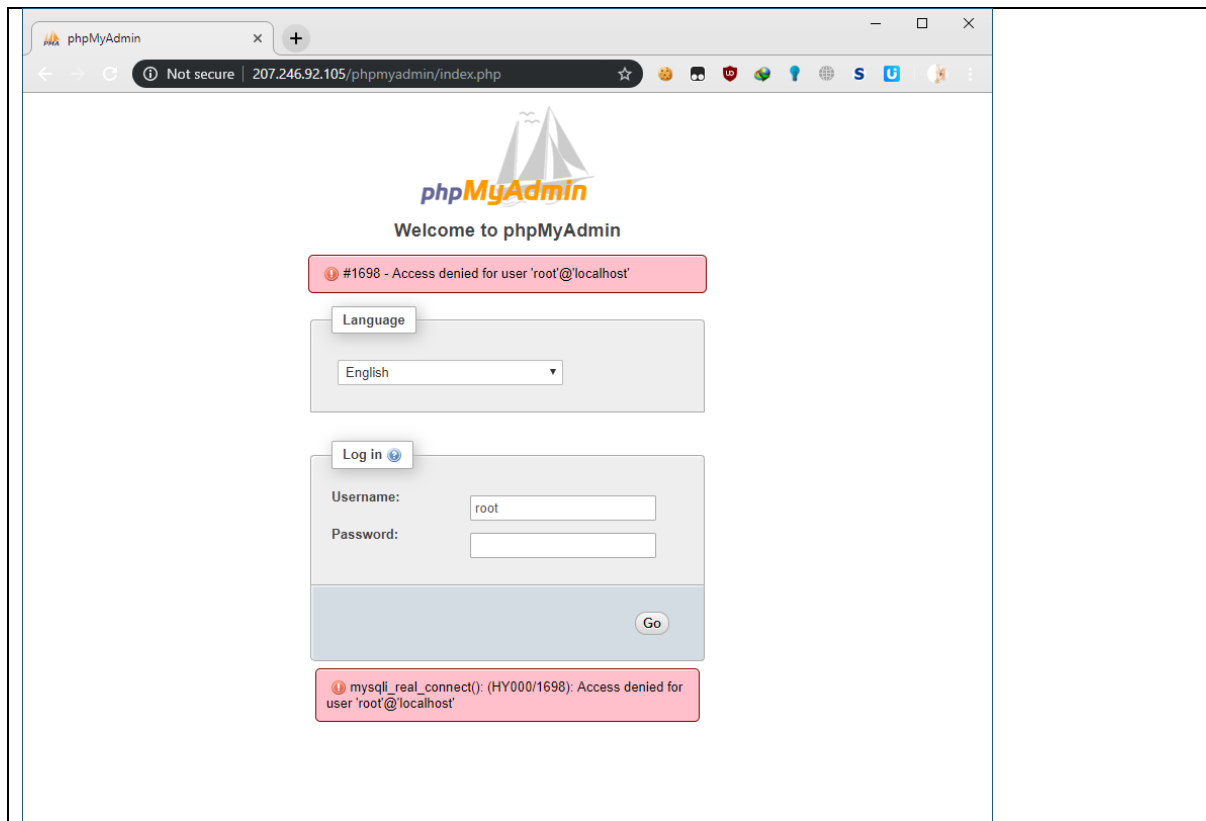


2. **[Contoh]** Deskripsikan parameter yang digunakan untuk keluar dari akun root

```
$ exit
```

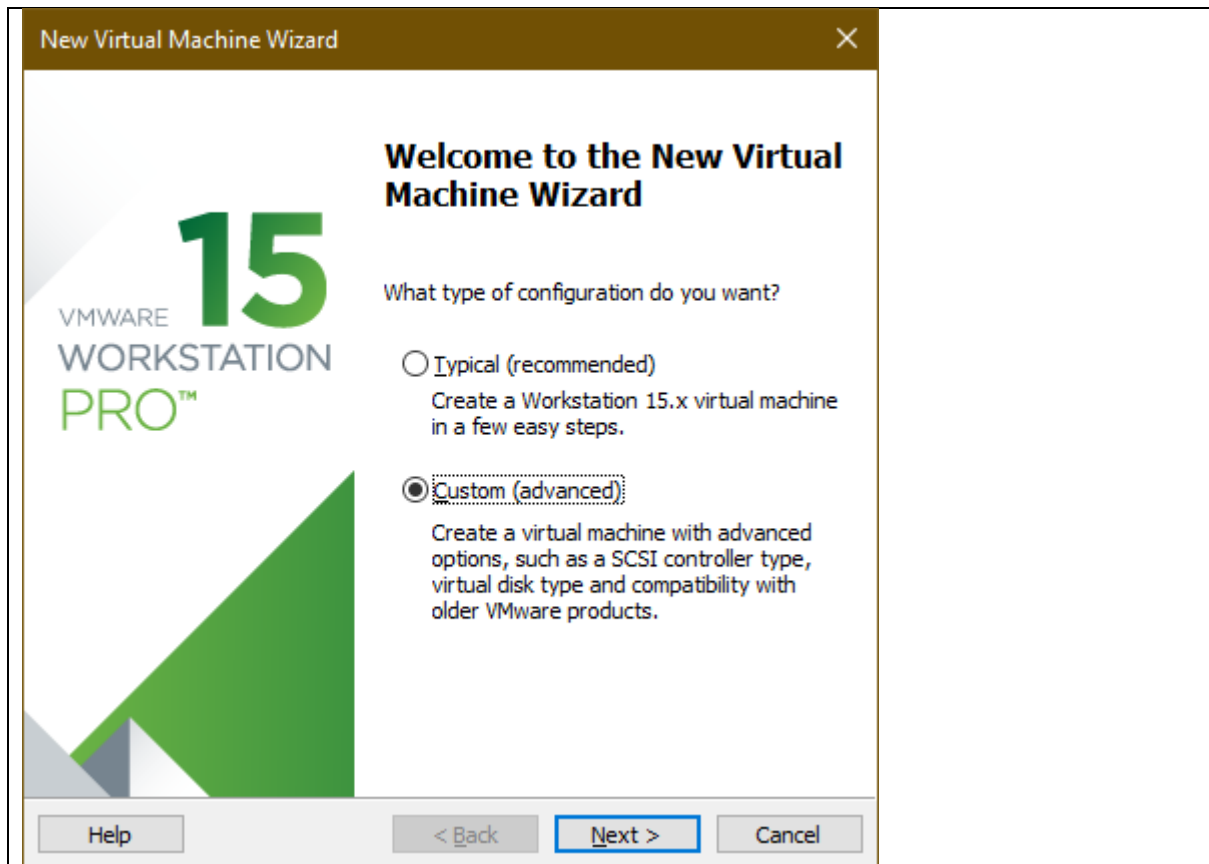
Perintah exit digunakan untuk keluar dari sesi akun aktif

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

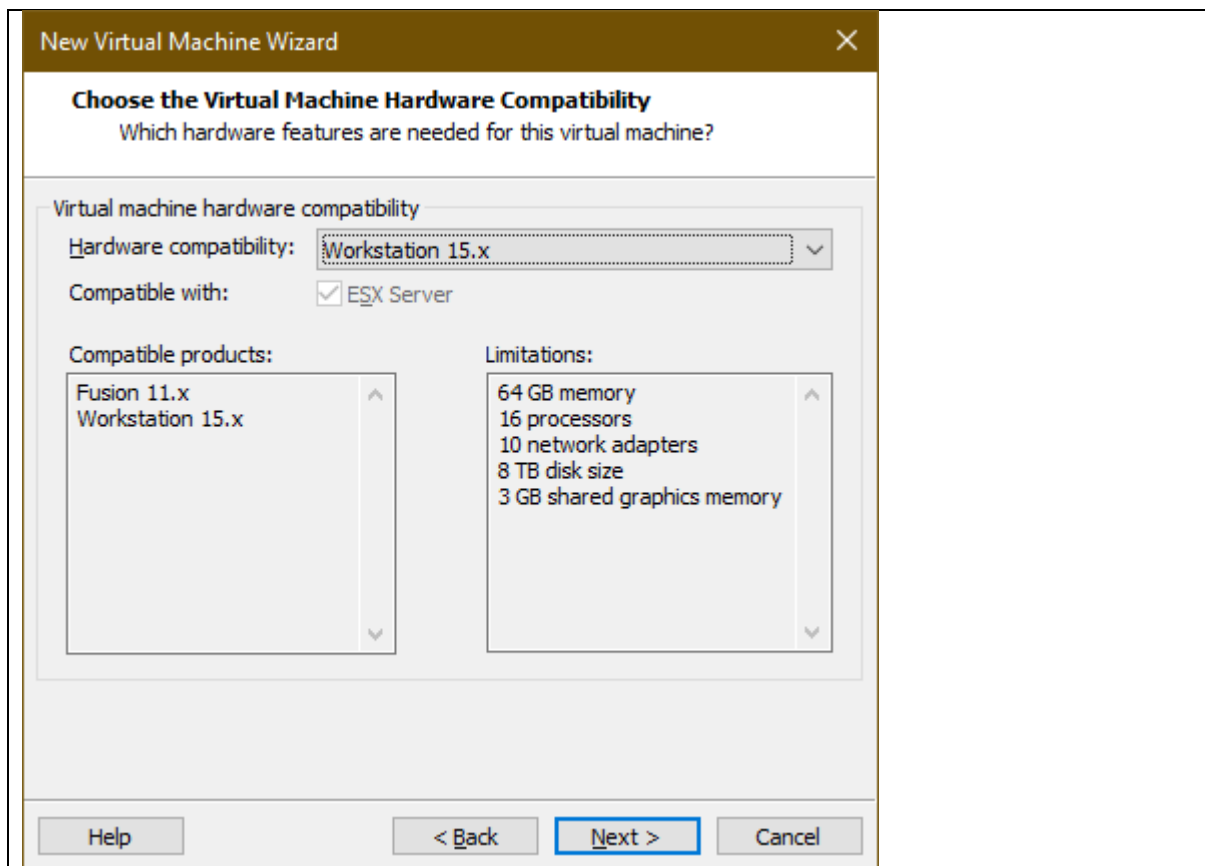


## **TUGAS BAGIAN PERTAMA – PEMBUATAN VM:**

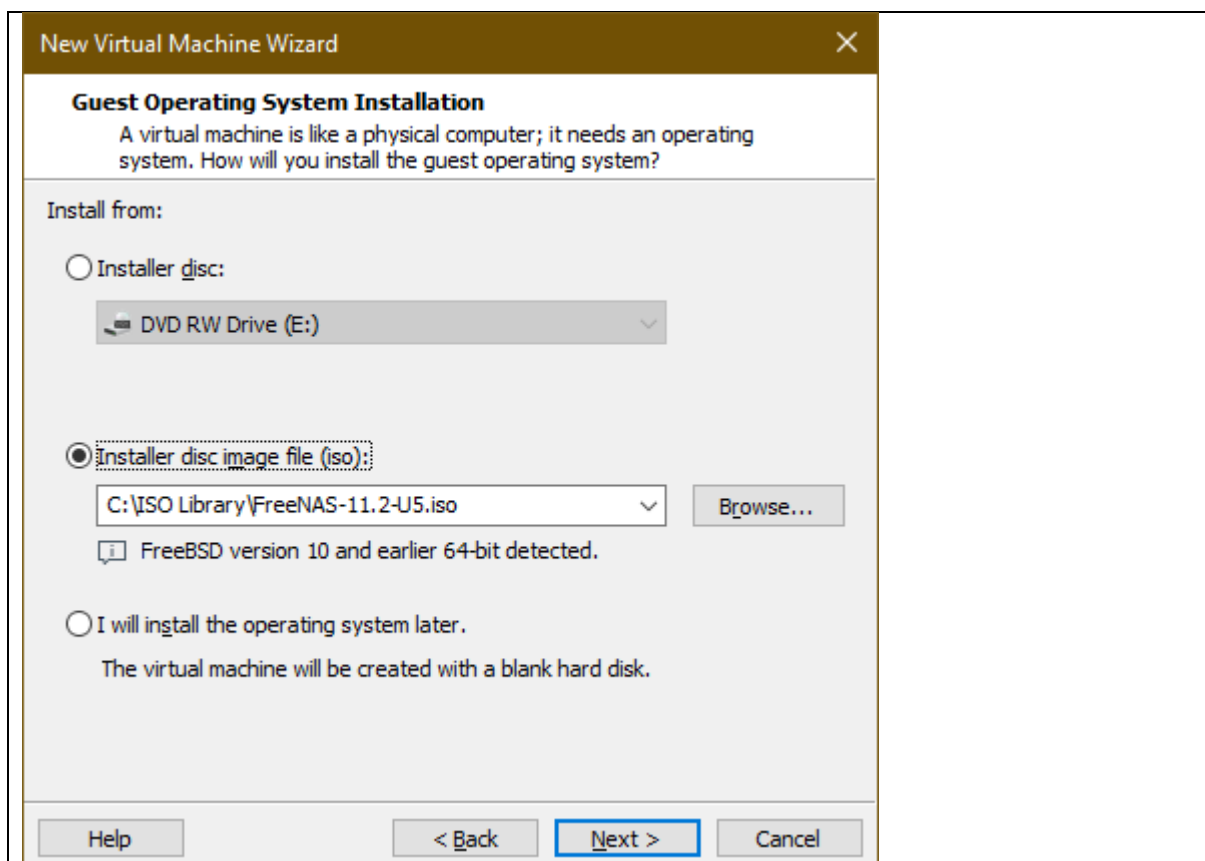
1. Gunakan opsi konfigurasi Custom



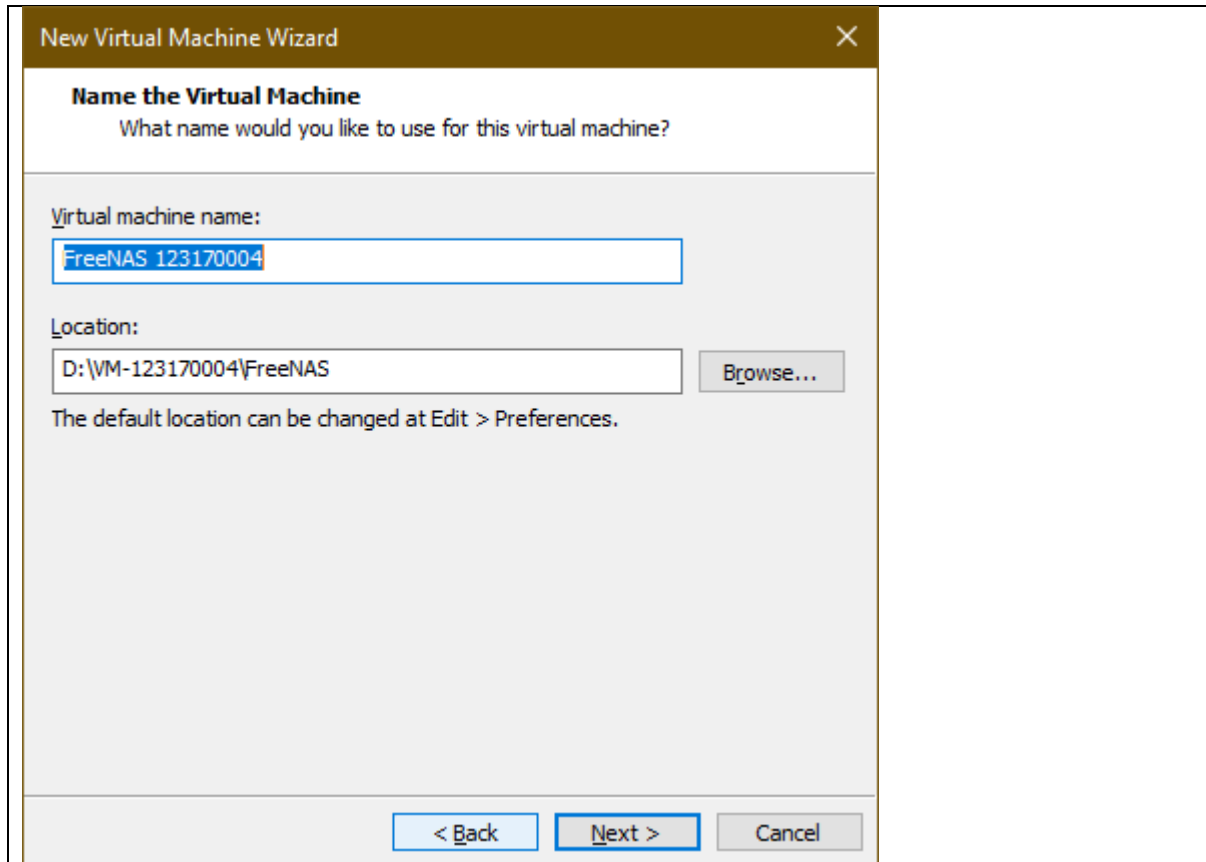
2. Gunakan compatibility Workstation 15.X



### 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

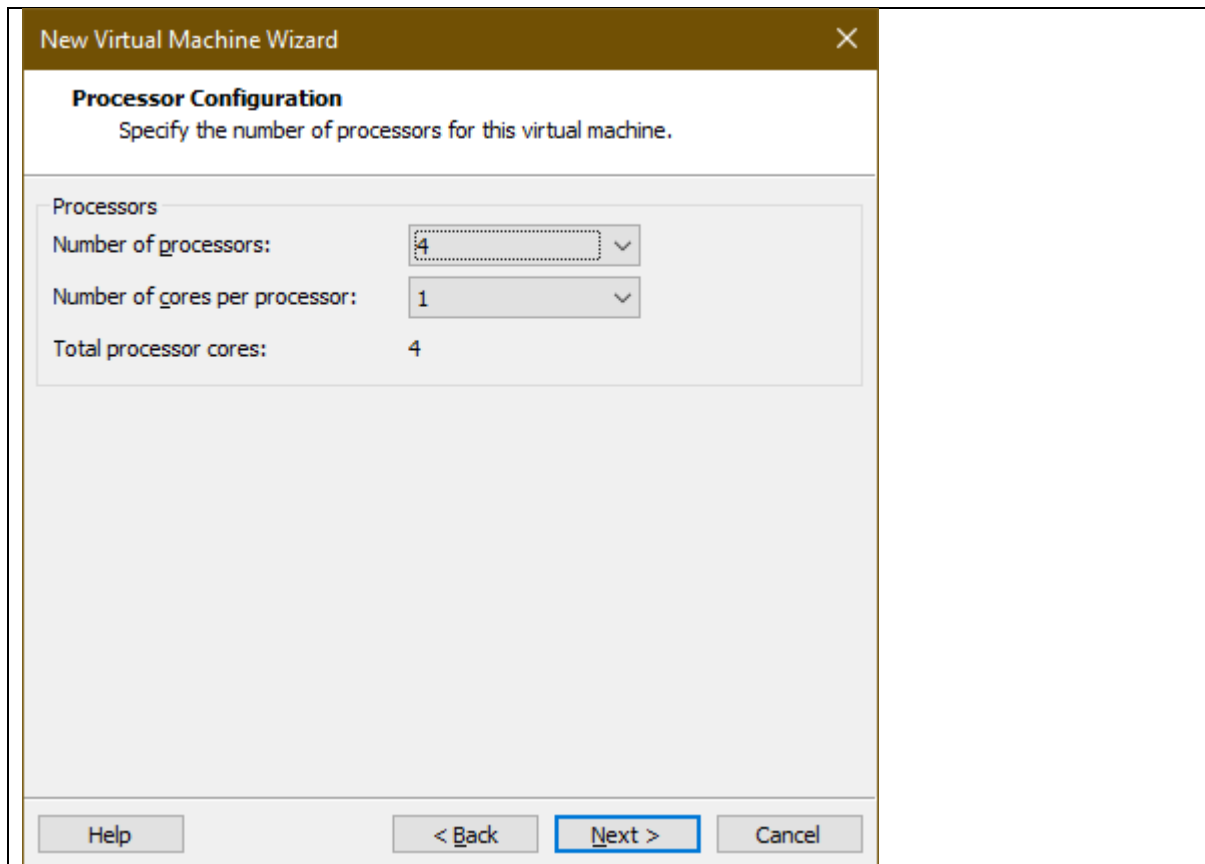
**Name the Virtual Machine**  
What name would you like to use for this virtual machine?

Virtual machine name:

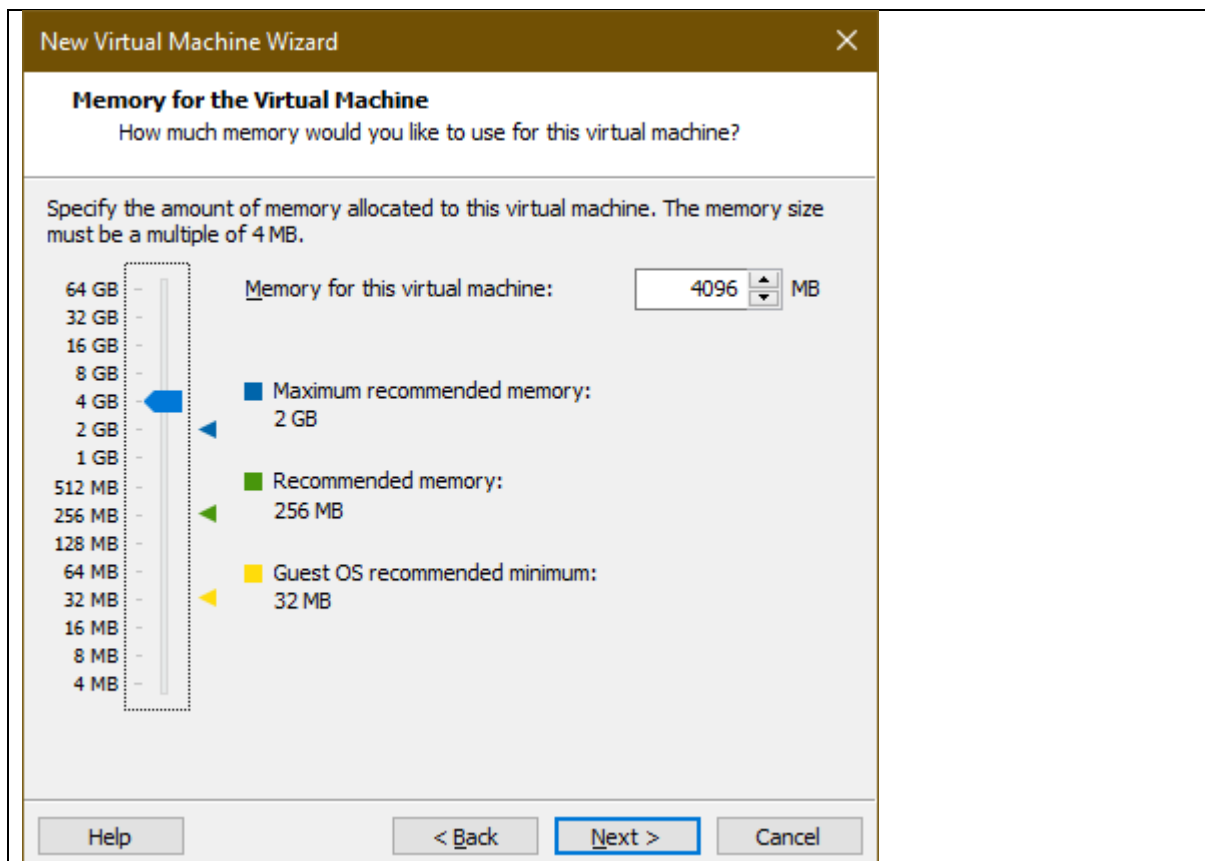
Location:

The default location can be changed at Edit > Preferences.

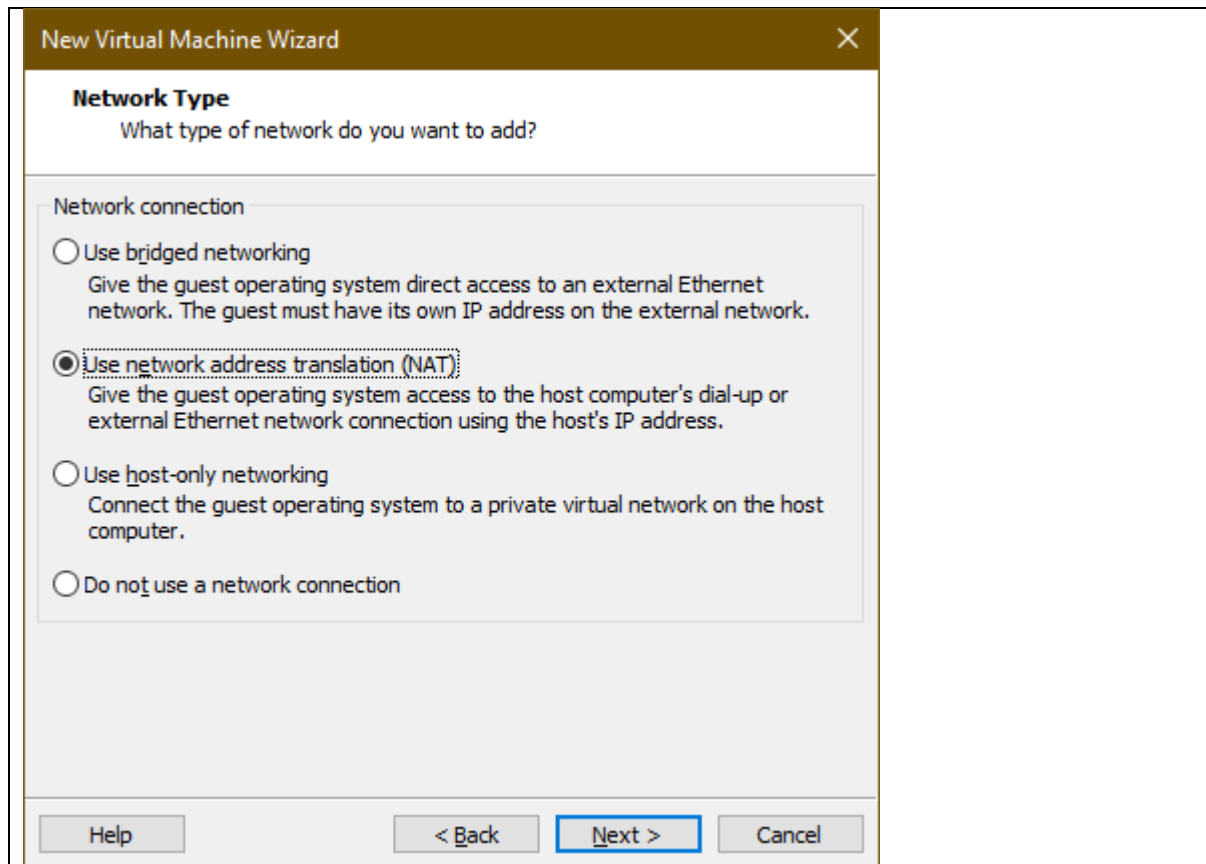
5. Gunakan 4 processor dan 1 core



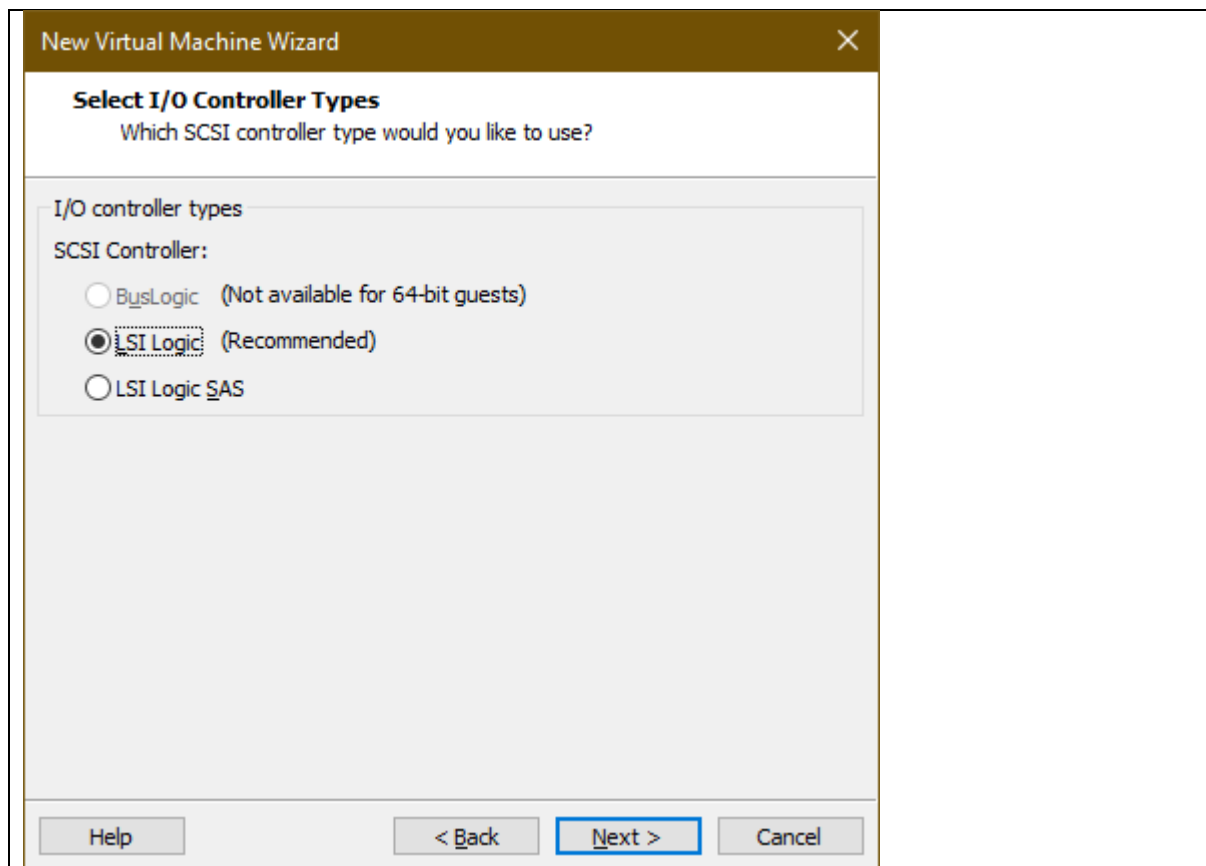
6. Gunakan RAM sebesar 4 GB



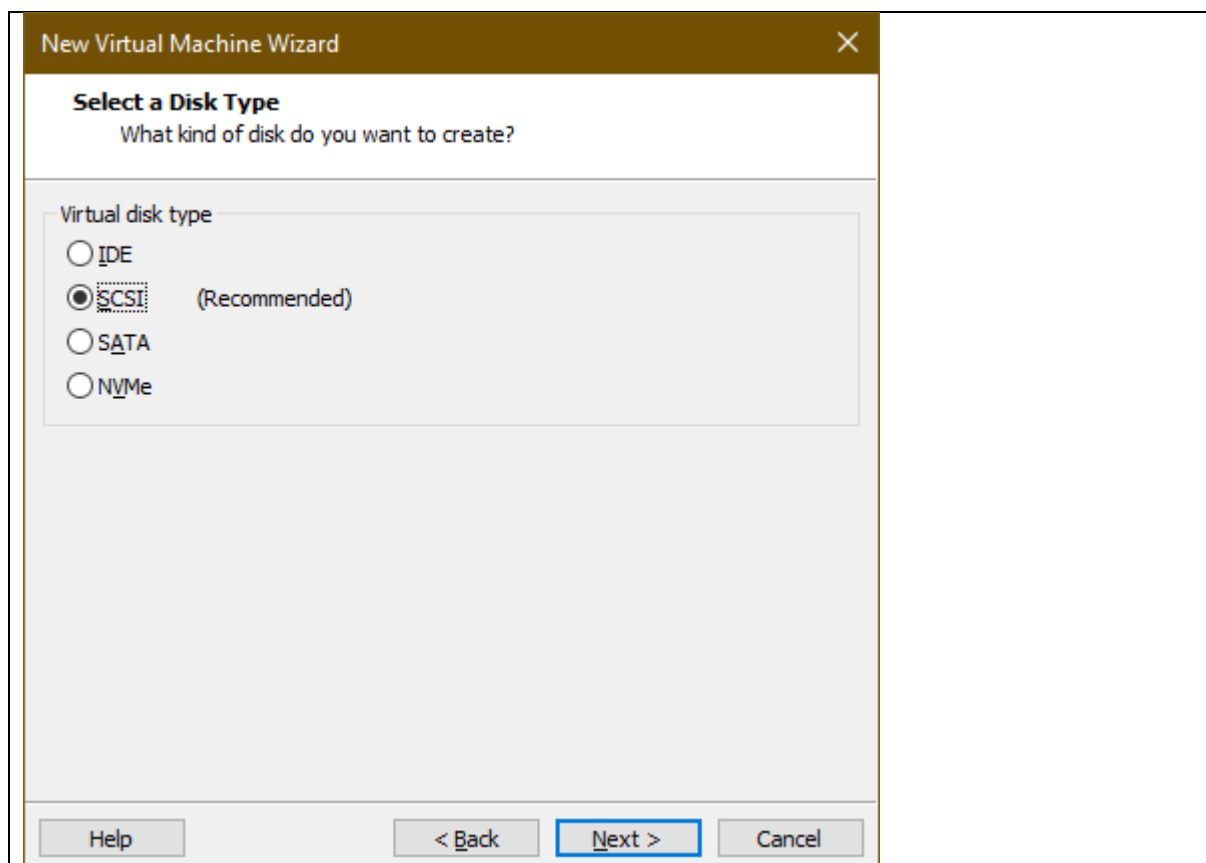
## 7. Gunakan mode jaringan NAT



## 8. Gunakan pengaturan default I/O Controller

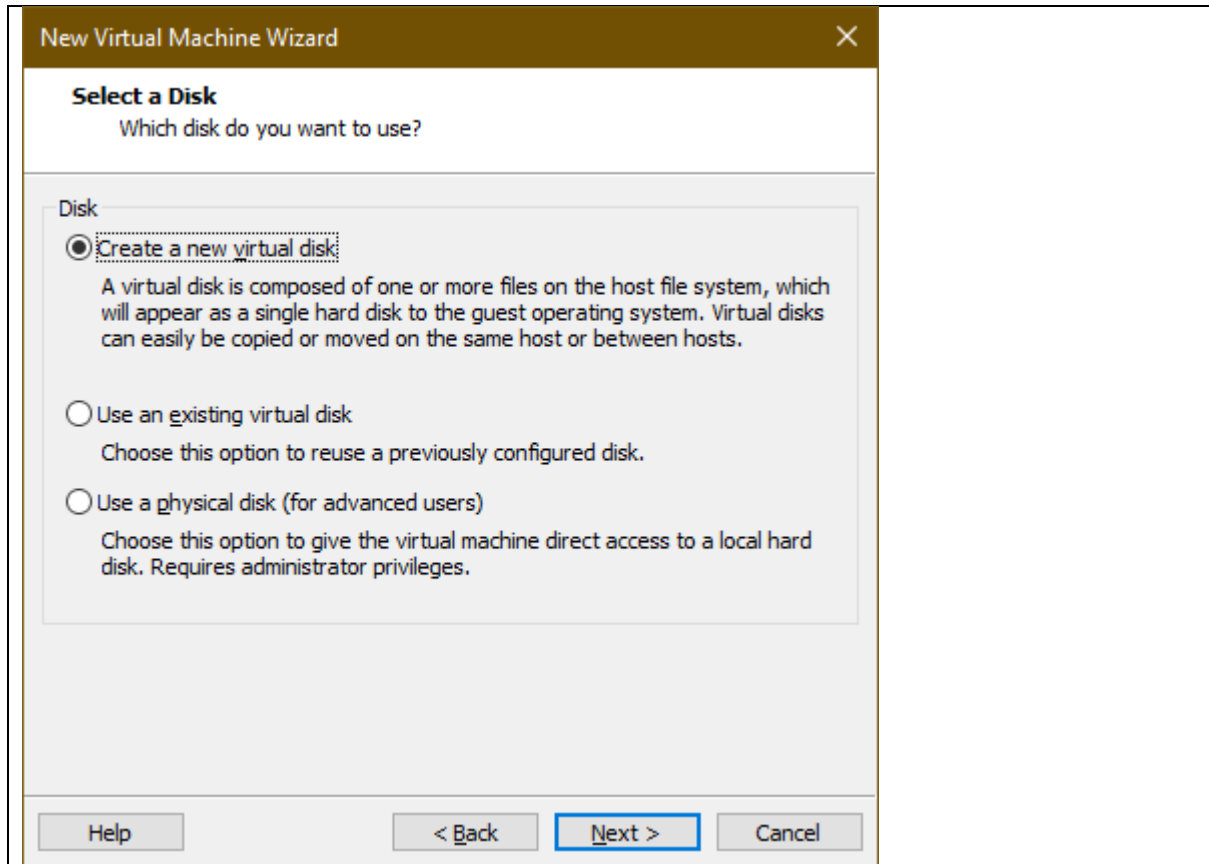


9. Gunakan pengaturan default Virtual Disk Type





## 10. Pilih opsi buat virtual disk baru



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

**New Virtual Machine Wizard** [X]

**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

**New Virtual Machine Wizard** [X]

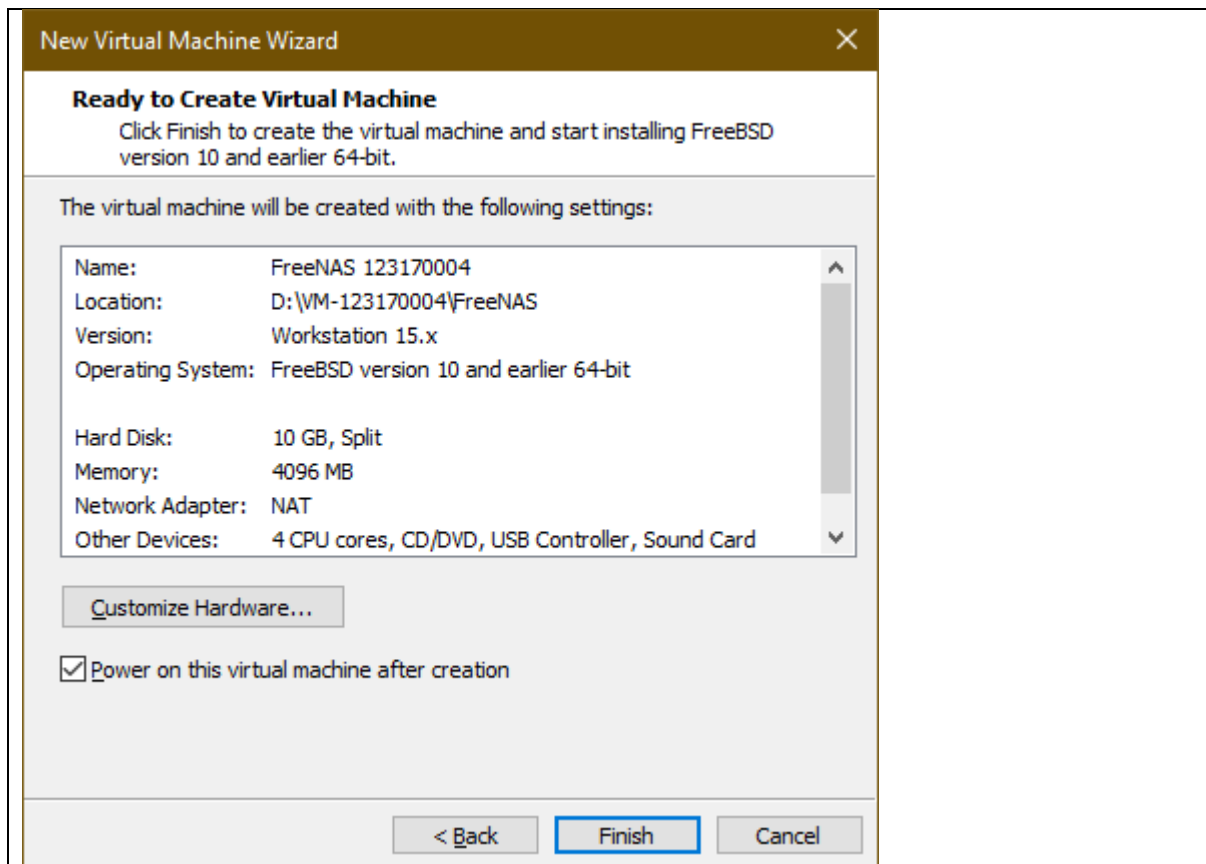
**Specify Disk File**  
Where would you like to store the disk file?

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

Browse...

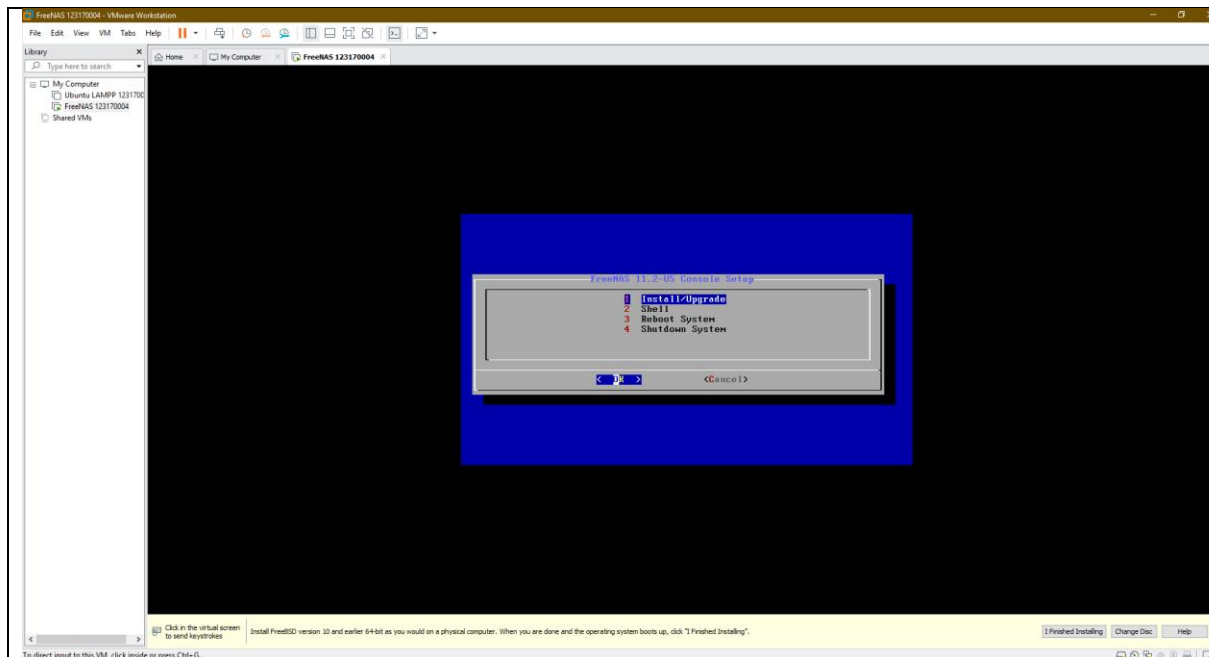
Help < Back Next > Cancel

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

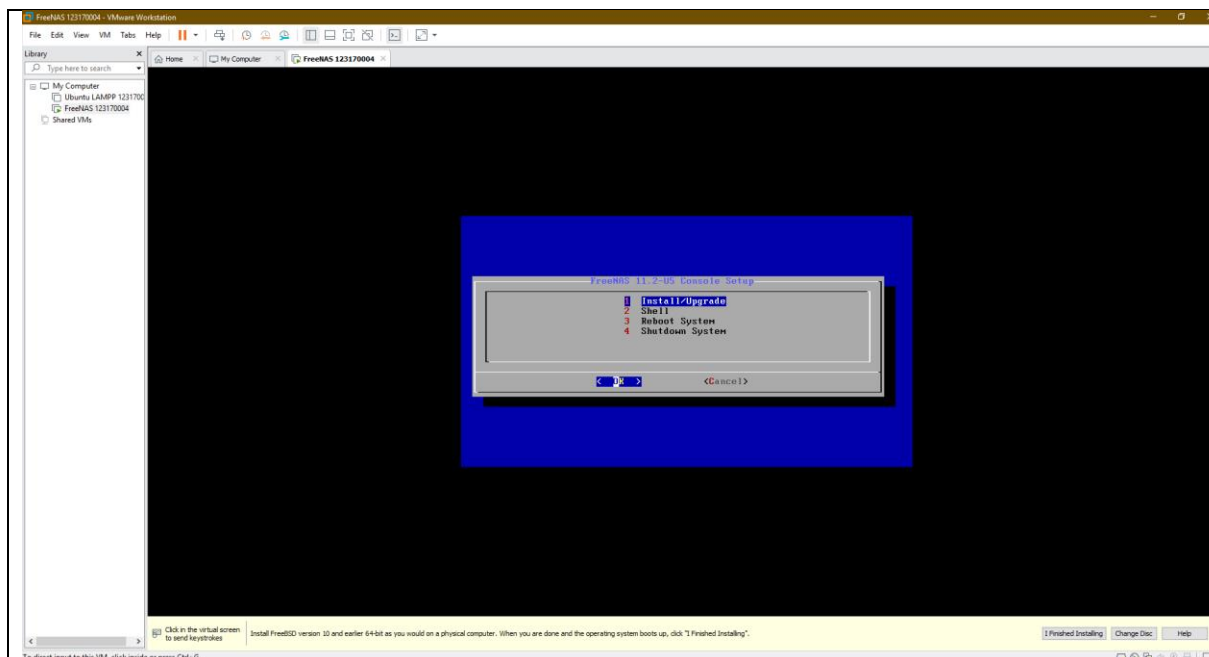


**TUGAS BAGIAN KEDUA – INSTALASI FREENAS:**

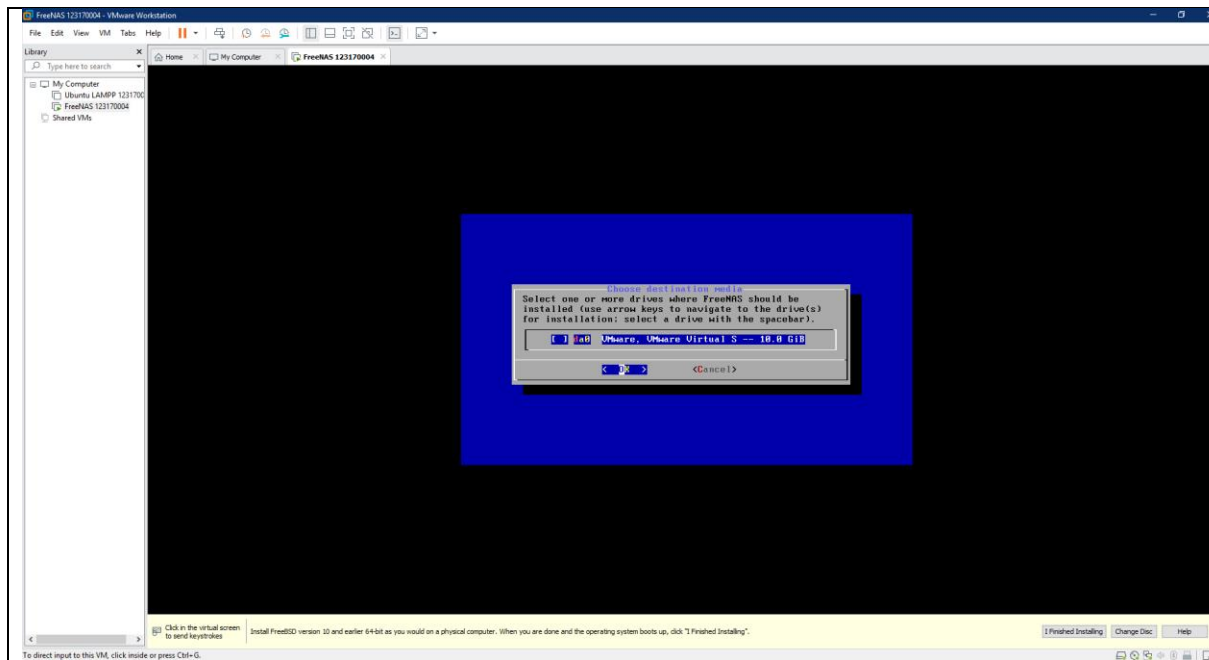
## 1. Tampilan awal tahap instalasi FreeNAS, pilih Install/Upgrade



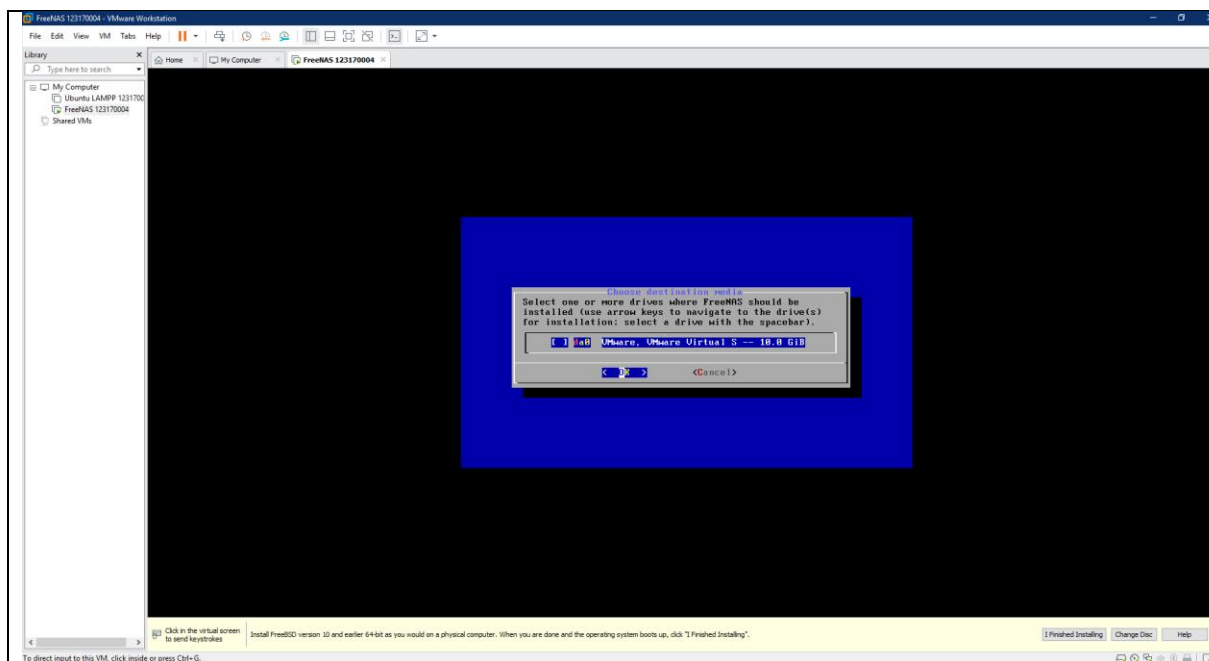
## 2. Tampilan warning RAM kurang dari 8GB, pilih Yes



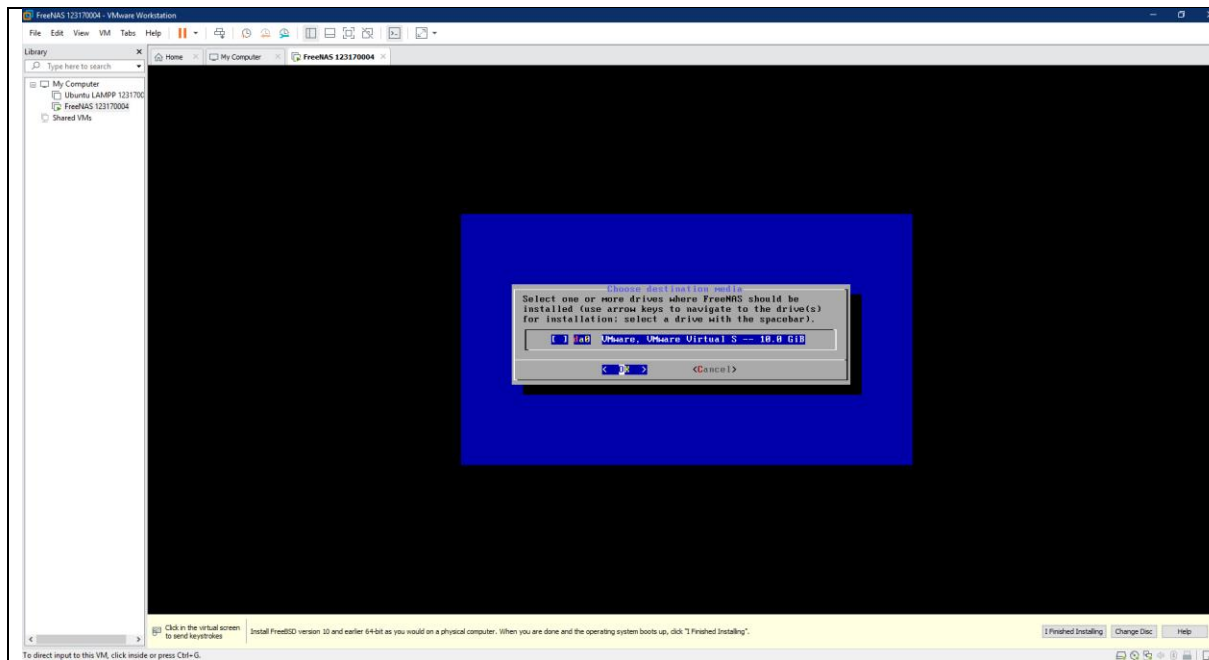
## 3. Tampilan pemilihan destination media untuk dipasang FreeNAS, pilih da0



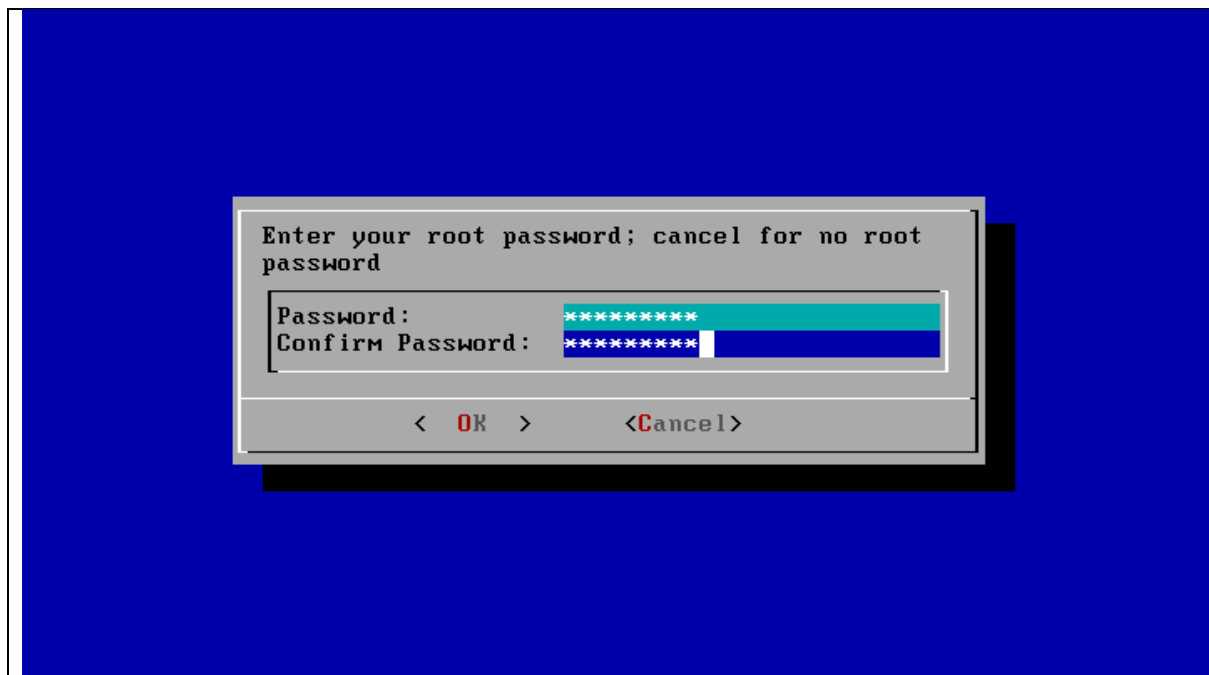
#### 4. Tampilan konfirmasi penghapusan/format media yang terpilih, pilih Yes



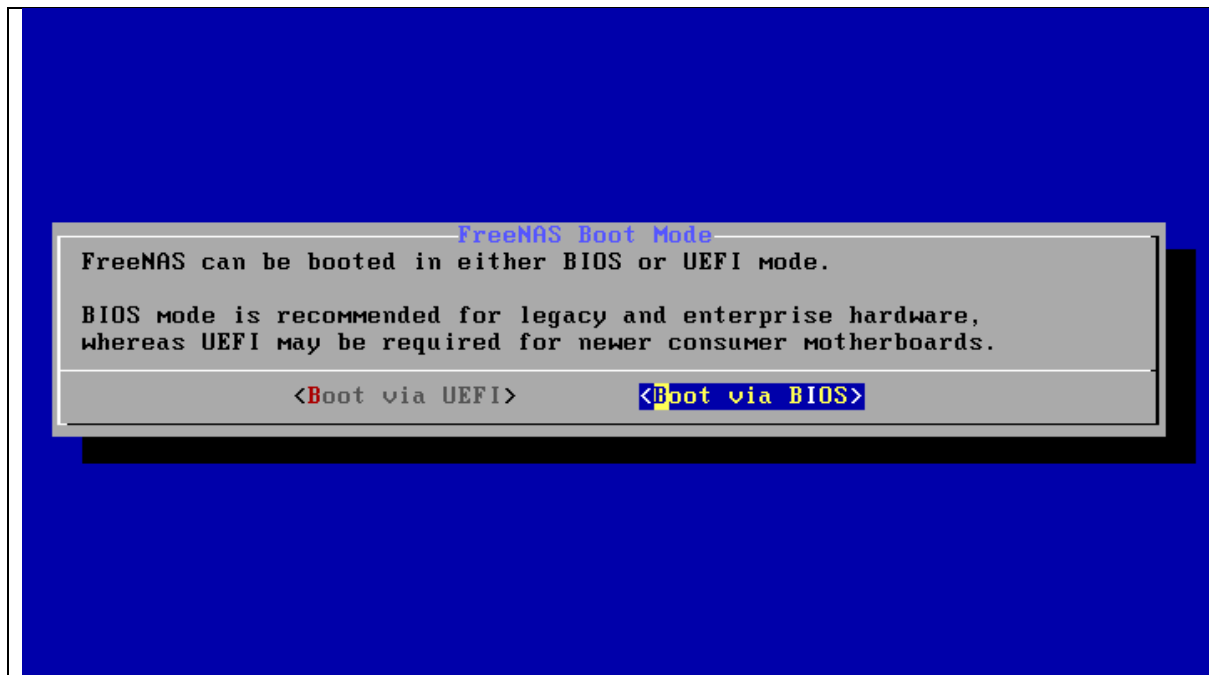
#### 5. Tampilan pengaturan kata sandi, gunakan NIM atau bebas



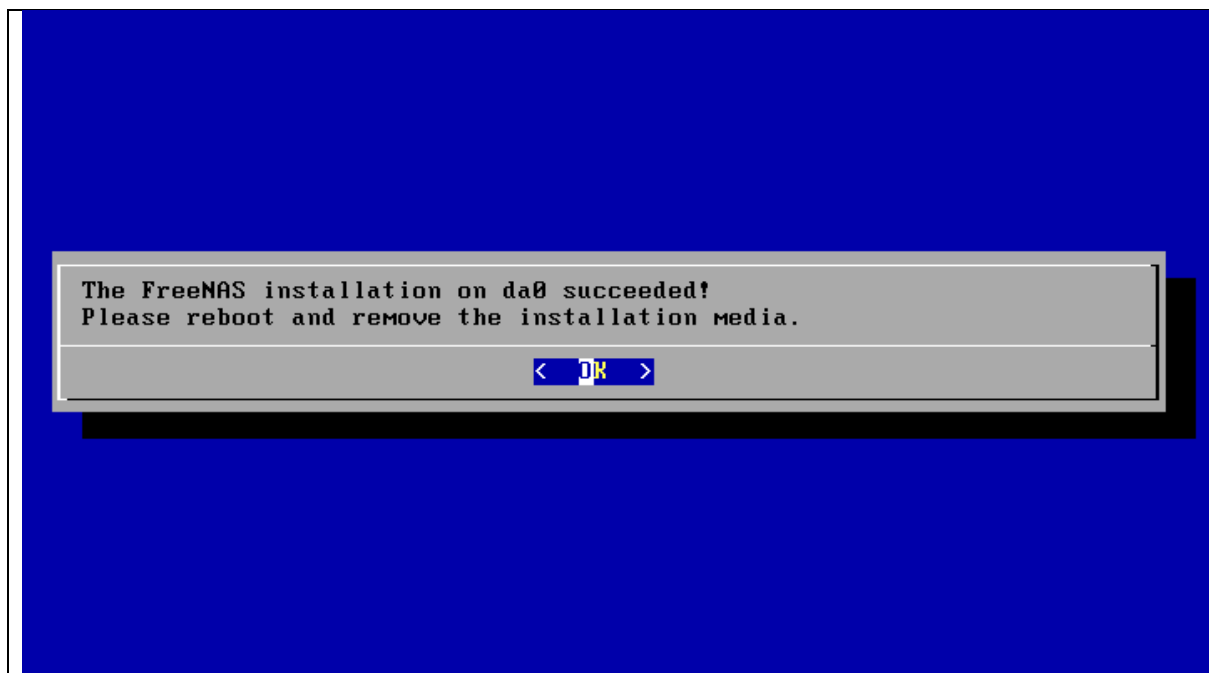
## 6. Tampilan mode boot dari FreeNAS, pilih BIOS



## 7. Tampilan proses instalasi FreeNAS



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



9. Tampilan proses booting menuju FreeNAS OS

```
,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 middleware.
freenas_sysctl: adding network.
freenas_sysctl: adding services.
ipfw2 (+ipv6) initialized, divert enabled, nat enabled, default to accept, logging disabled
ugen1.1: <0x15ad EHCI root HUB> at usb1
ugen0.1: <0x15ad UHCI root HUB> at usb0
uhub0: <0x15ad EHCI root HUB, class 9/0, rev 2.00/1.00, addr 1> on usb1
uhub1: <0x15ad UHCI root HUB, class 9/0, rev 1.00/1.00, addr 1> on usb0
uhub1: 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 uhub1
uhub2: <VMware Virtual USB Hub> on usb0
uhub0: 6 ports with 6 removable, self powered
uhub2: 7 ports with 7 removable, self powered
```

#### 10. Tampilan hasil akhir booting yang menunjukkan Console Setup

```
Tue Mar  3 22:59:43 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

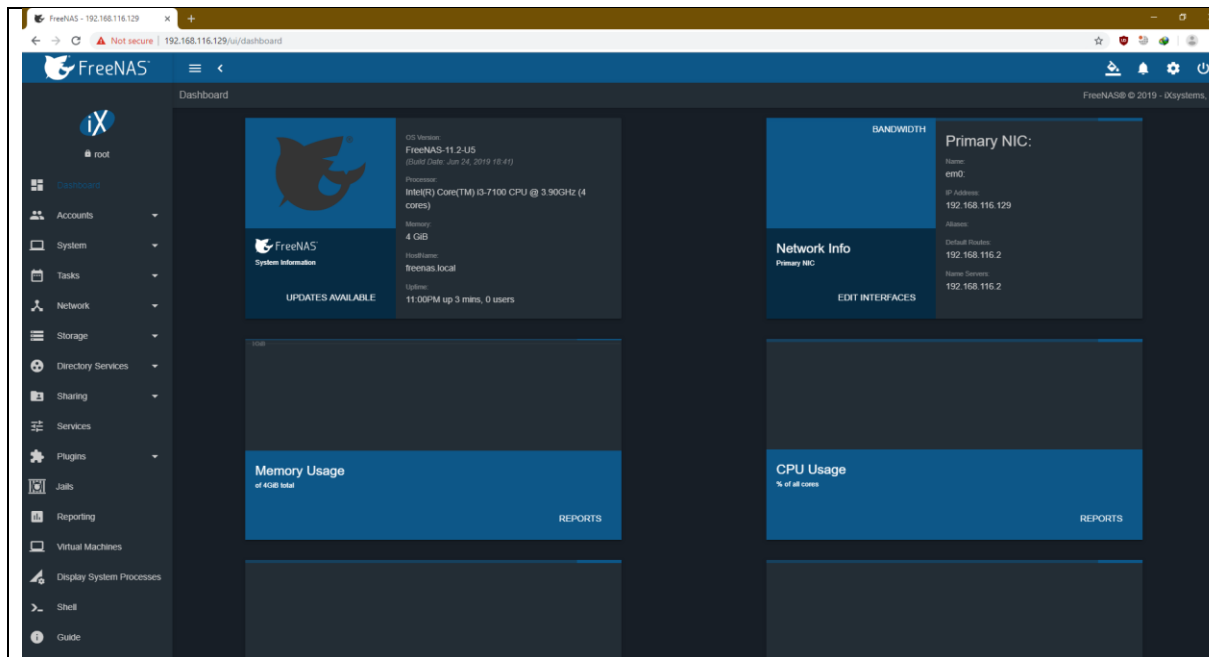
The web user interface is at:
http://192.168.116.129

Enter an option from 1-11: █
```

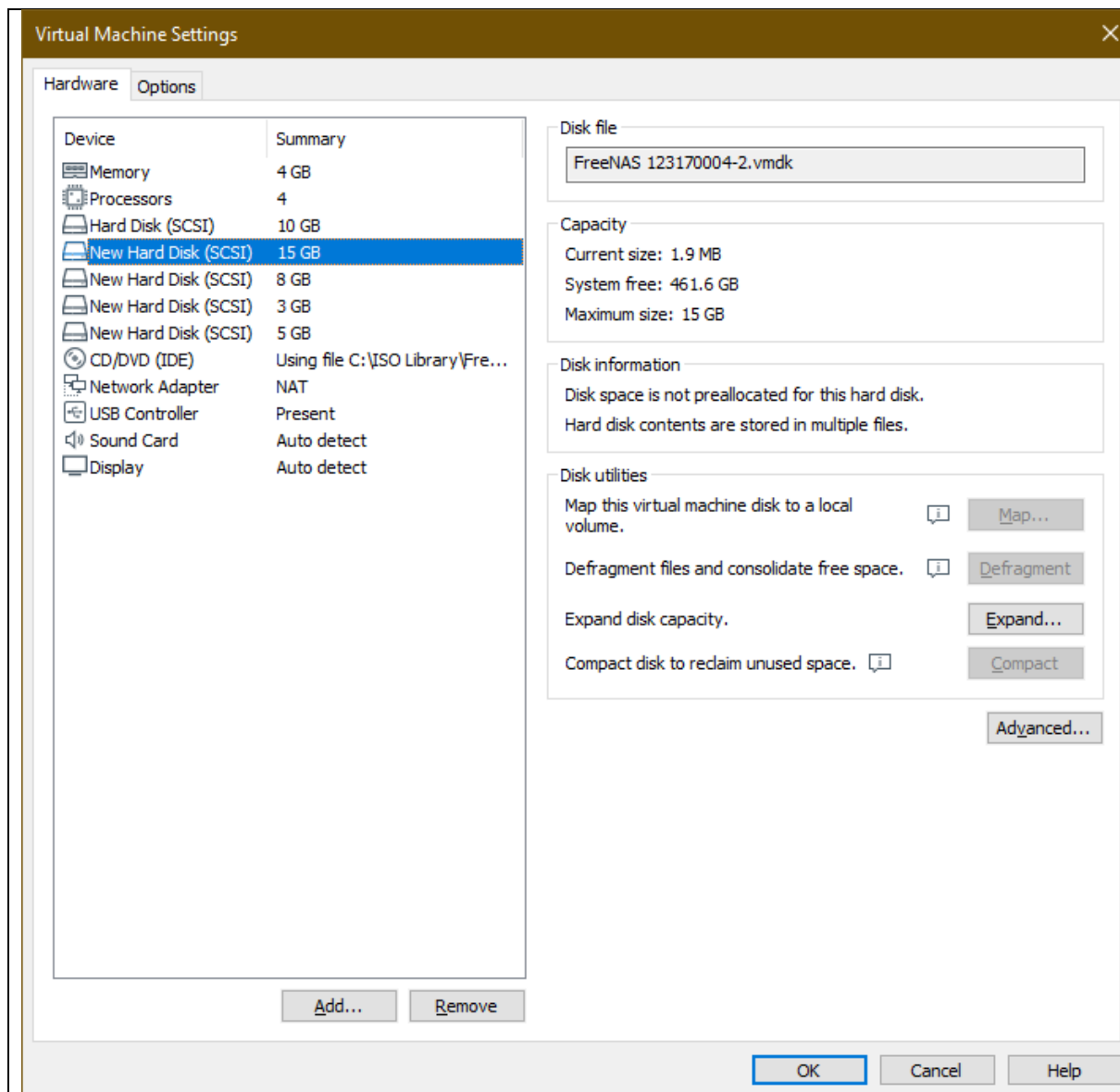


**TUGAS BAGIAN KETIGA – KONFIGURASI FREENAS:**

## 1. Tampilan dashboard setelah login FreeNAS



## 2. Tampilan konfigurasi VM pada Eksperimen #1



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

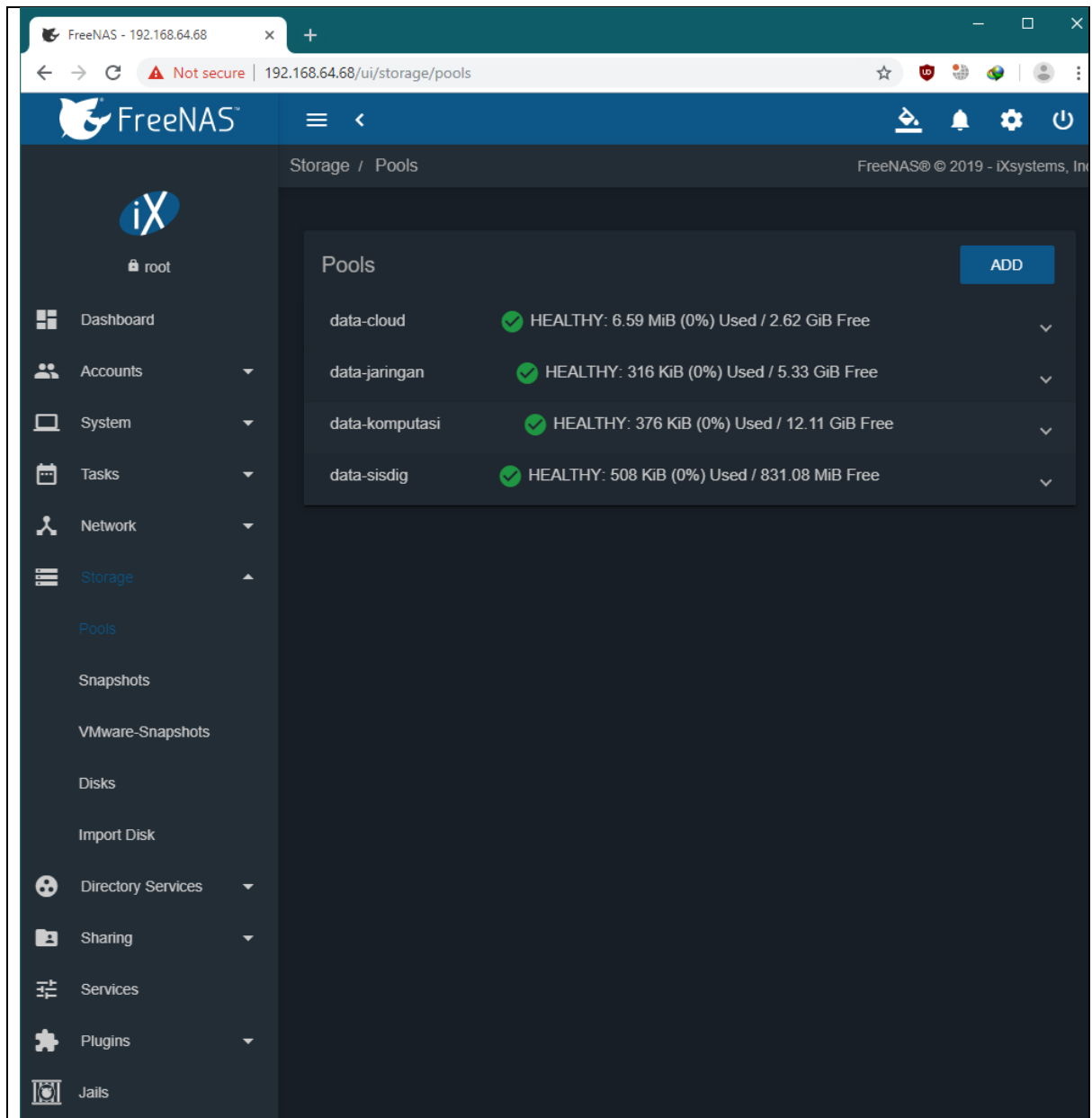
```
Tue Mar  3 23:10:33 PST 2020
FreeBSD/amd64 (freenas.local) (ttyv0)

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://192.168.64.68
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

FreeNAS - 192.168.64.68

Not secure | 192.168.64.68/ui/account/users

FreeNAS® © 2019 - iXsystems, Inc.

Accounts / Users

Filter Users

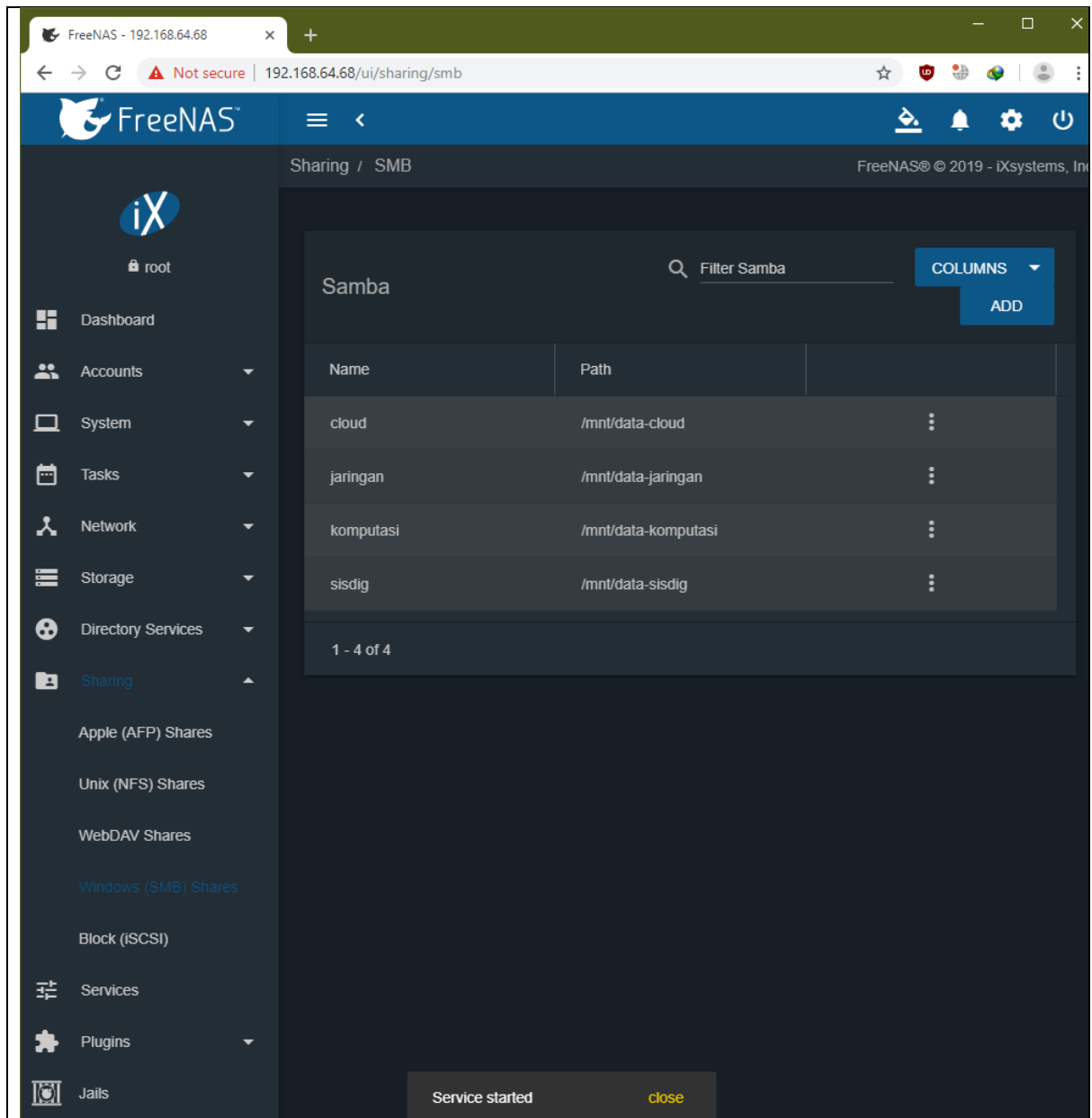
COLUMNS ADD

Username	Home directory	Shell	Full Name	
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
daemon	/root	/usr/sbin/nologin	Owner of many sy	no
operator	/	/usr/sbin/nologin	System &	no
bin	/	/usr/sbin/nologin	Binaries Comm	no
tty	/	/usr/sbin/nologin	Tty Sandbox	no
kmem	/	/usr/sbin/nologin	KMem Sandbox	no
games	/	/usr/sbin/nologin	Games pseudo-u	no
news	/	/usr/sbin/nologin	News Subsystem	no

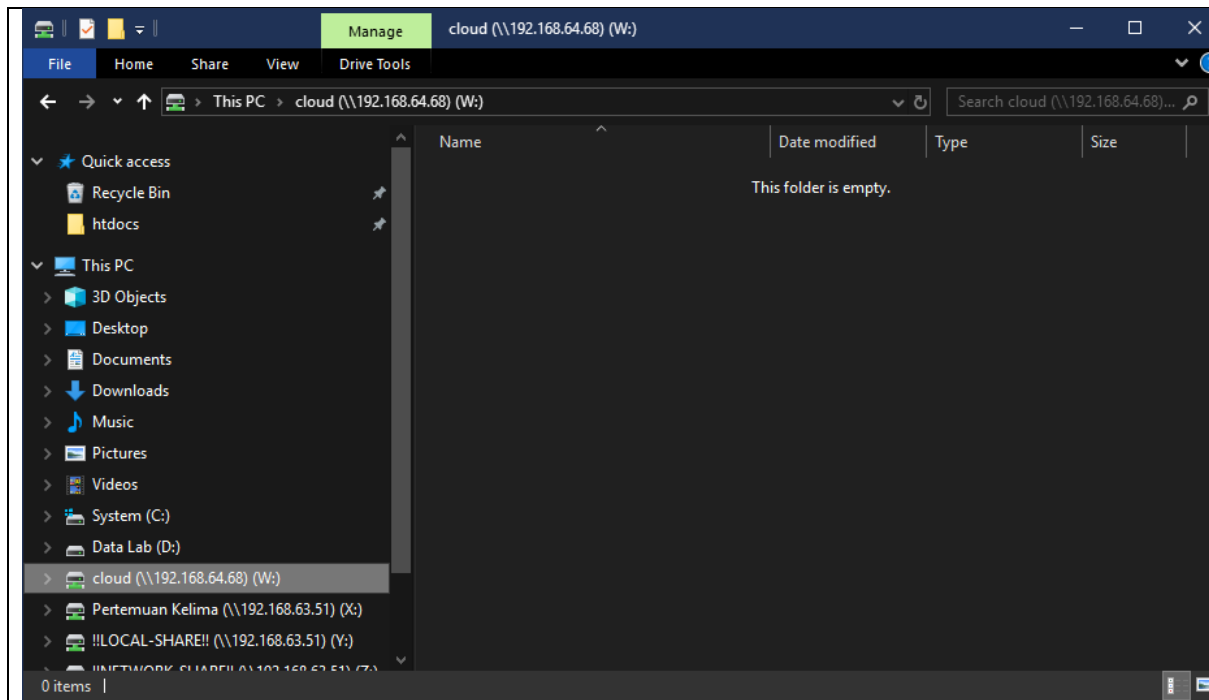
1 - 12 of 37

1 2 3 4

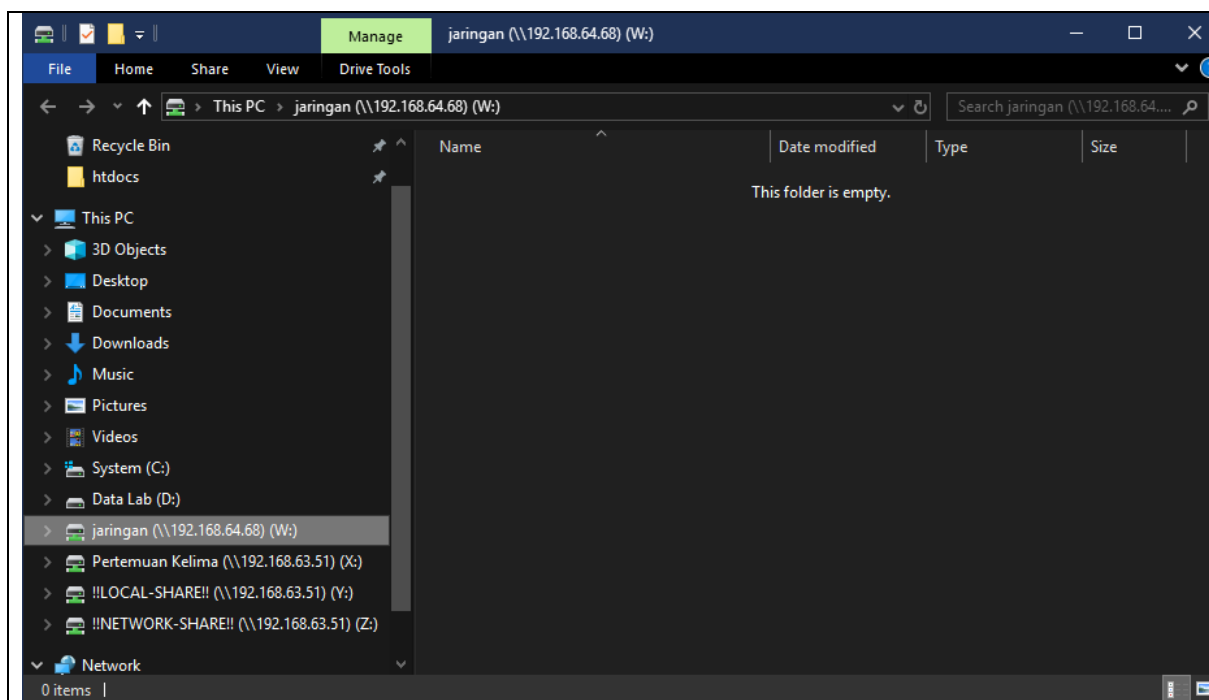
6. Tampilkan hasil dari pembuatan shares tambahan untuk 4 lab pada menu Sharing -> Windows (SMB) Shares



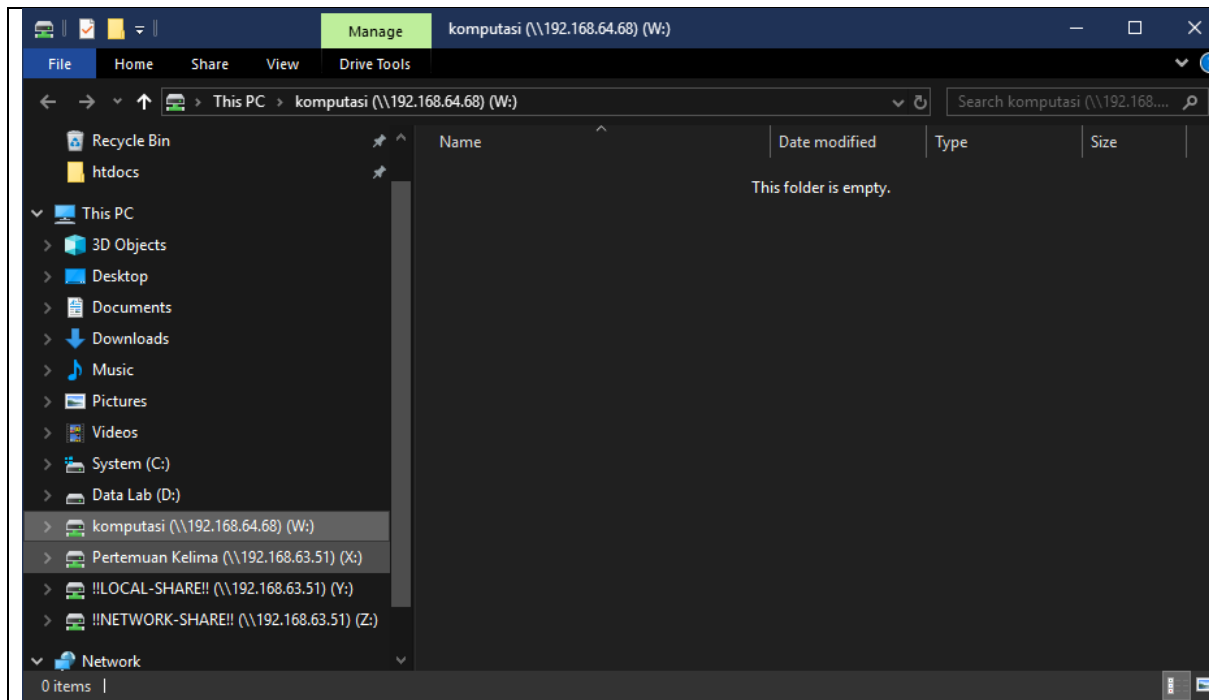
7. Tampilkan hasil akses shares pada Windows Explorer (hasil mapping) untuk Lab Cloud (yang pertama kali dibuat)



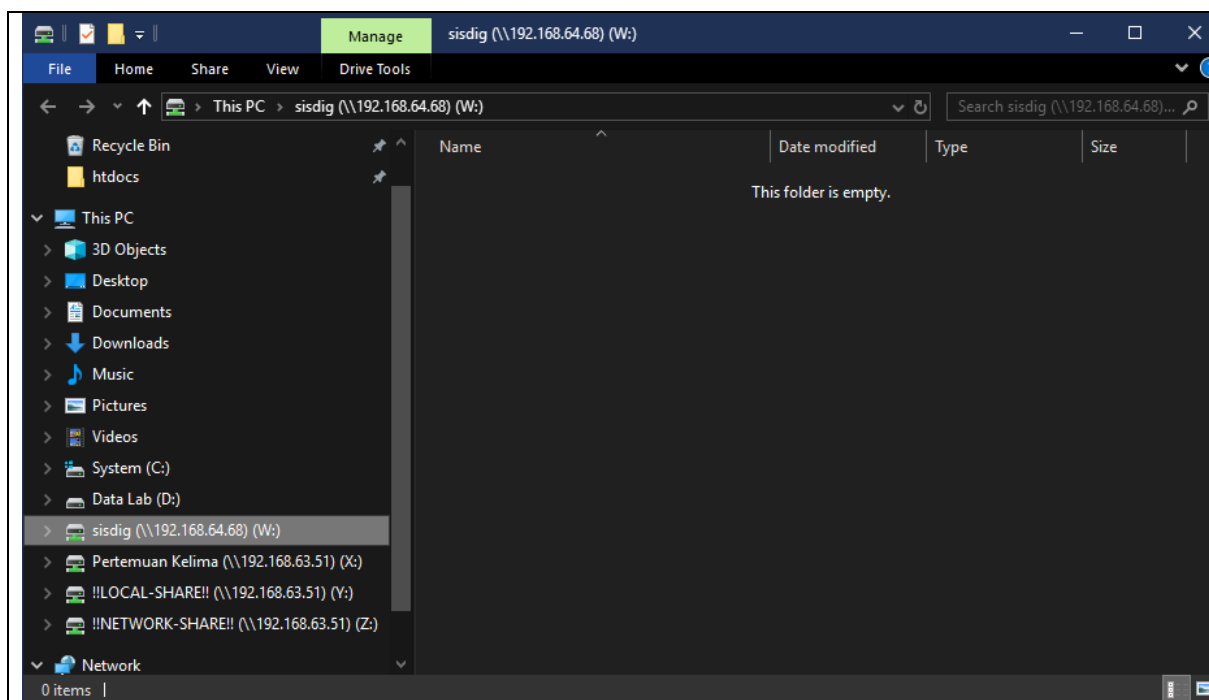
#### 8. Tampilkan hasil akses shares untuk Lab Jaringan



#### 9. Tampilkan hasil akses shares untuk Lab Komputasi

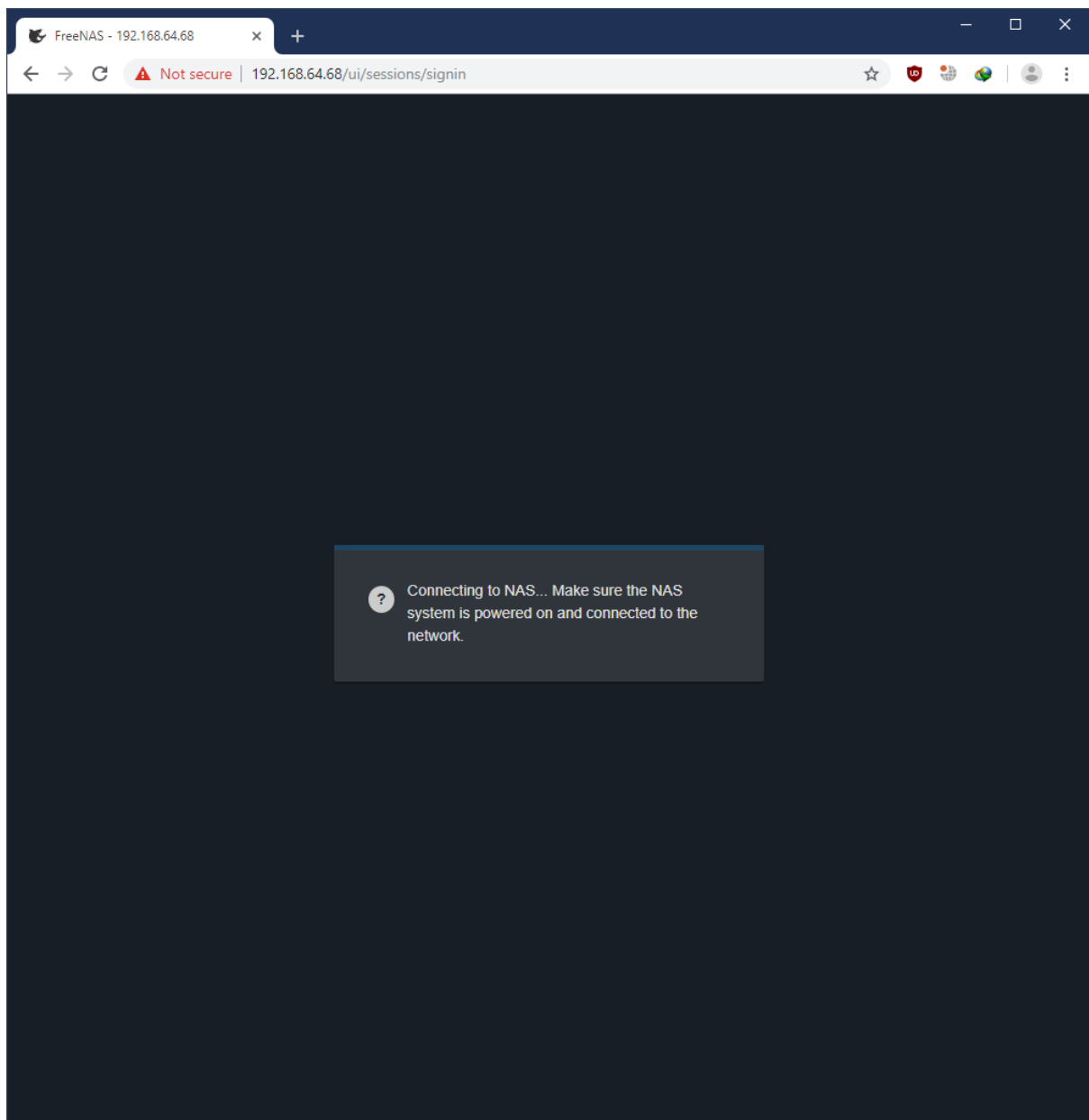


#### 10. Tampilkan hasil akses shares untuk Lab Sisdig





## **DOKUMENTASI PERTEMUAN KELIMA (BILA ADA)**



Tampilan ketika FreeNAS poweroff