LEMBAR KERJA PRAKTIKUM CLOUD COMPUTING

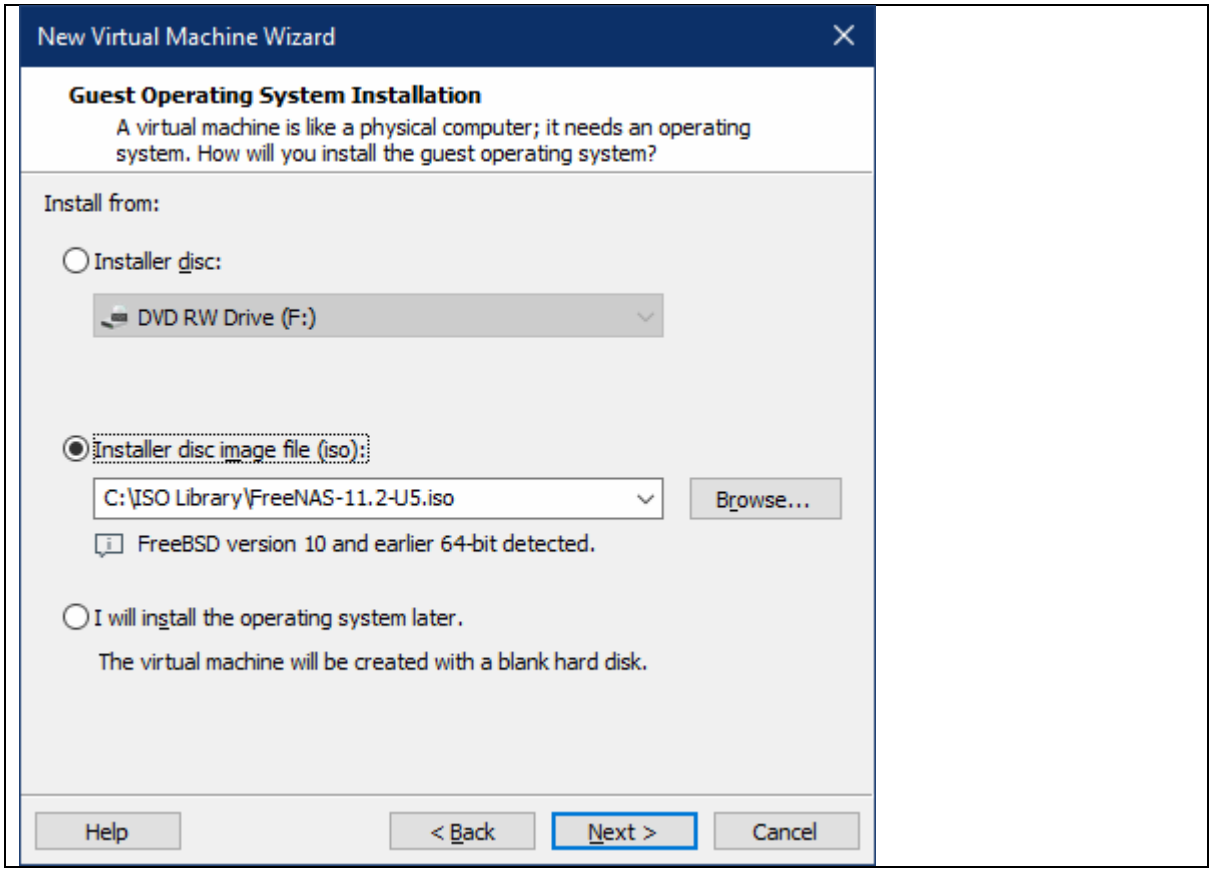
INSTALASI DAN KONFIGURASI LAYANAN FILE SHARING DENGAN FREENAS

IDENTITAS:

Nama:	**Sakti Wicaksono**
NIM:	**123170031**
Kelas:	**E**
Hari, Tanggal:	**Rabu, 04 Maret 2020**

CONTOH ISIAN DAN PETUNJUK:

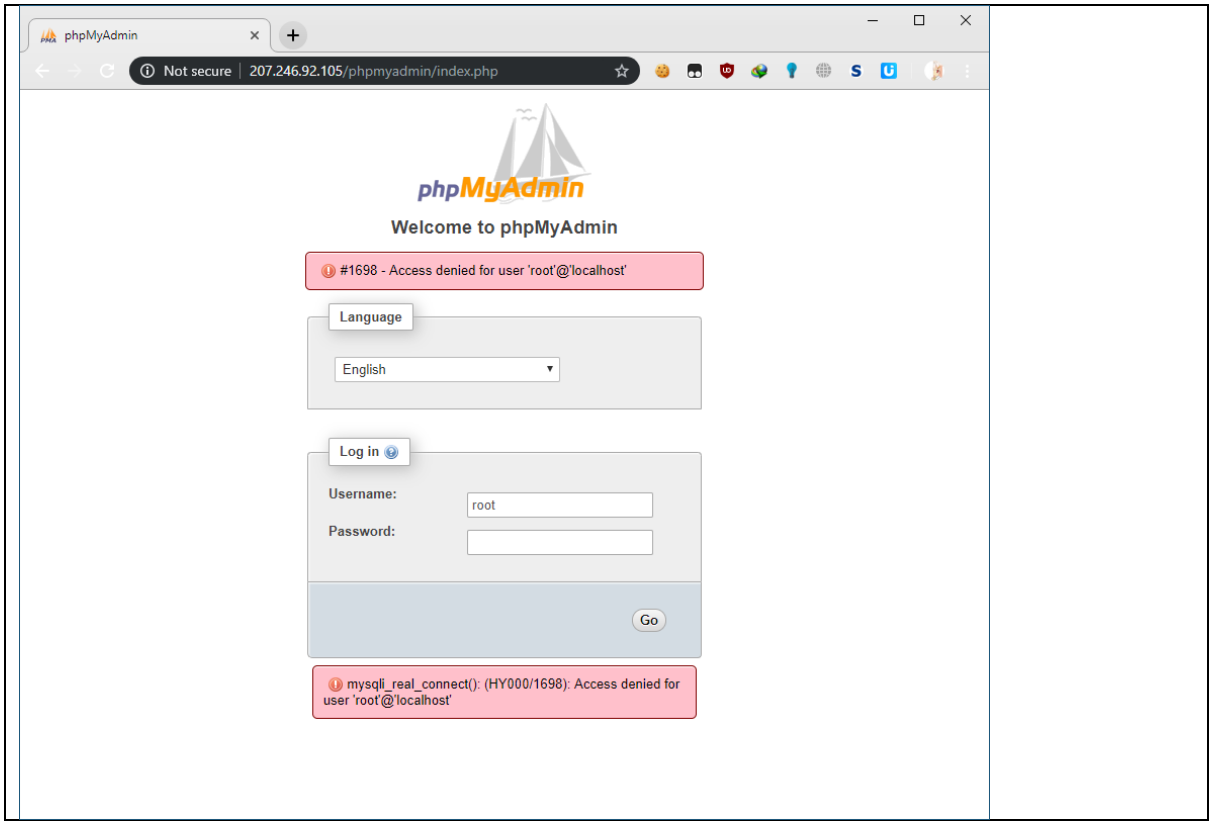
1. **[Contoh]** Gunakan ISO FreeNAS-11.2-U5 di folder ISO Library



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

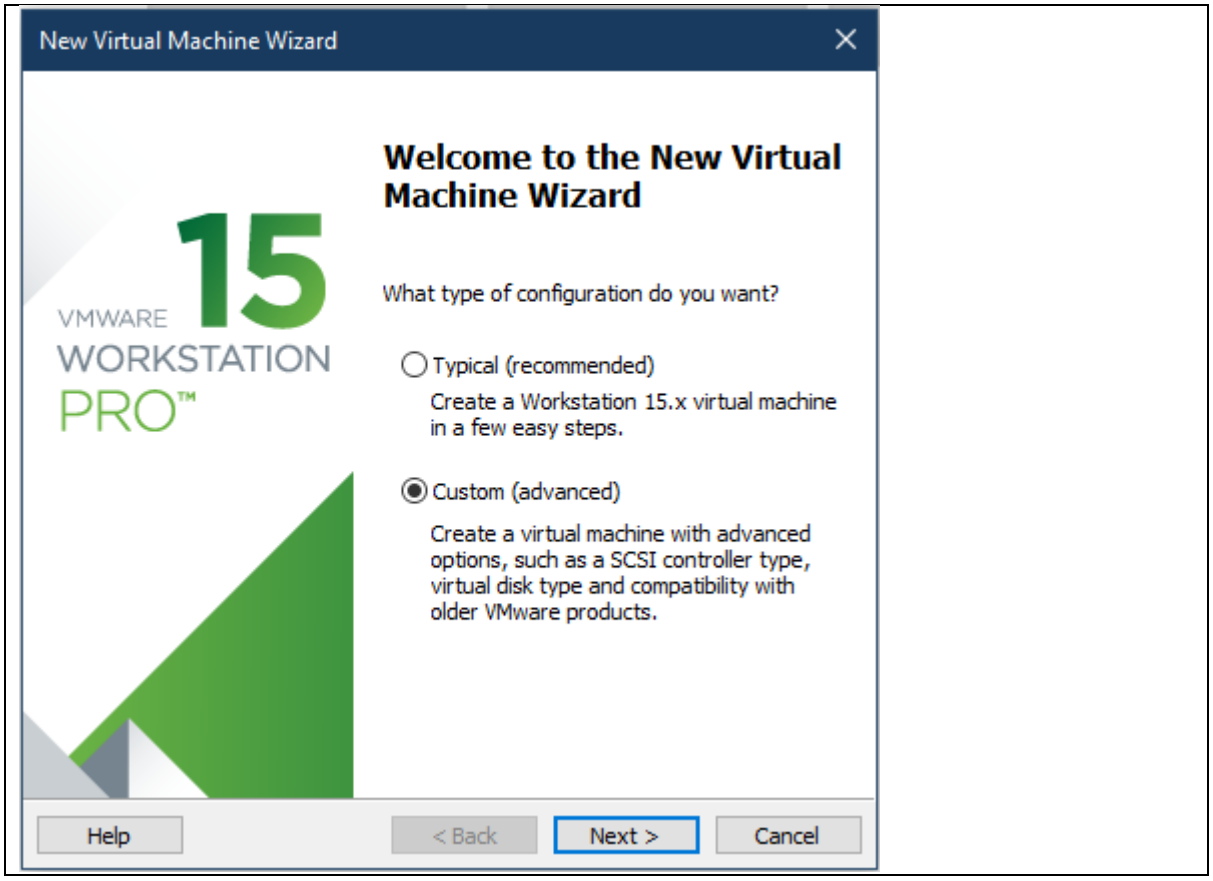
```
$ exit

Perintah exit digunakan untuk keluar dari sesi akun aktif
```

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

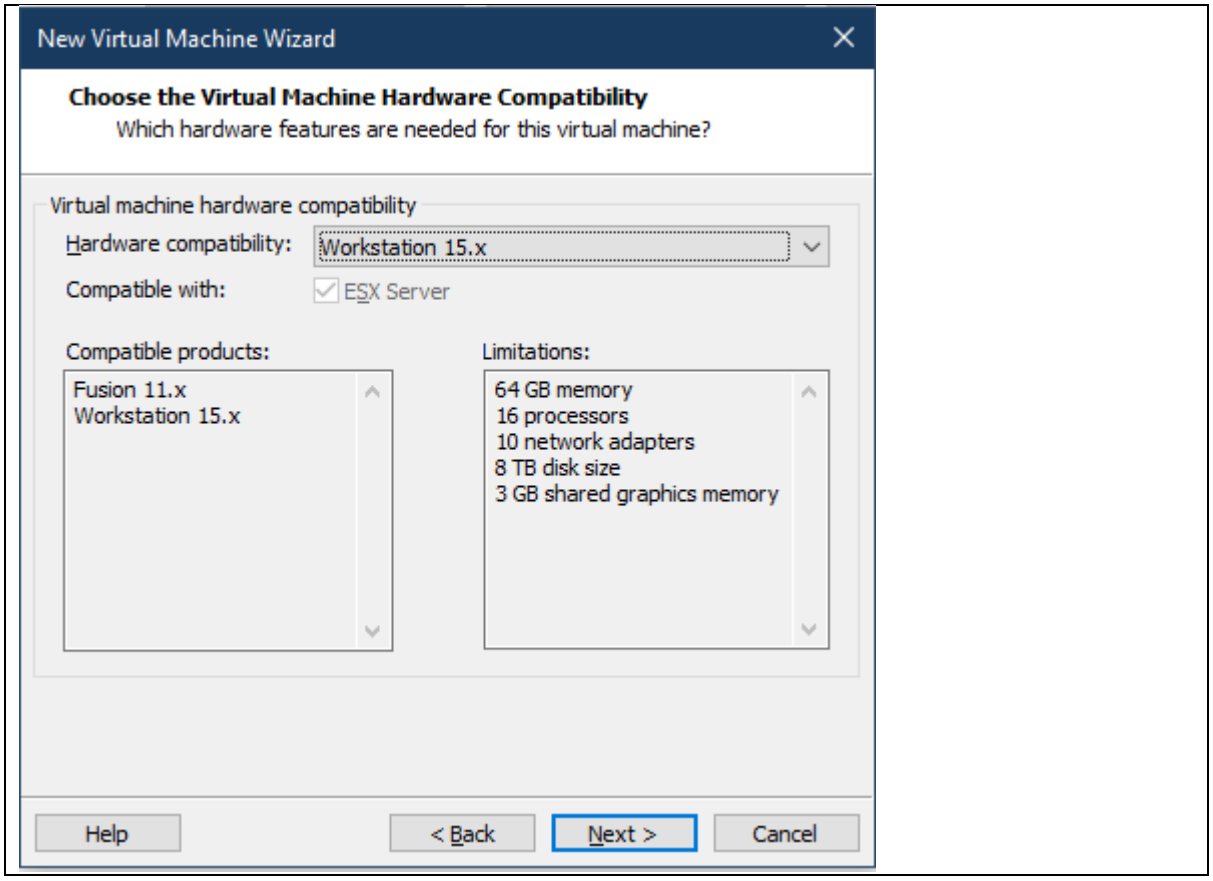


TUGAS BAGIAN PERTAMA – PEMBUATAN VM:

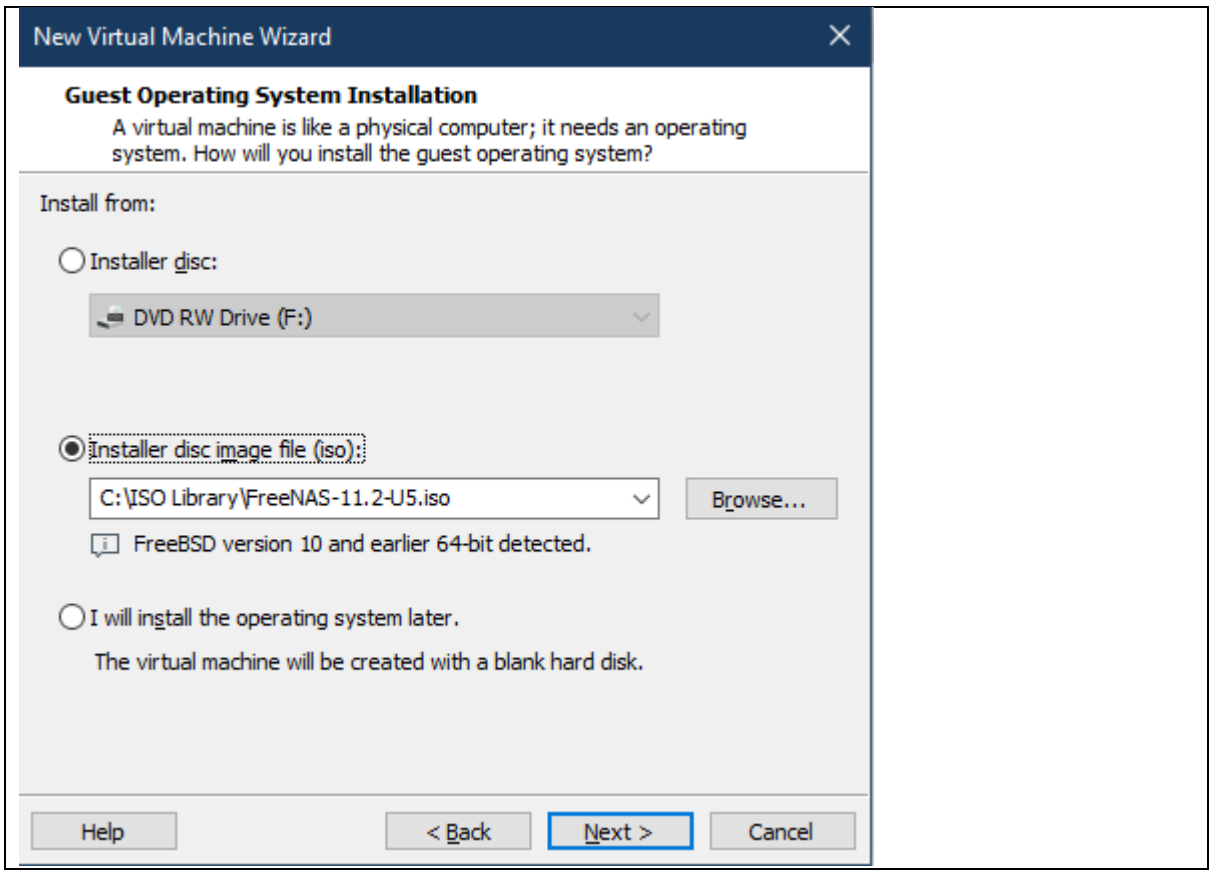
1. Gunakan opsi konfigurasi Custom



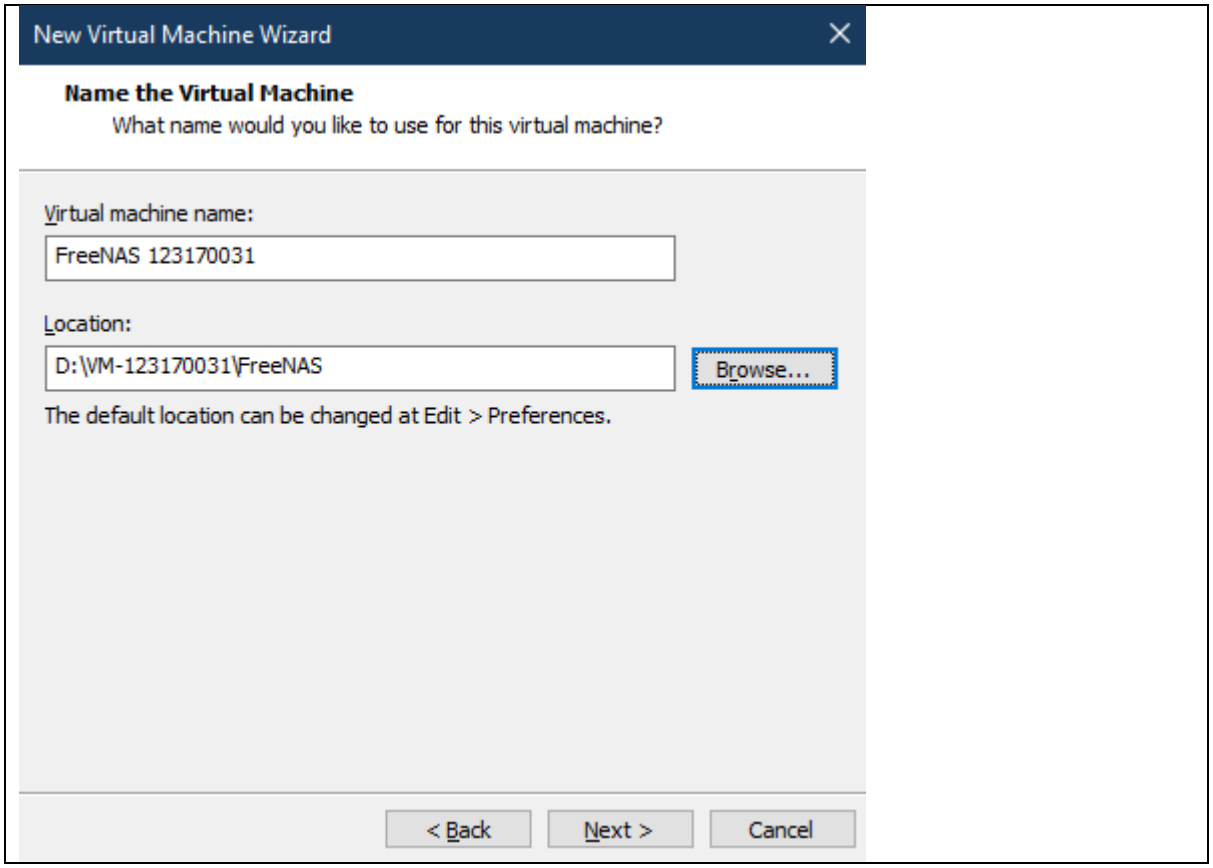
2. Gunakan compatibility Workstation 15.X



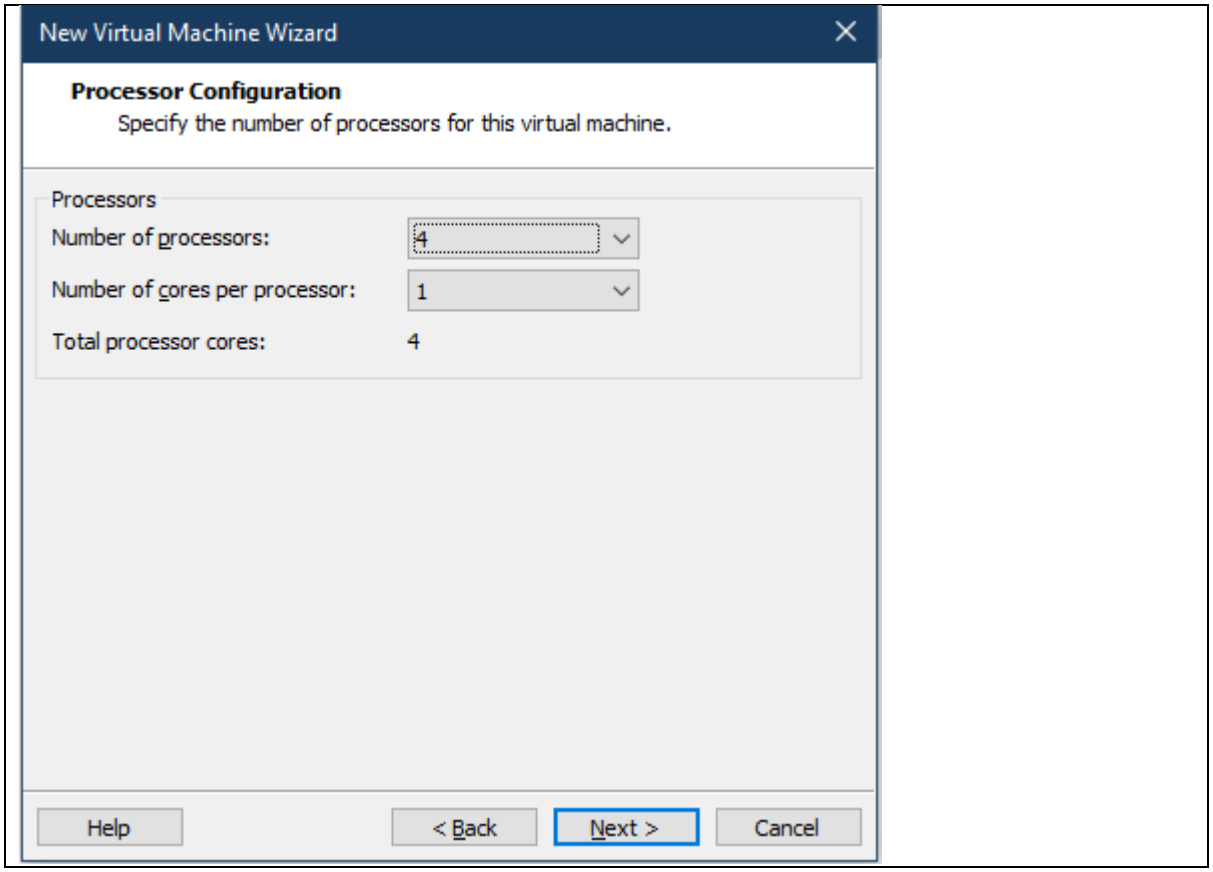
3. Gunakan ISO FreeNAS-11.2-U5 di folder ISO Library



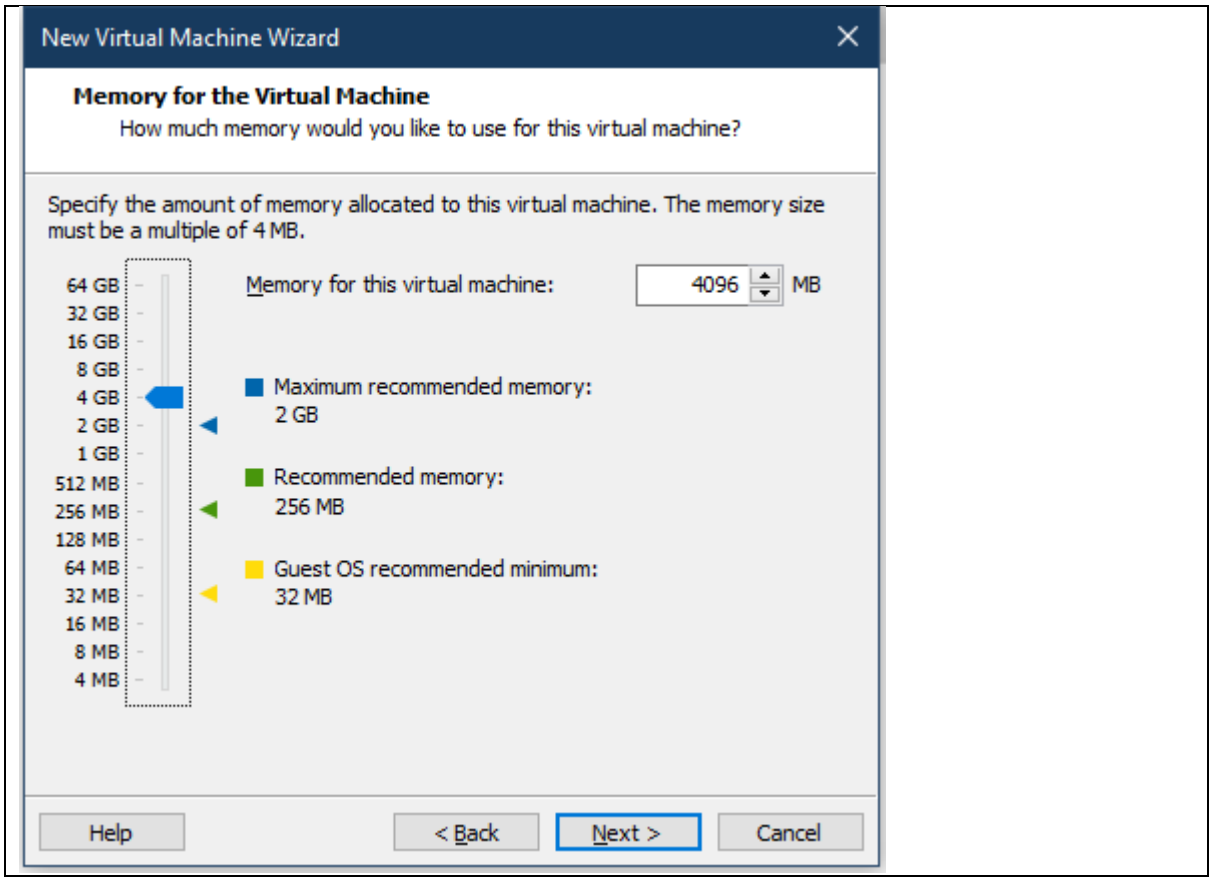
4. Format nama VM: **FreeNAS NIM** dan buat folder **FreeNAS** di dalam **VM-NIM**



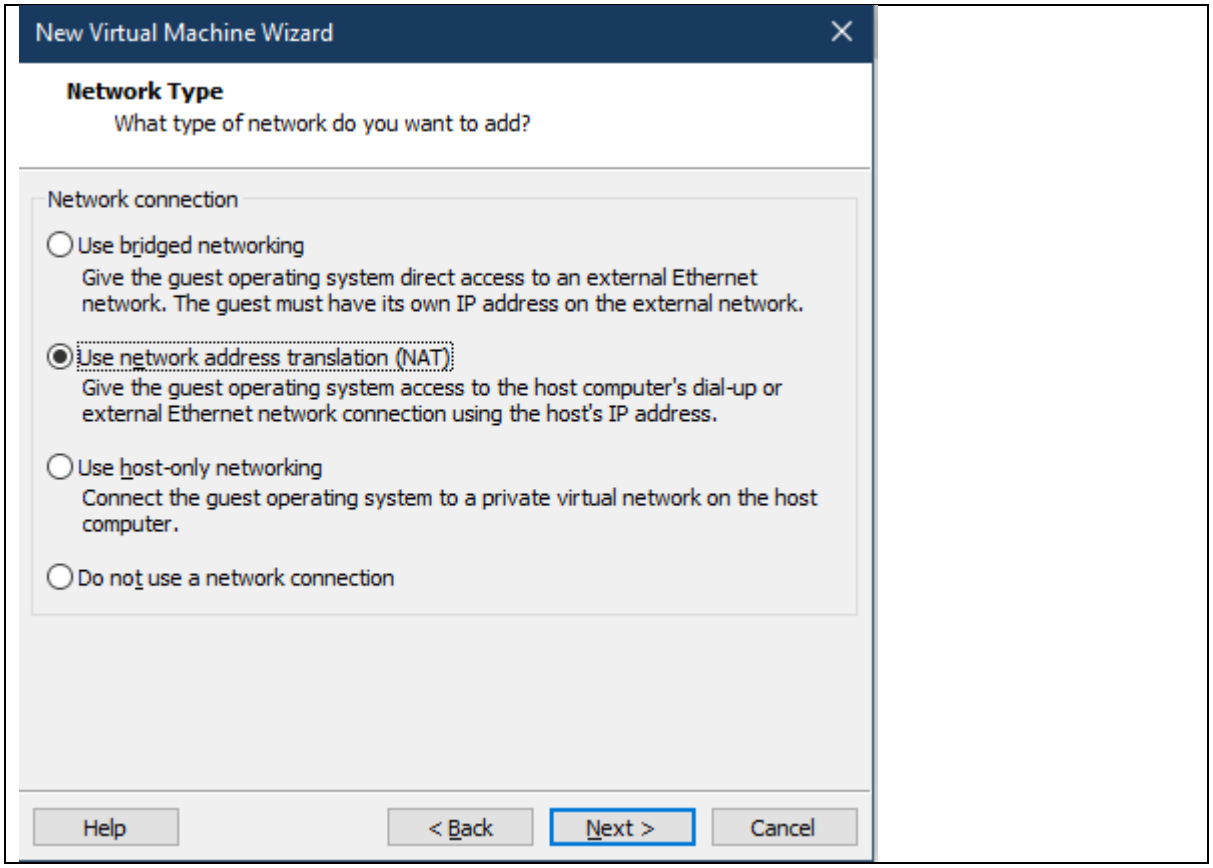
5. Gunakan 4 processor dan 1 core



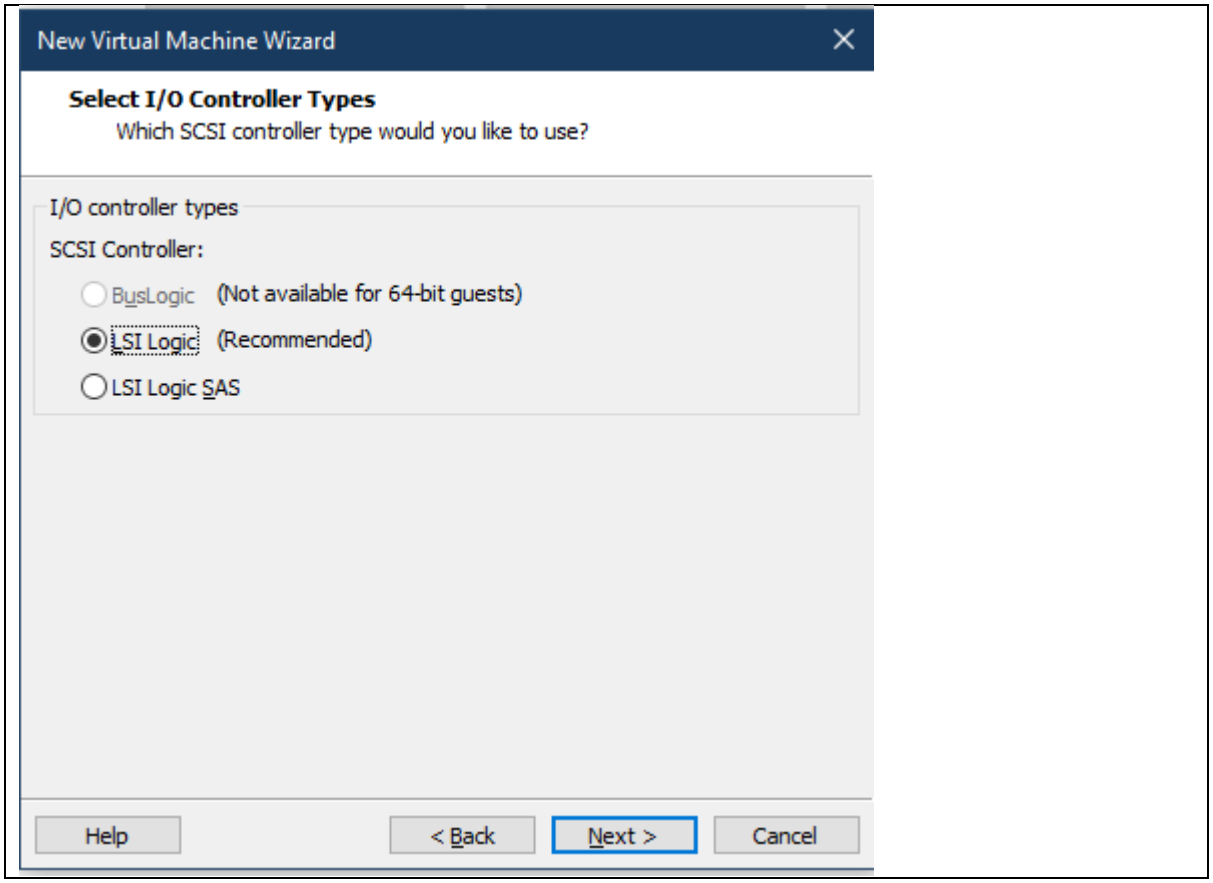
6. Gunakan RAM sebesar 4 GB



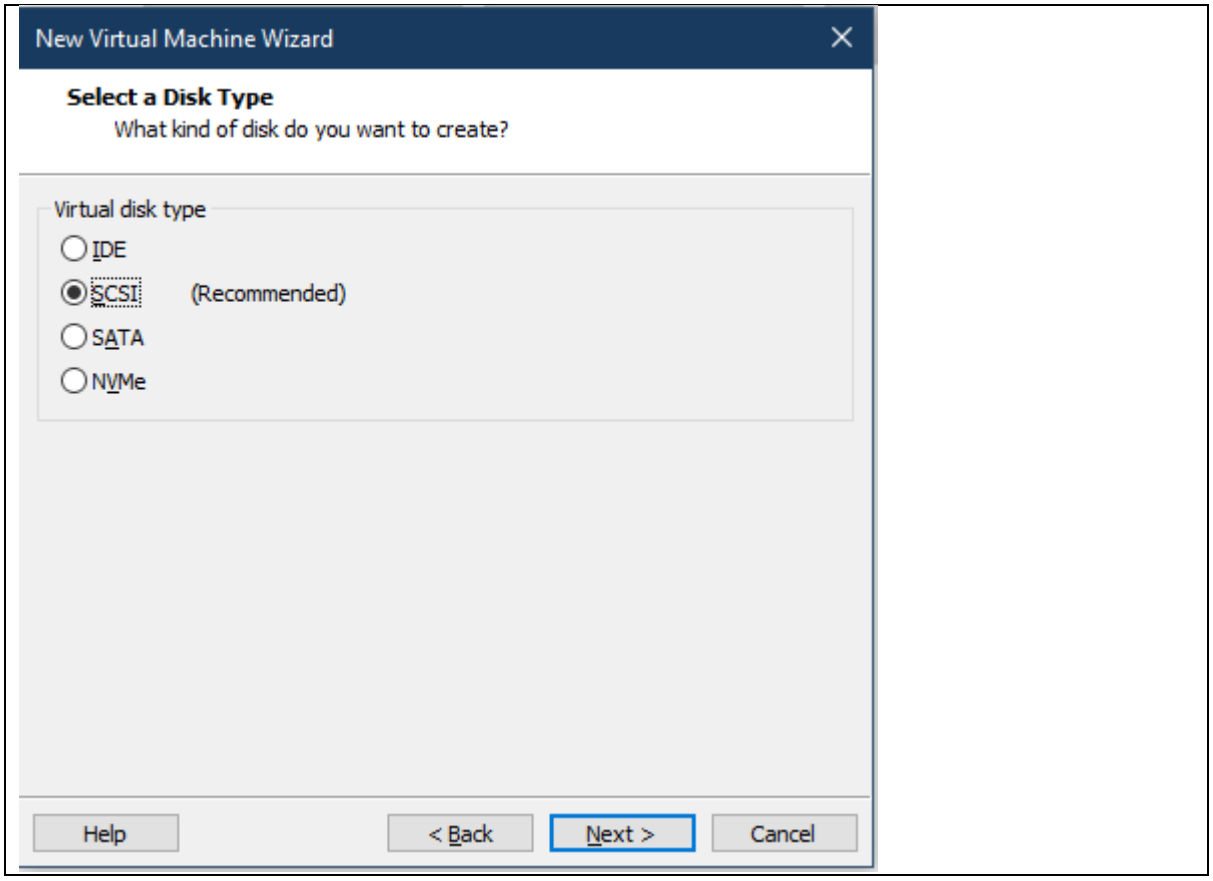
7. Gunakan mode jaringan NAT



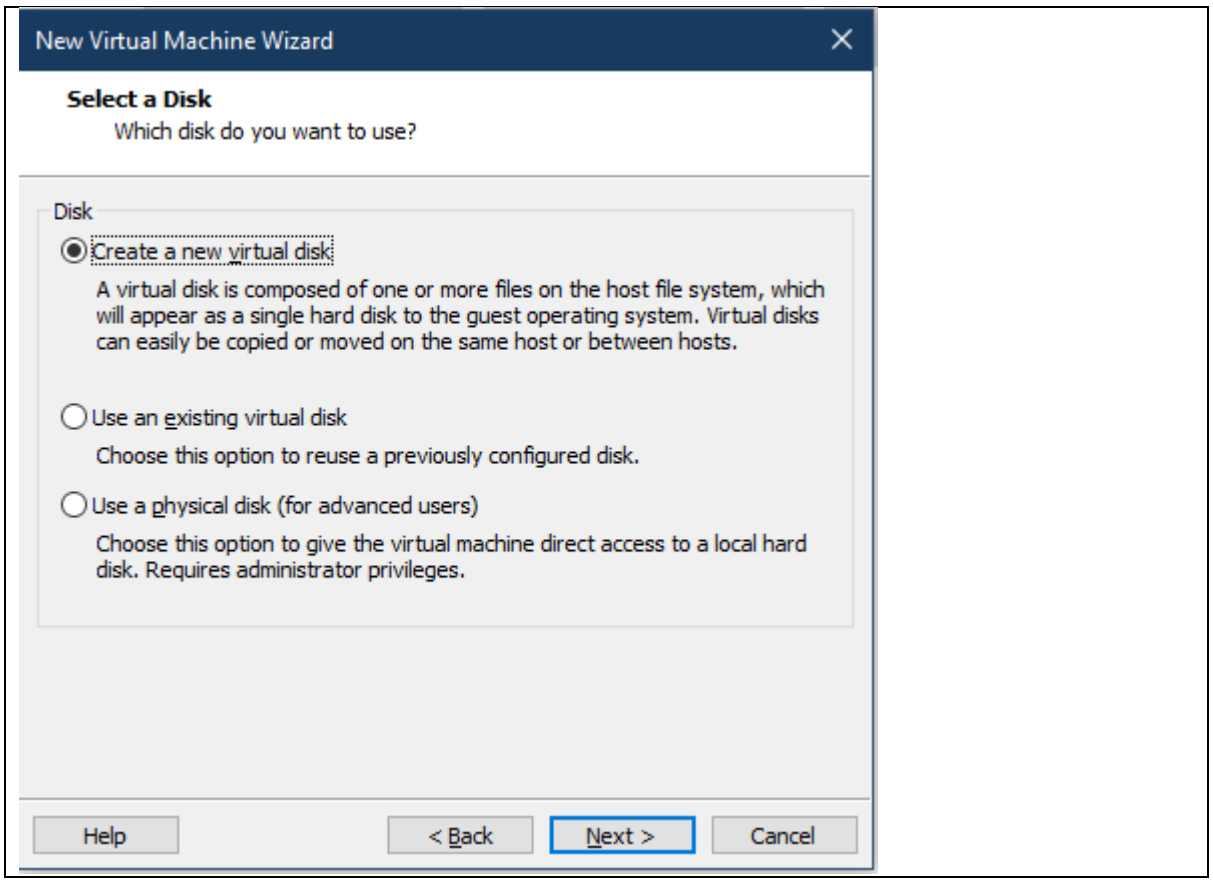
8. Gunakan pengaturan default I/O Controller



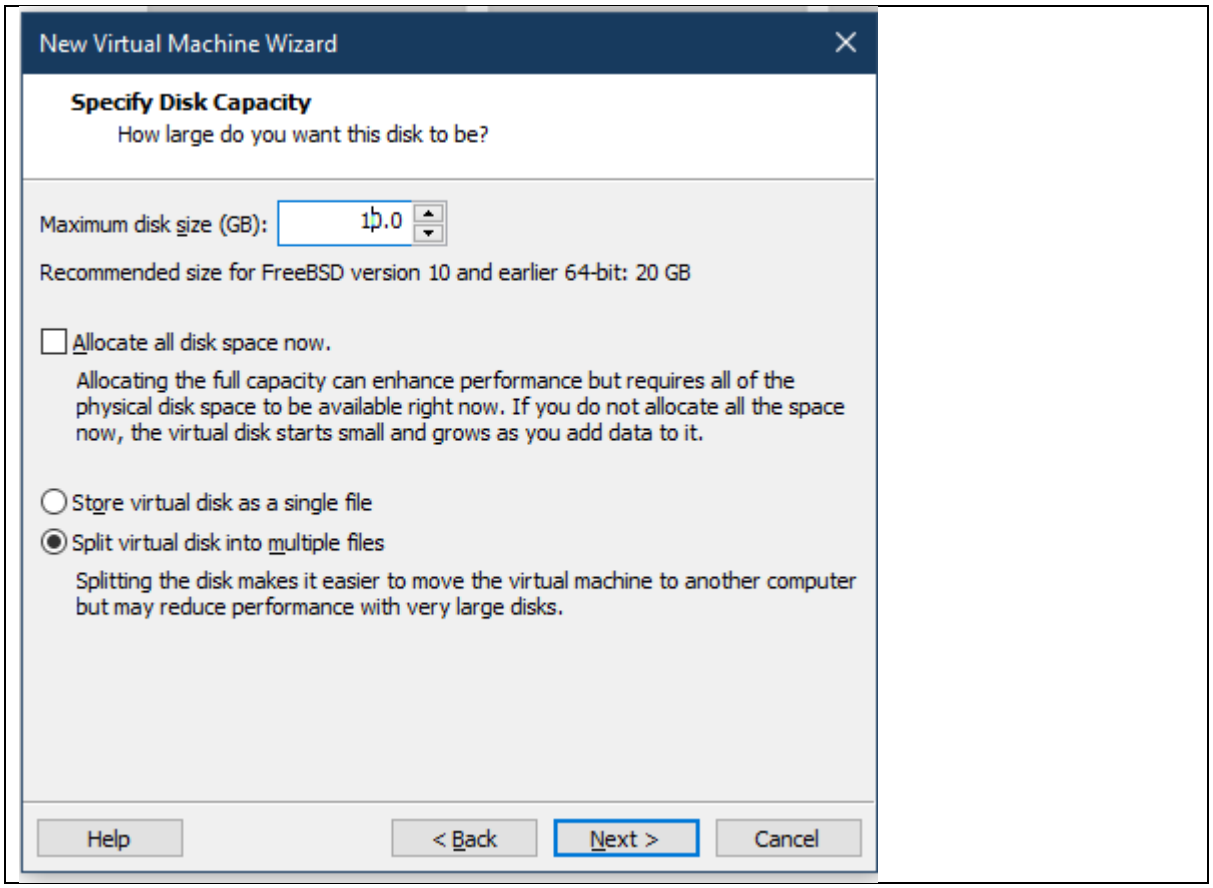
9. Gunakan pengaturan default Virtual Disk Type



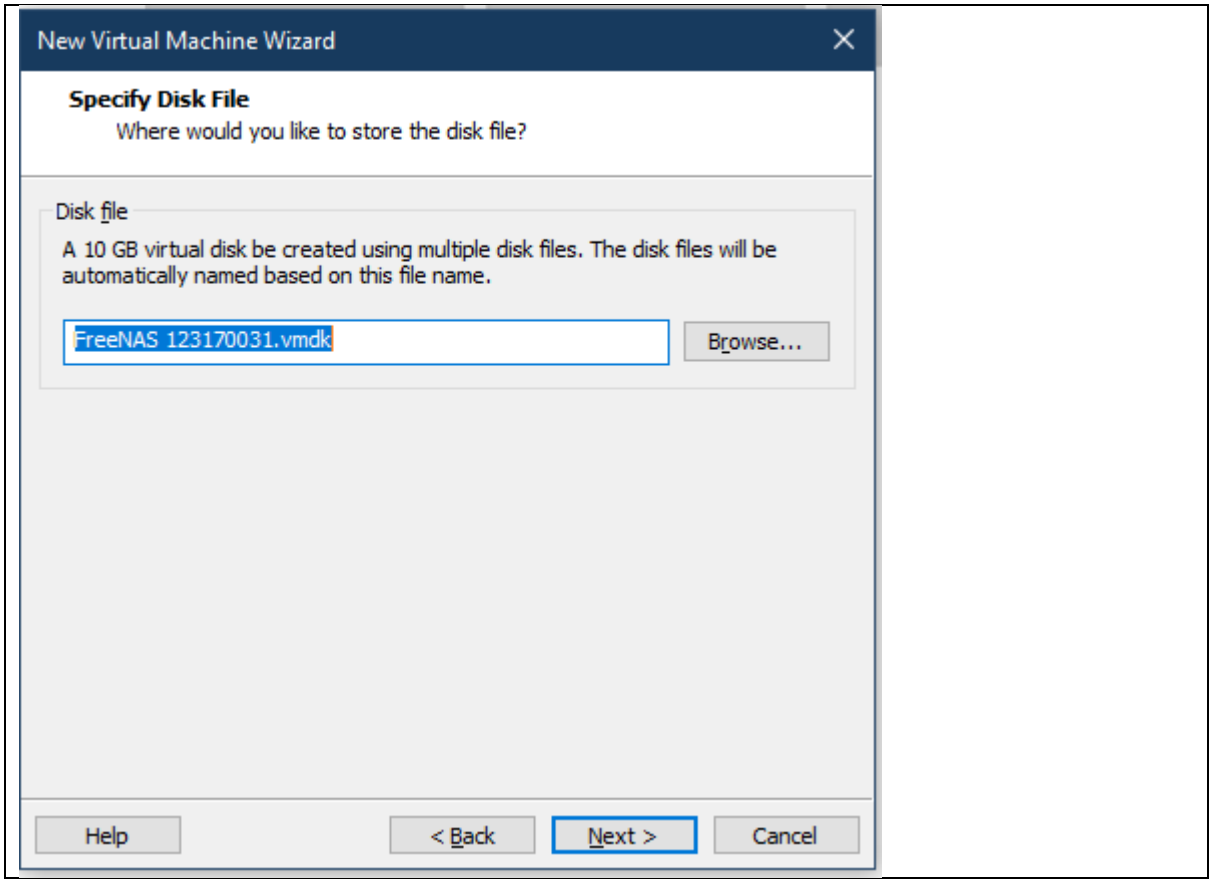
10. Pilih opsi buat virtual disk baru



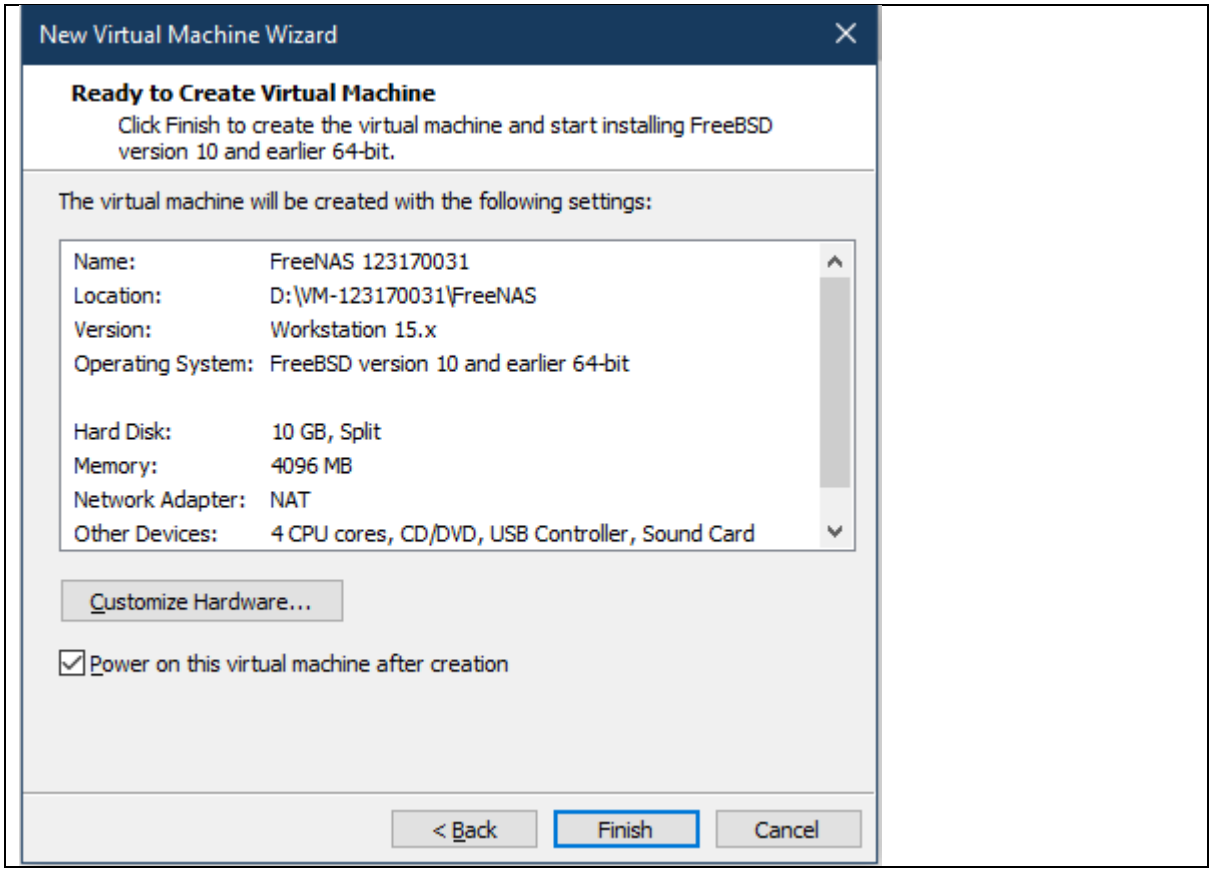
11. Buat disk untuk sistem sebesar 10 GB dengan mode Split dan hilangkan checklist allocate disk



12. Gunakan pengaturan default untuk nama disk

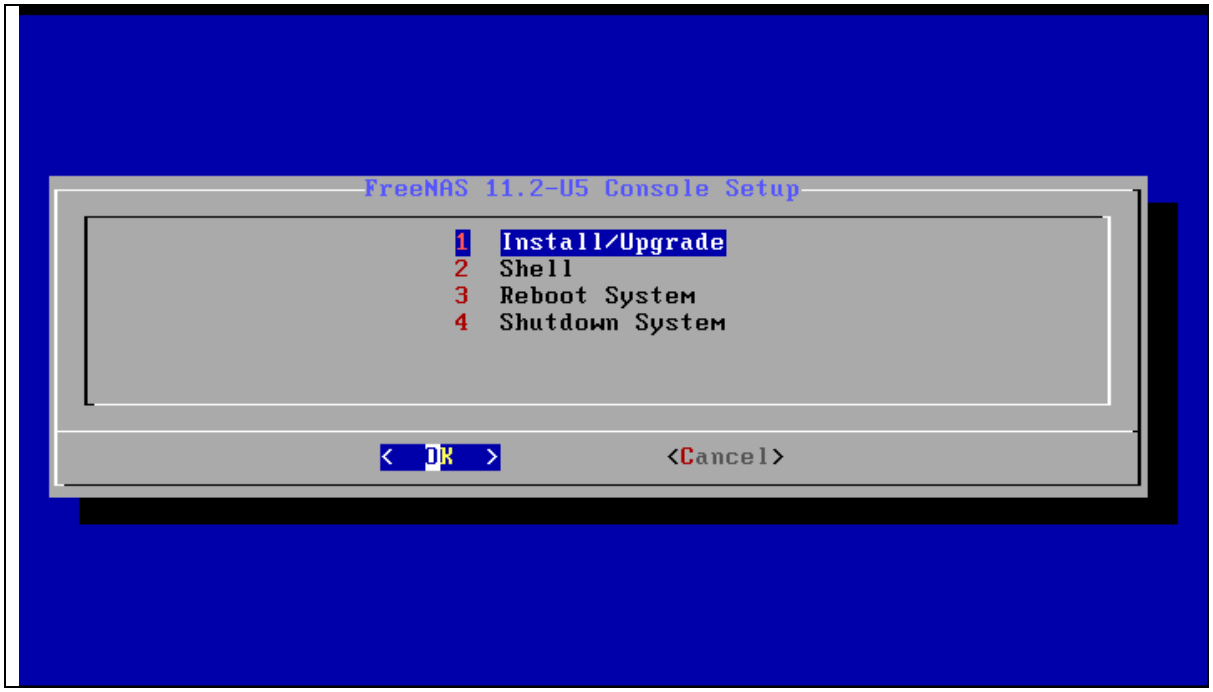


13. Tampilkan tangkapan layar dari ringkasan konfigurasi Virtual Machine (tahap akhir Wizard) lalu nyalakan VM

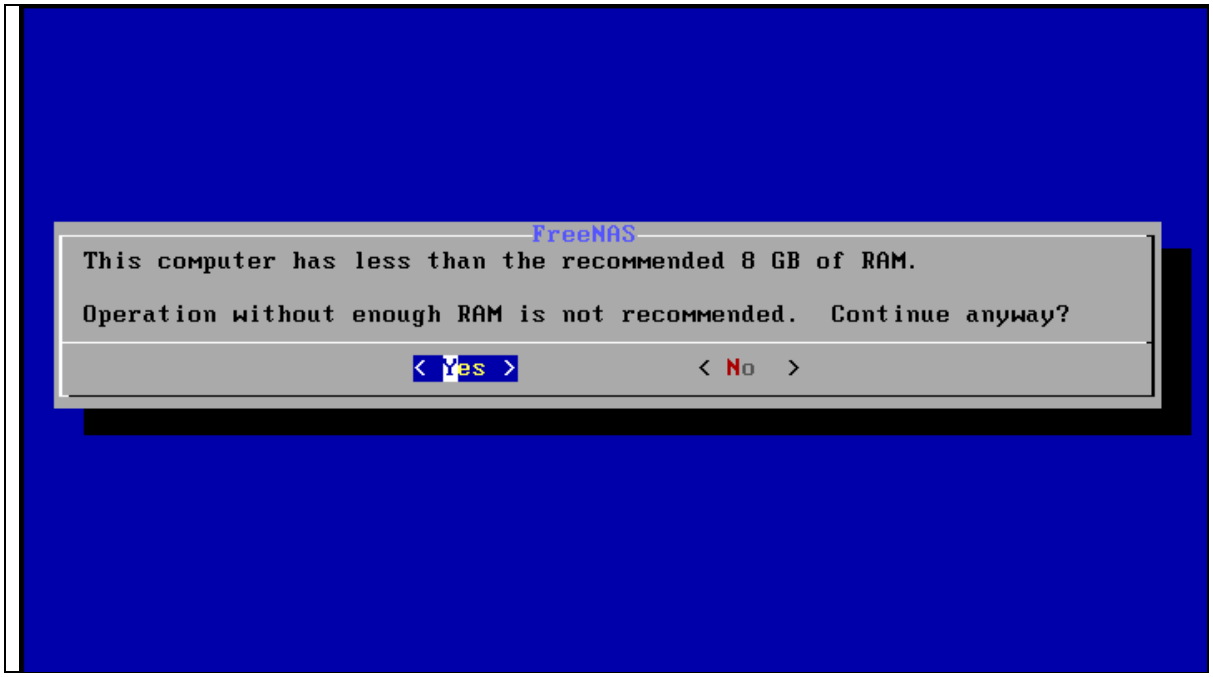

New Virtual Machine Wizard
Ready to Create Virtual Machine
Click Finish to create the virtual machine and start installing FreeBSD version 10 and earlier 64-bit.
The virtual machine will be created with the following settings:
Name: FreeNAS 123170031
Location: D:\VM-123170031\FreeNAS
Version: Workstation 15.x
Operating System: FreeBSD version 10 and earlier 64-bit
Hard Disk: 10 GB, Split
Memory: 4096 MB
Network Adapter: NAT
Other Devices: 4 CPU cores, CD/DVD, USB Controller, Sound Card
Customize Hardware...
Power on this virtual machine after creation
< Back
Finish
Cancel

TUGAS BAGIAN KEDUA – INSTALASI FREENAS:

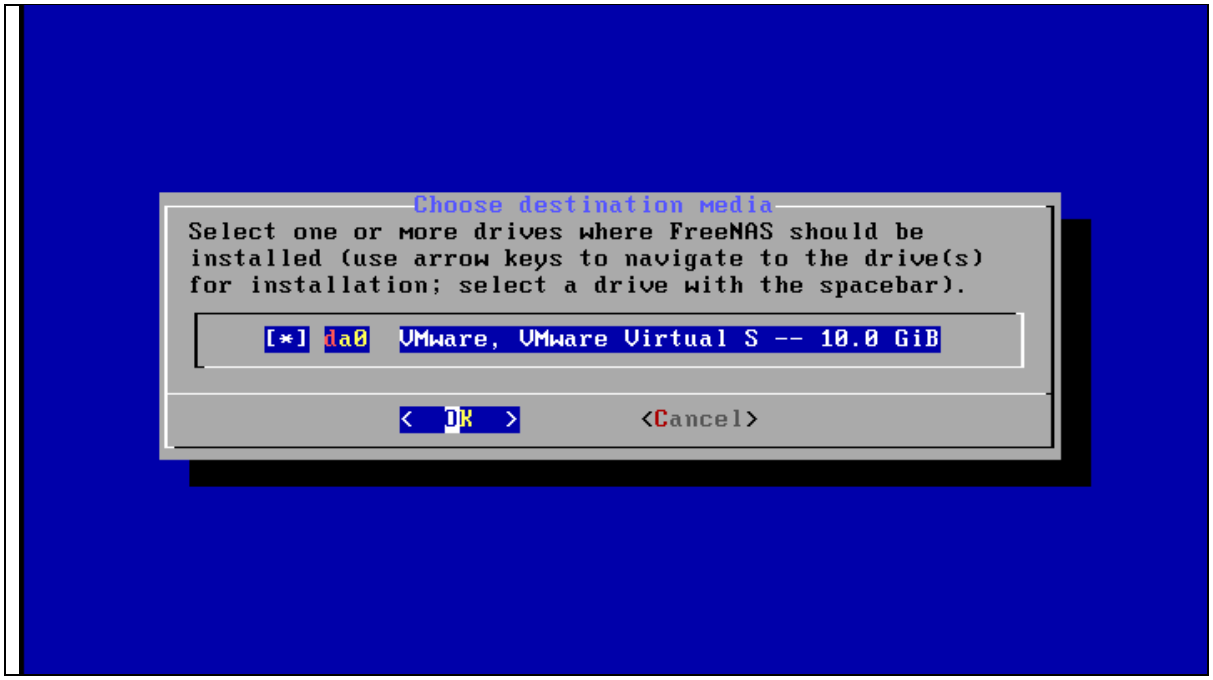
1. Tampilan awal tahap instalasi FreeNAS, pilih Install/Upgrade



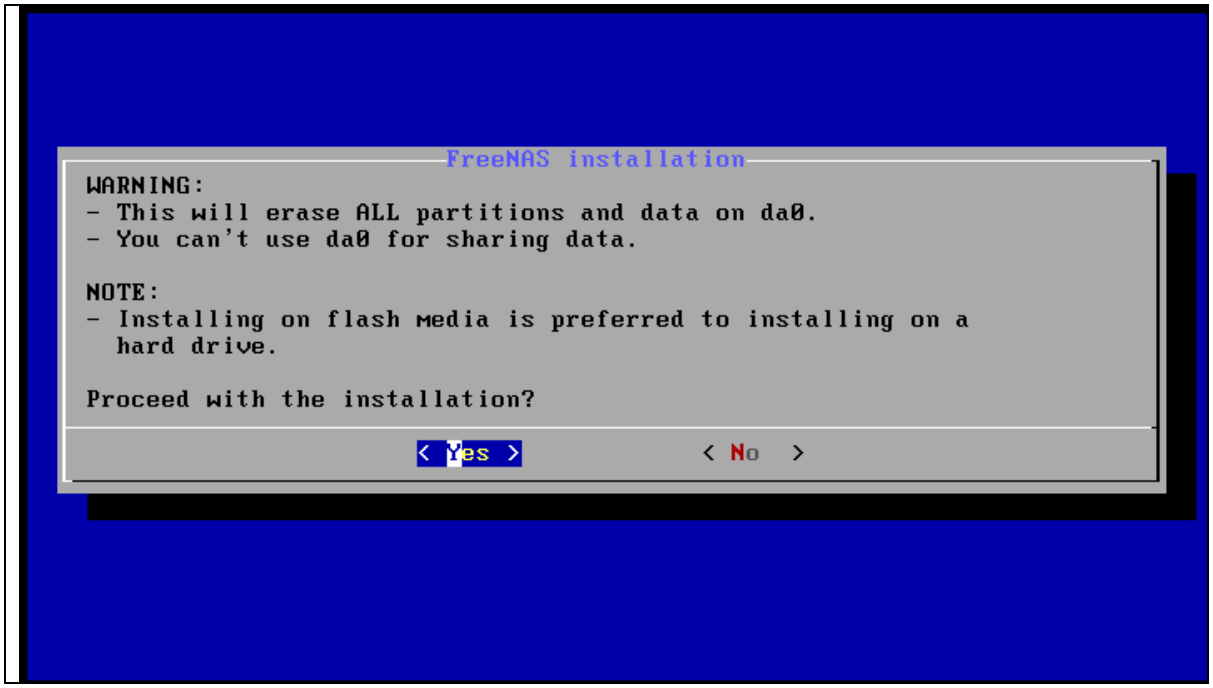
2. Tampilan warning RAM kurang dari 8GB, pilih Yes



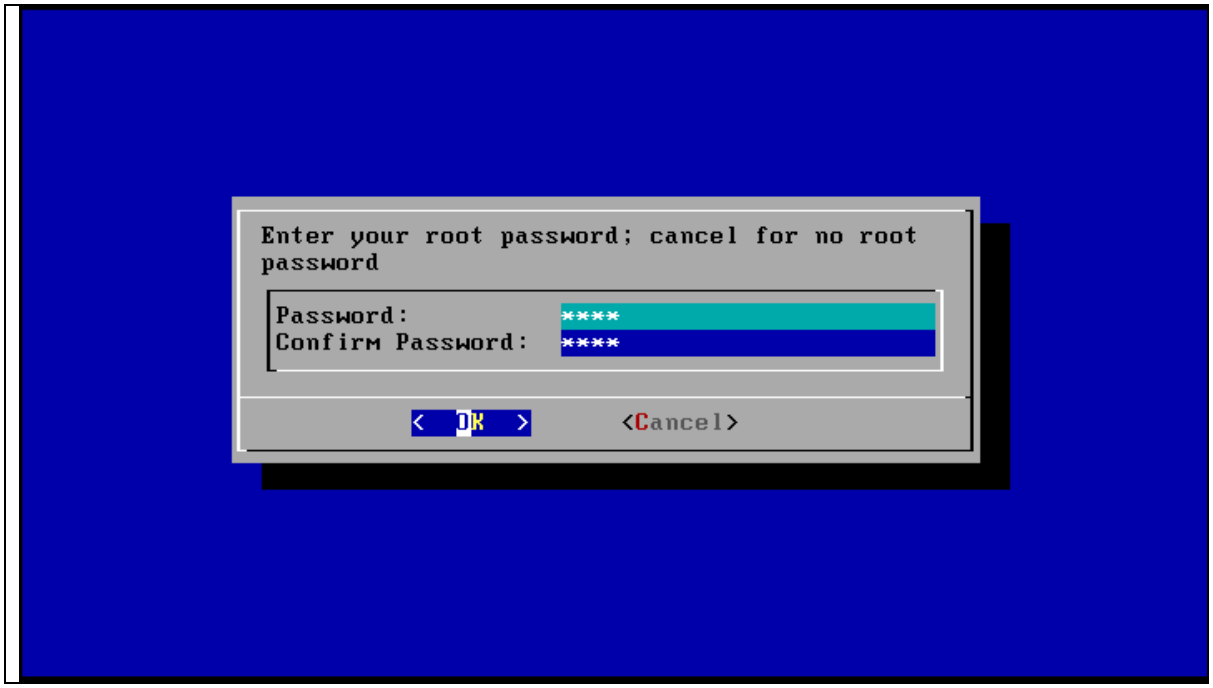
3. Tampilan pemilihan destination media untuk dipasang FreeNAS, pilih da0



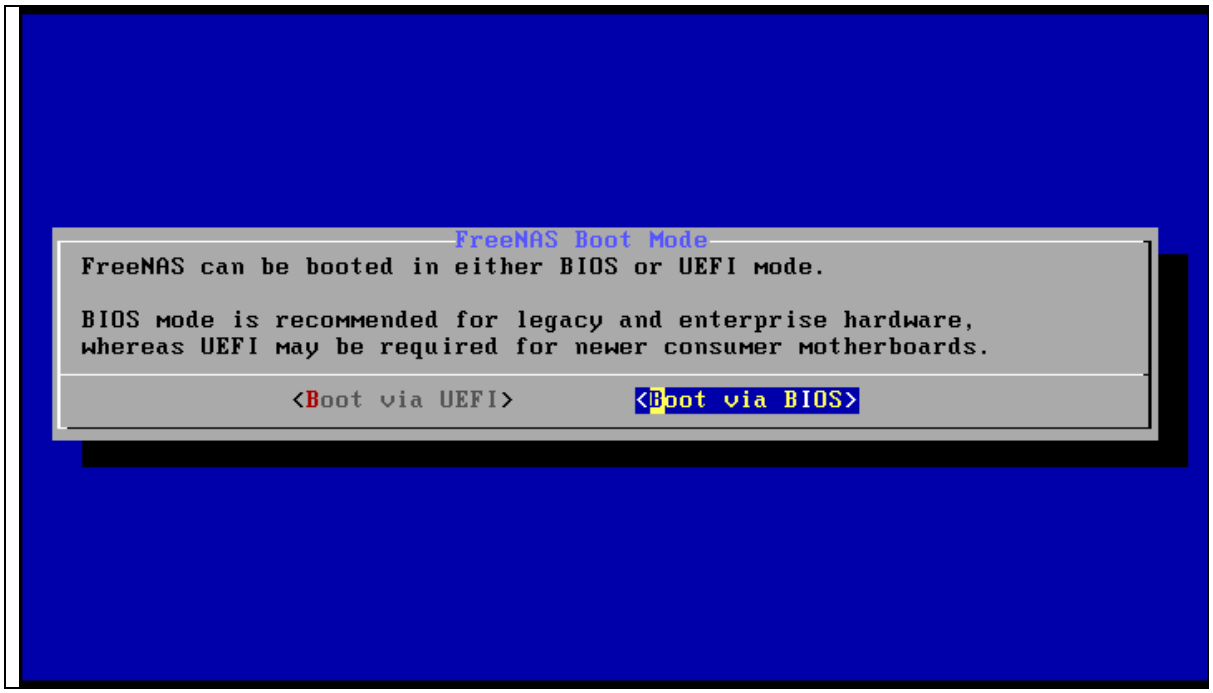
4. Tampilan konfirmasi penghapusan/format media yang terpilih, pilih Yes



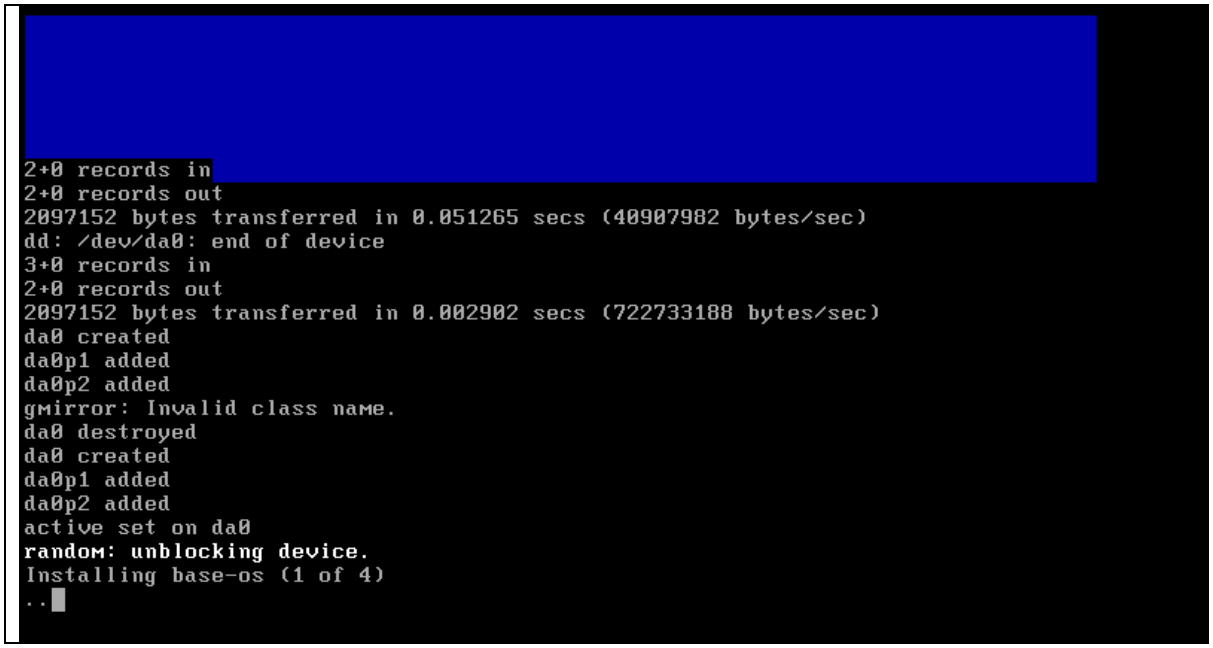
5. Tampilan pengaturan kata sandi, gunakan NIM atau bebas



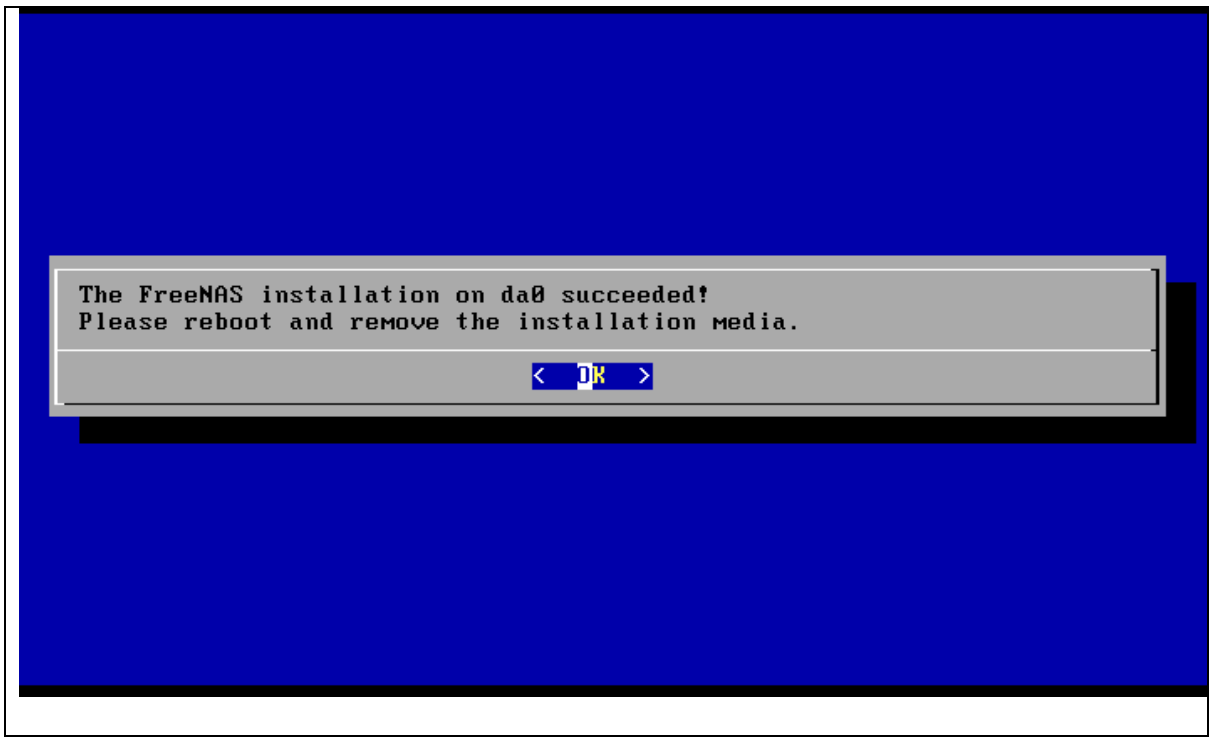
6. Tampilan mode boot dari FreeNAS, pilih BIOS

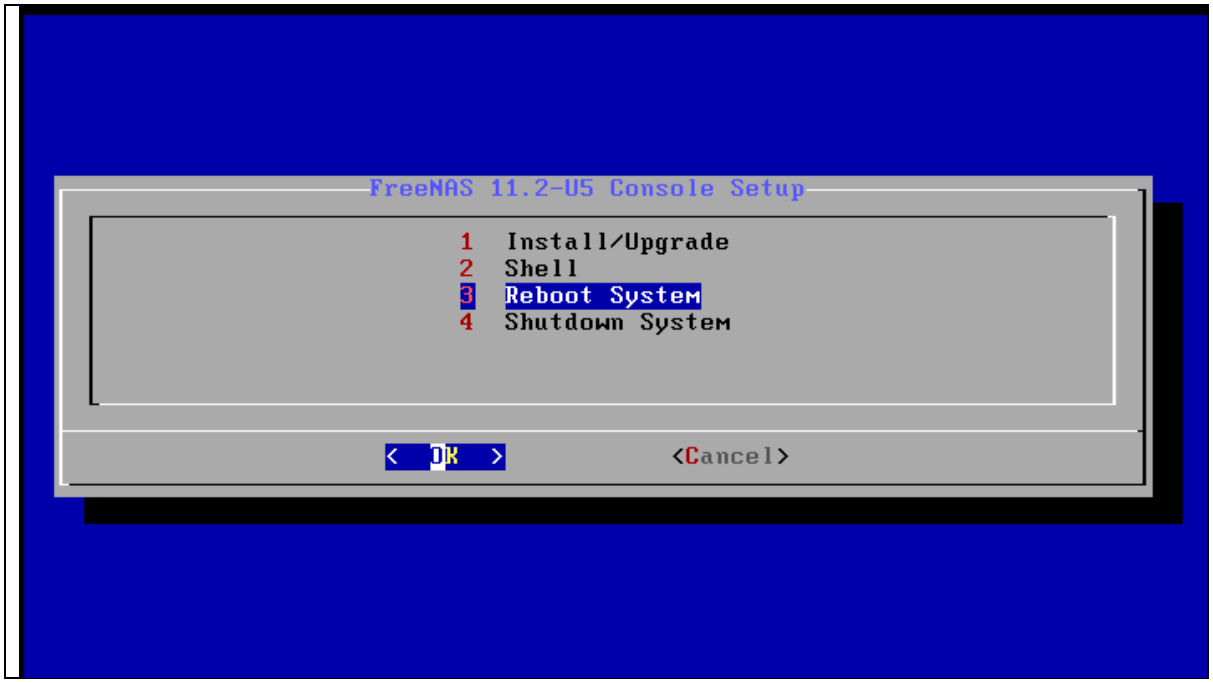


7. Tampilan proses instalasi FreeNAS

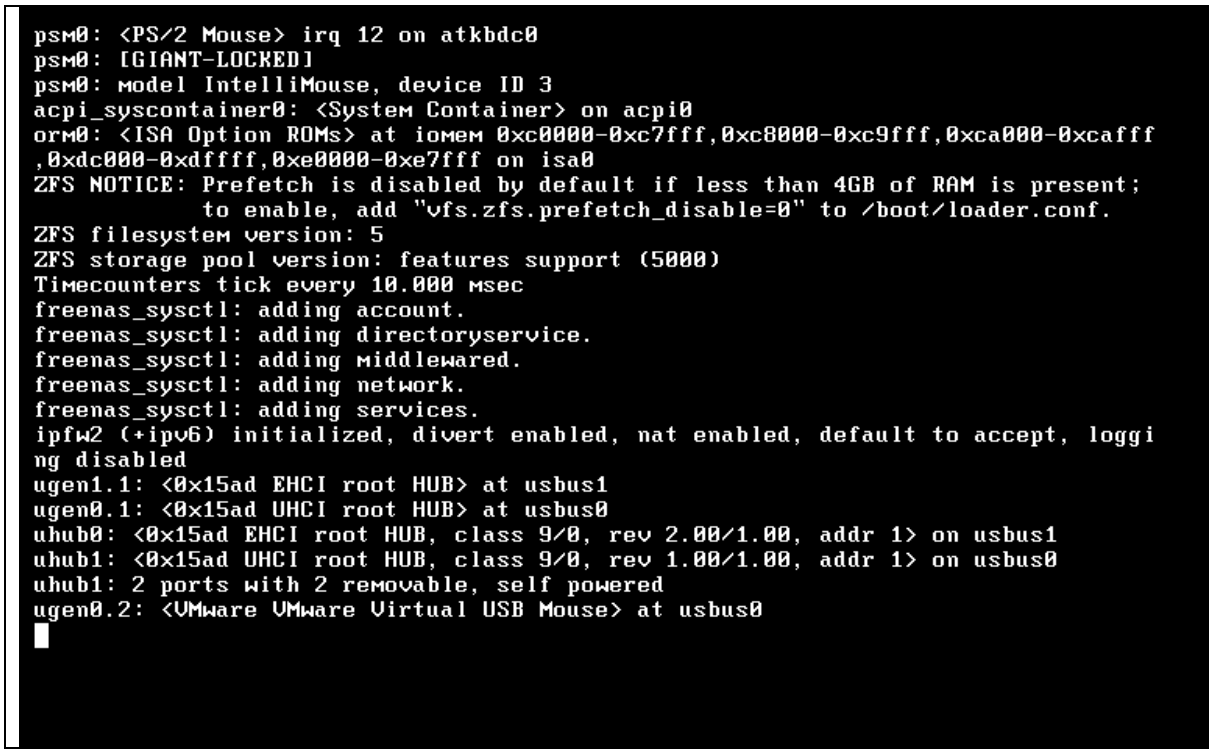


8. Tampilan hasil akhir proses instalasi FreeNAS, pilih OK kemudian pilih Reboot System

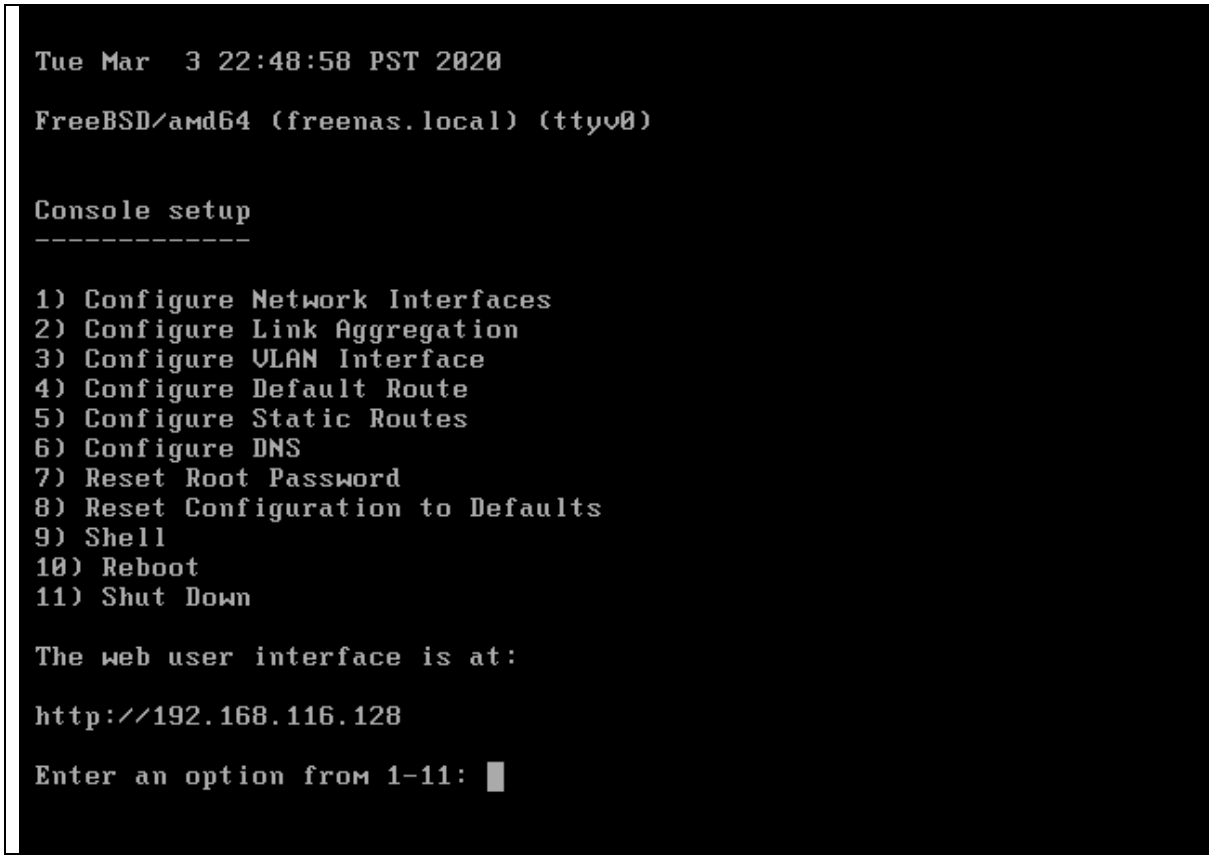




9. Tampilan proses booting menuju FreeNAS OS

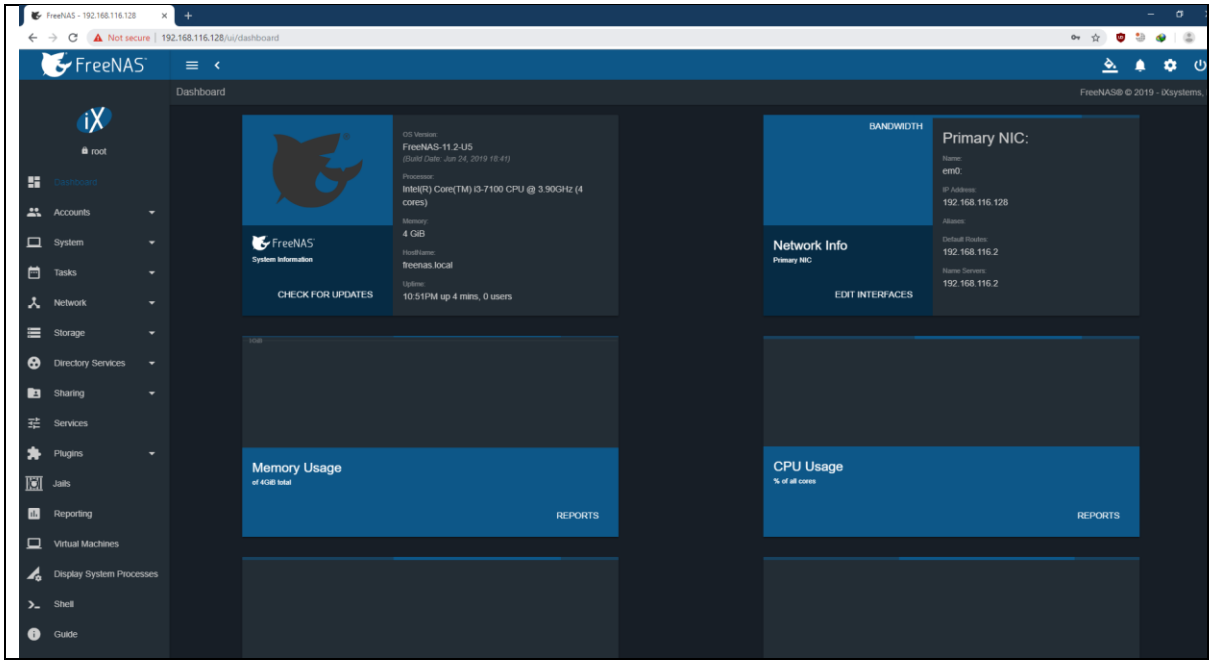


10. Tampilan hasil akhir booting yang menunjukkan Console Setup

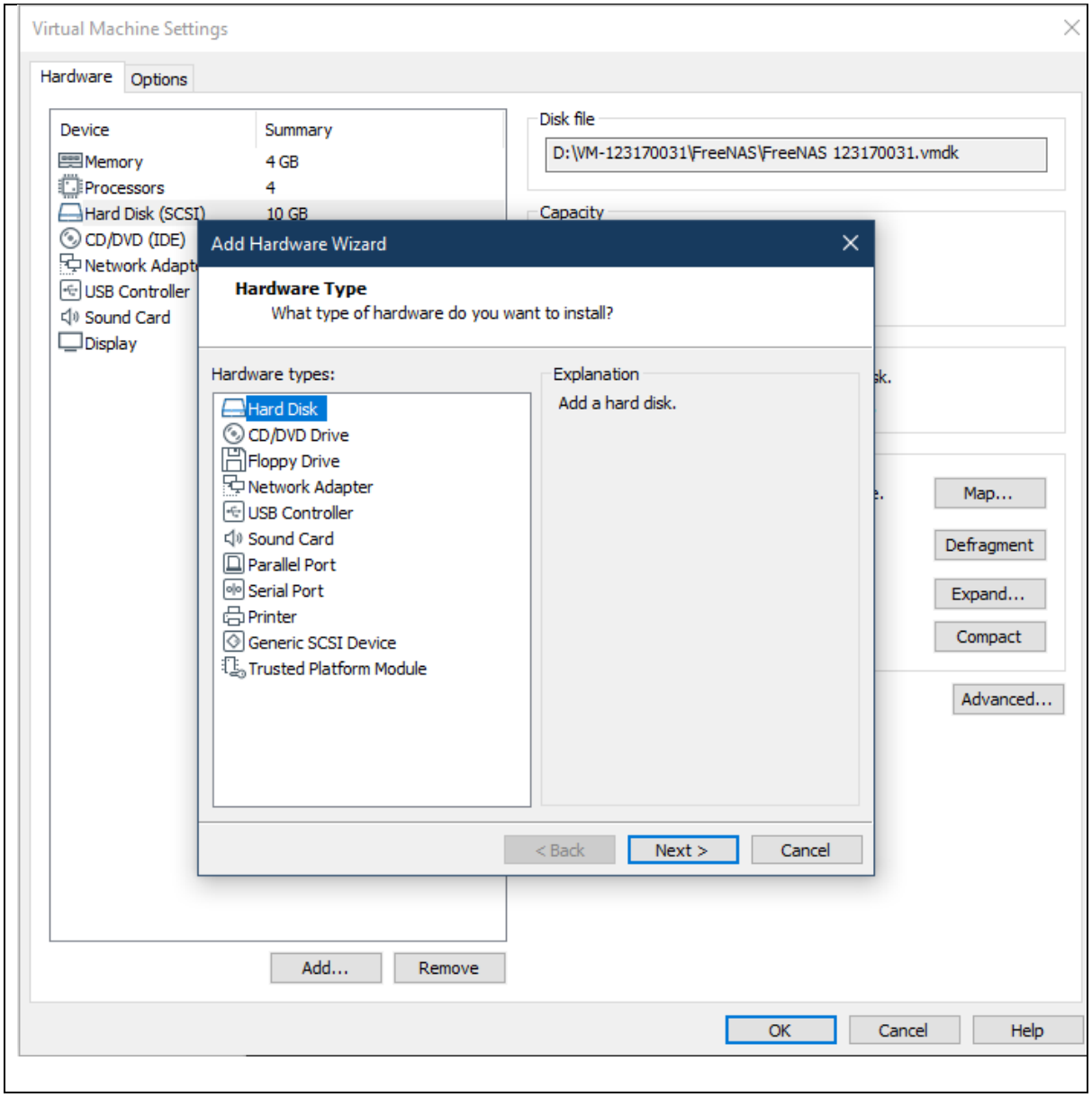

Tue Mar 3 22:48:58 PST 2020
FreeBSD/amd64 (freenas.local) (ttyv0)
Console setup
1) Configure Network Interfaces
2) Configure Link Aggregation
3) Configure VLAN Interface
4) Configure Default Route
5) Configure Static Routes
6) Configure DNS
7) Reset Root Password
8) Reset Configuration to Defaults
9) Shell
10) Reboot
11) Shut Down
The web user interface is at:
http://192.168.116.128
Enter an option from 1-11:

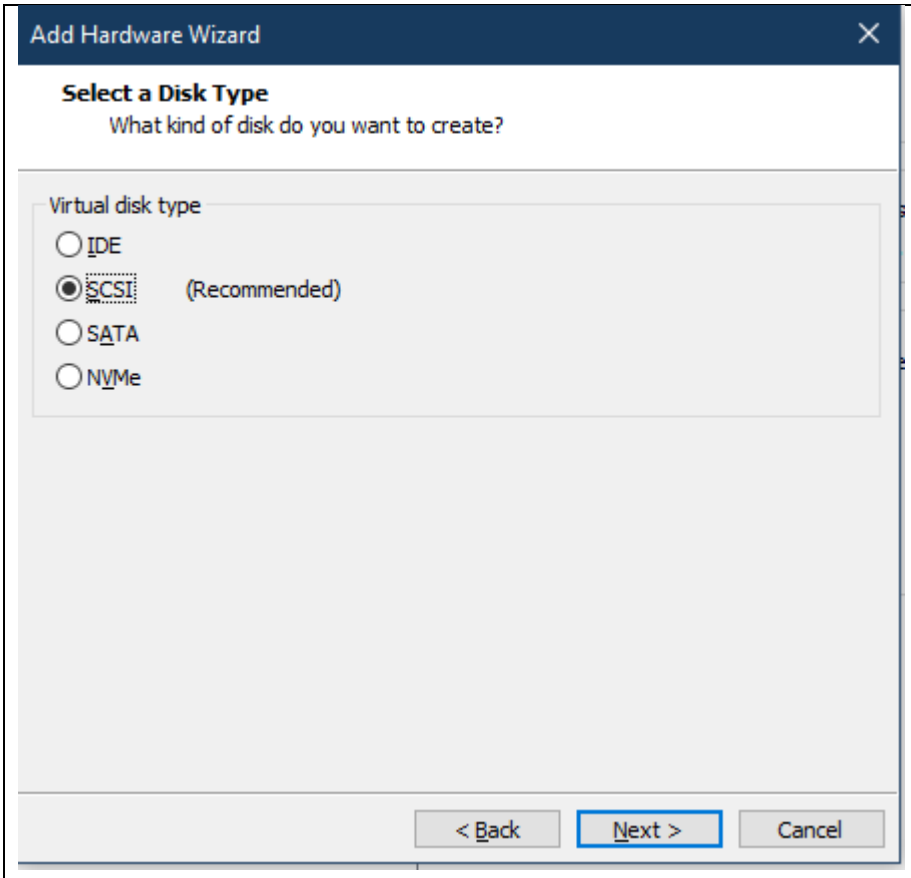
TUGAS BAGIAN KETIGA – KONFIGURASI FREENAS:

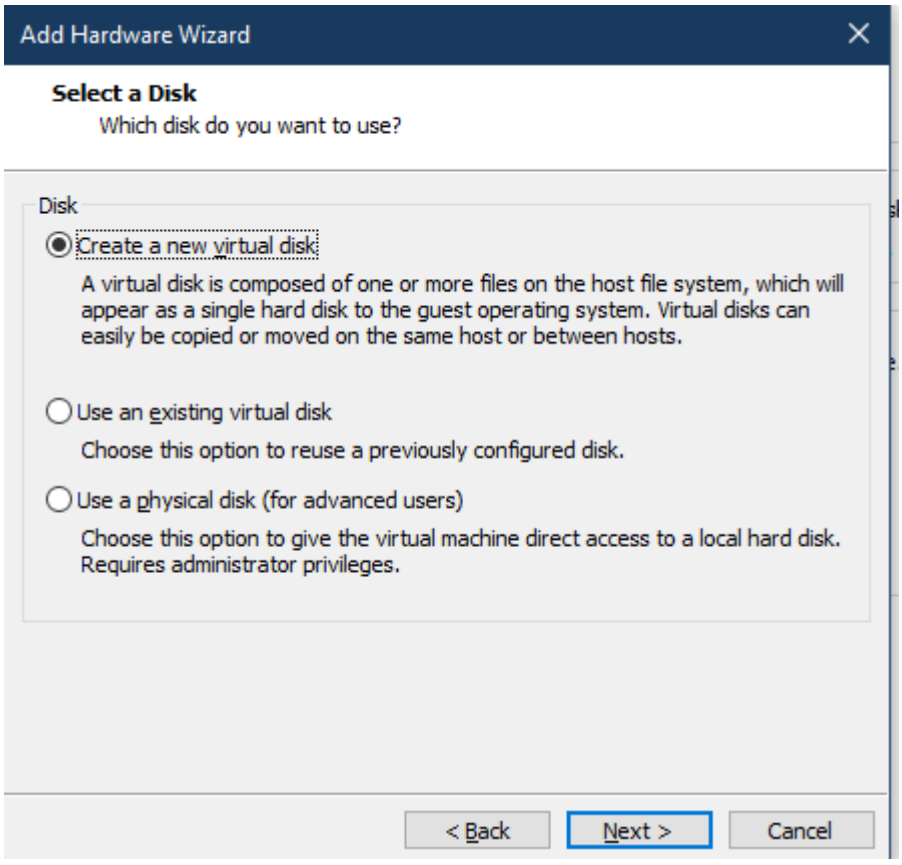
1. Tampilan dashboard setelah login FreeNAS

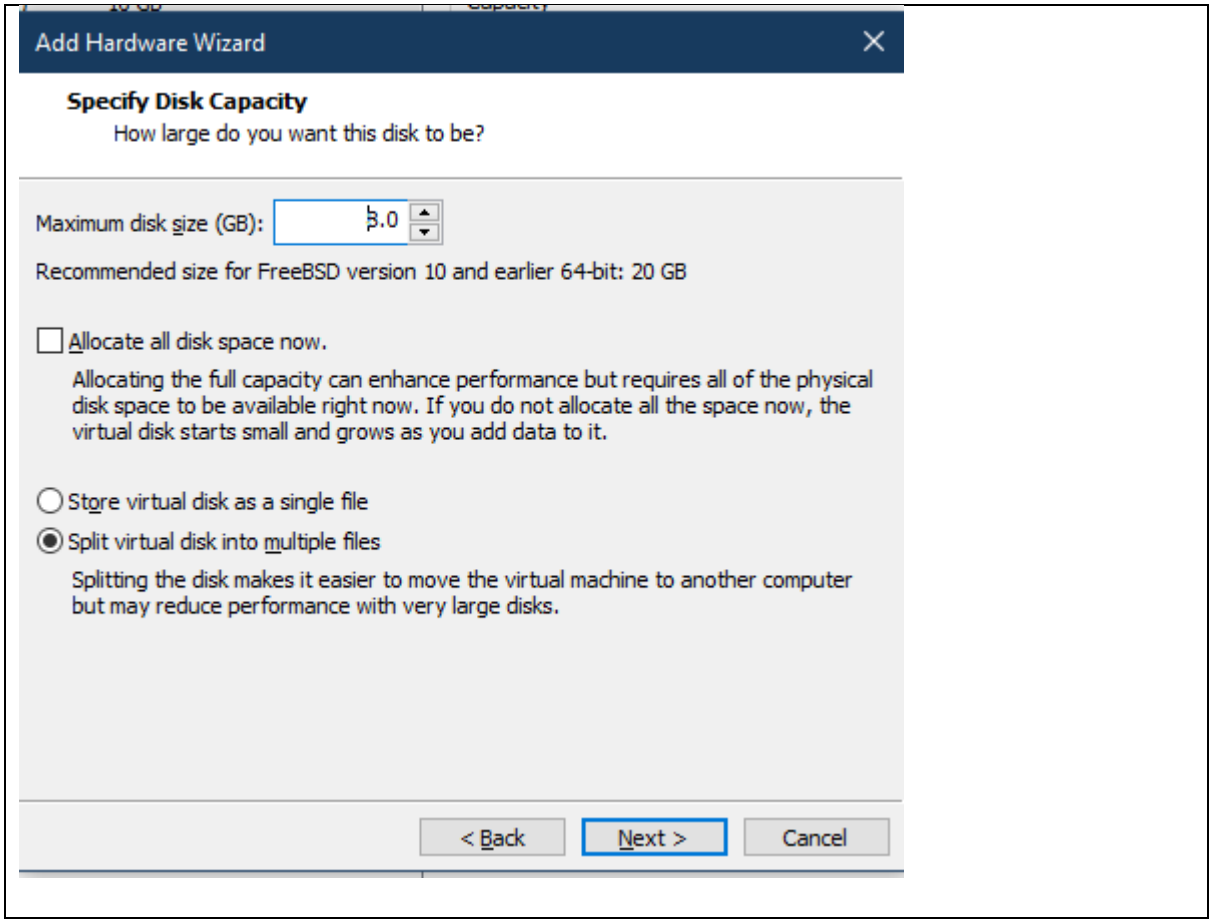


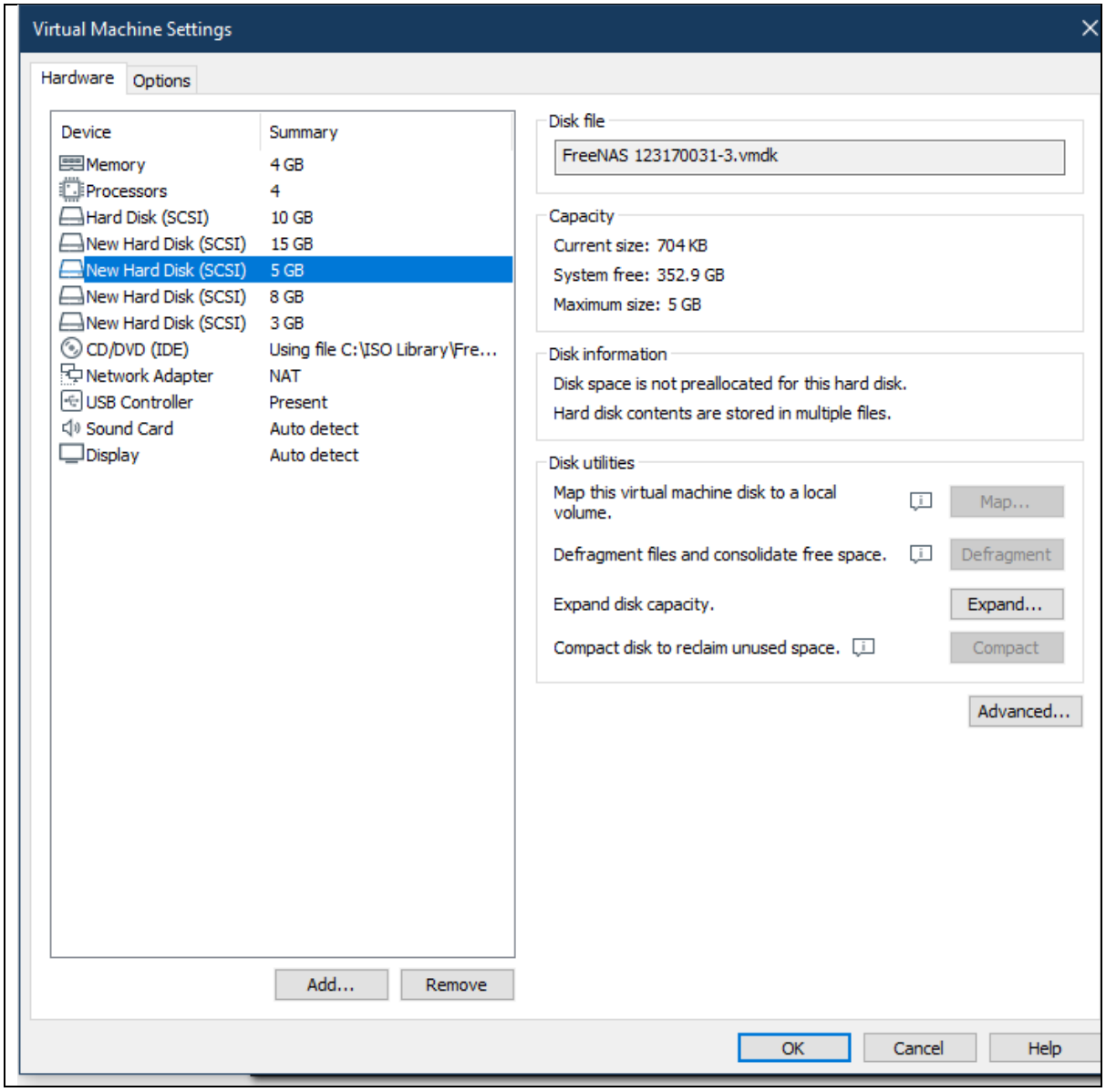
2. Tampilan konfigurasi VM pada Eksperimen #1


Virtual Machine Settings
Hardware
Options
Device
Summary
Memory
4 GB
Processors
4
Hard Disk (SCSI)
10 GB
CD/DVD (IDE)
Network Adapt
USB Controller
Sound Card
Display
Disk file
D:\VM-123170031\FreeNAS\FreeNAS 123170031.vmdk
Capacity
Map...
Defragment
Expand...
Compact
Advanced...
Add...
Remove
OK
Cancel
Help
Add Hardware Wizard
Hardware Type
What type of hardware do you want to install?
Hardware types:
Hard Disk
CD/DVD Drive
Floppy Drive
Network Adapter
USB Controller
Sound Card
Parallel Port
Serial Port
Printer
Generic SCSI Device
Trusted Platform Module
Explanation
Add a hard disk.
< Back
Next >
Cancel

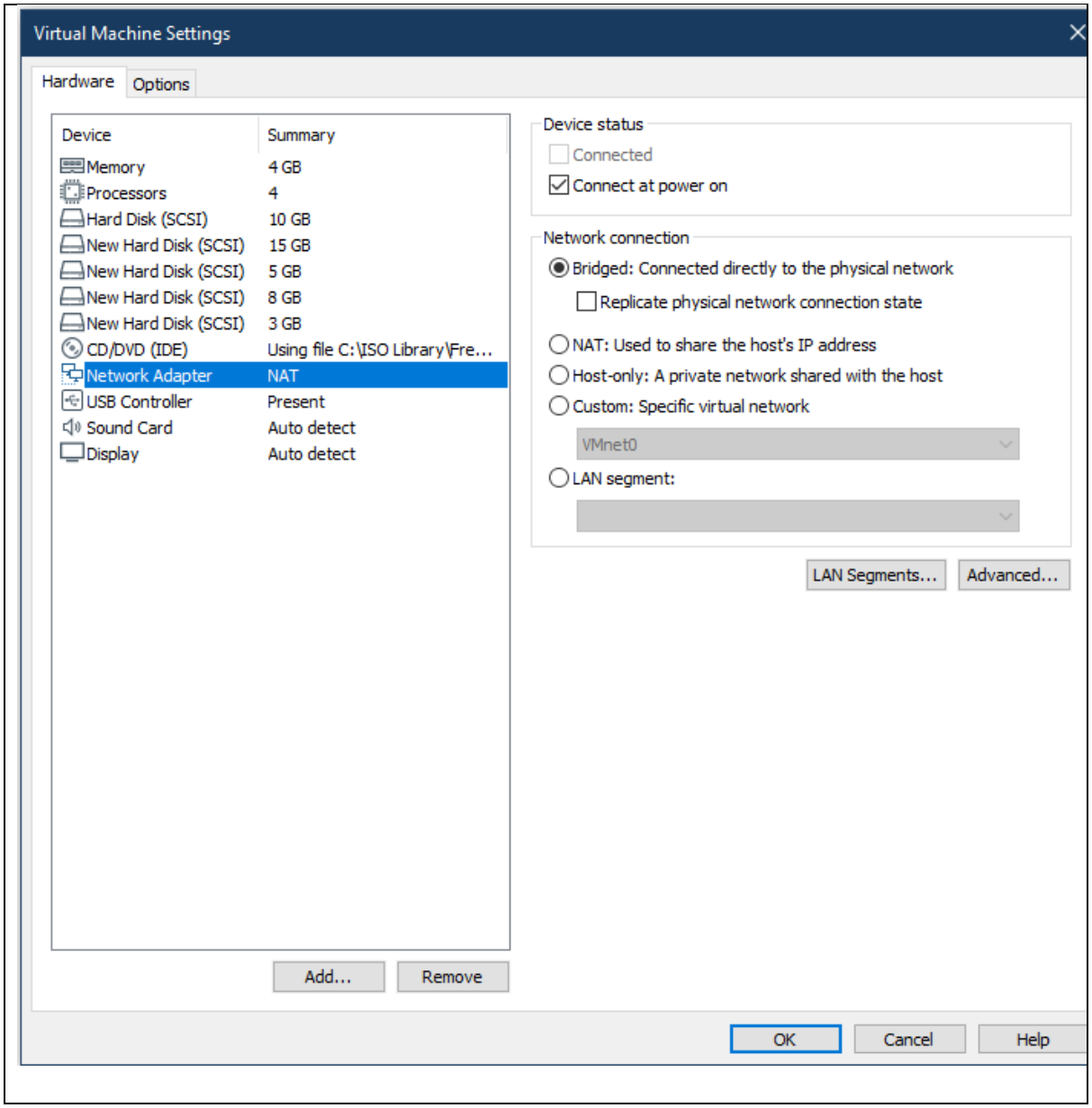

Add Hardware Wizard
Select a Disk Type
What kind of disk do you want to create?
Virtual disk type
IDE
SCSI
(Recommended)
SATA
NVMe
< Back
Next >
Cancel


Add Hardware Wizard
Select a Disk
Which disk do you want to use?
Disk
Create a new virtual disk
A virtual disk is composed of one or more files on the host file system, which will appear as a single hard disk to the guest operating system. Virtual disks can easily be copied or moved on the same host or between hosts.
Use an existing virtual disk
Choose this option to reuse a previously configured disk.
Use a physical disk (for advanced users)
Choose this option to give the virtual machine direct access to a local hard disk. Requires administrator privileges.
< Back
Next >
Cancel


Add Hardware Wizard
Specify Disk Capacity
How large do you want this disk to be?
Maximum disk size (GB):
3.0
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.
< Back
Next >
Cancel

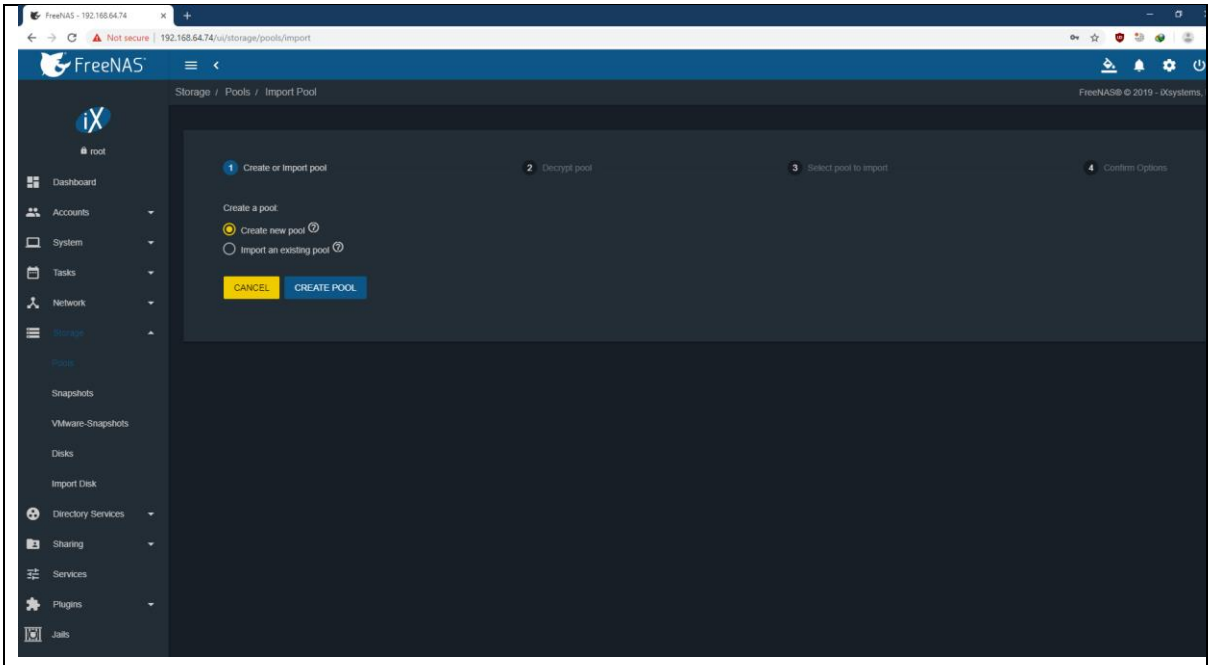


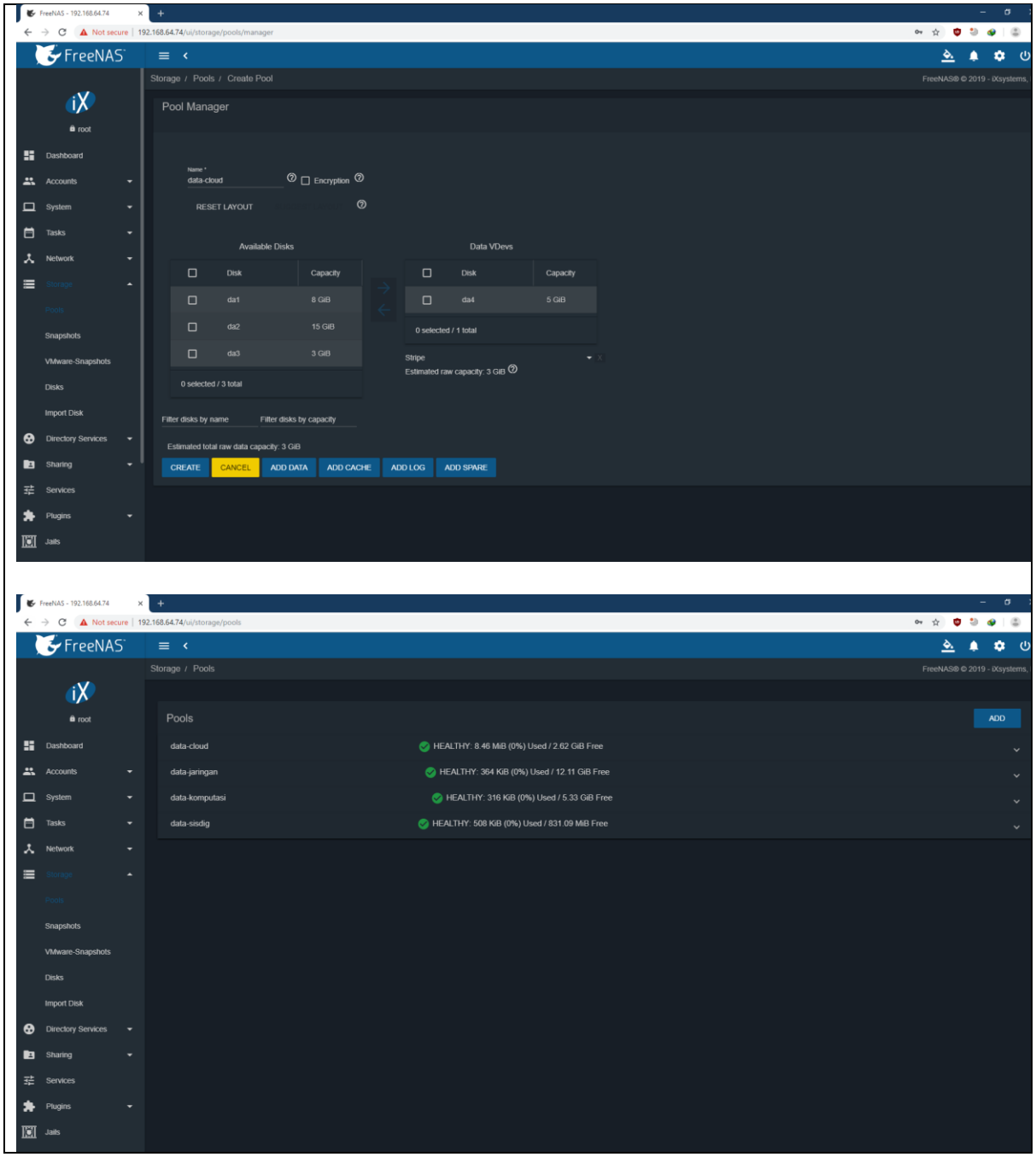
3. Tampilan IP pada dashboard Console Setup pada Eksperimen #2


Virtual Machine Settings
Hardware
Options
Device
Summary
Memory
4 GB
Processors
4
Hard Disk (SCSI)
10 GB
New Hard Disk (SCSI)
15 GB
New Hard Disk (SCSI)
5 GB
New Hard Disk (SCSI)
8 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
Add...
Remove
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...
OK
Cancel
Help

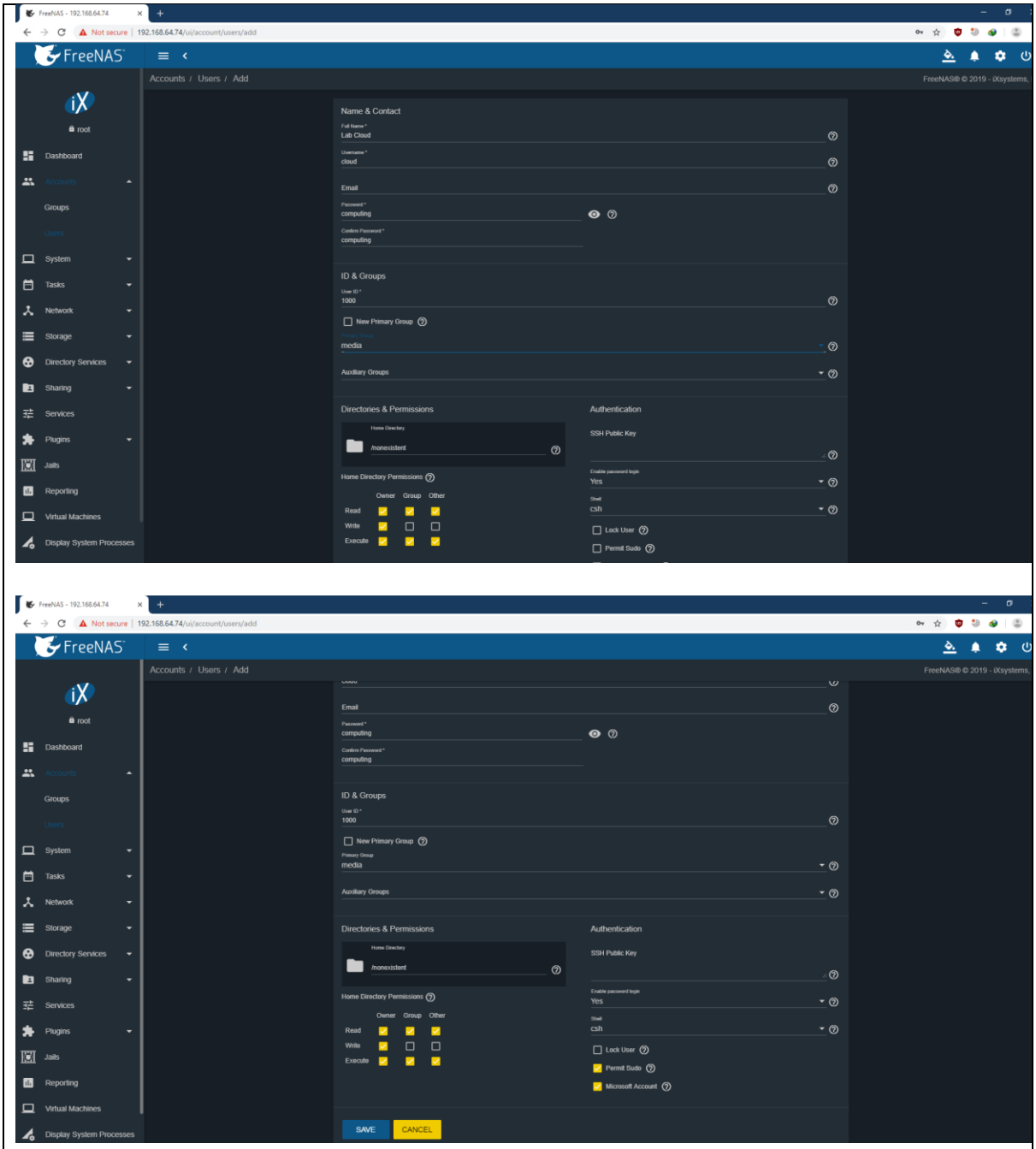
```
Tue Mar  3 23:10:55 PST 2020

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://192.168.64.74

Enter an option from 1-11:
```

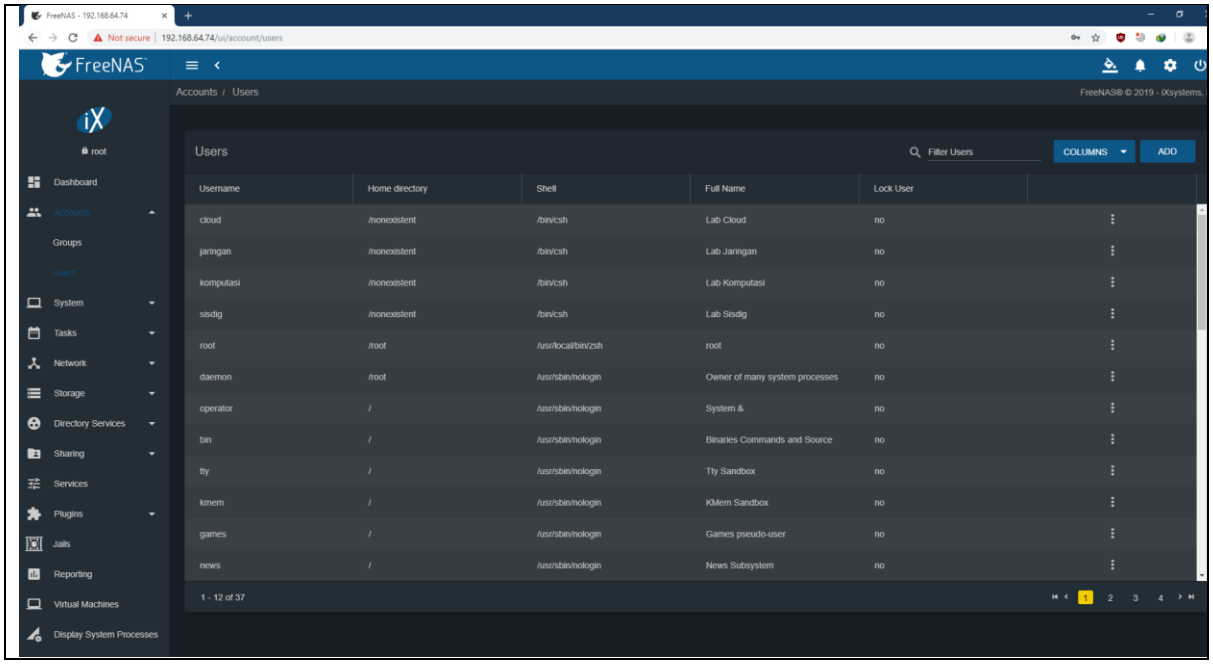
4. Tampilkan hasil dari pembuatan pools tambahan pada menu Storage -> Pools



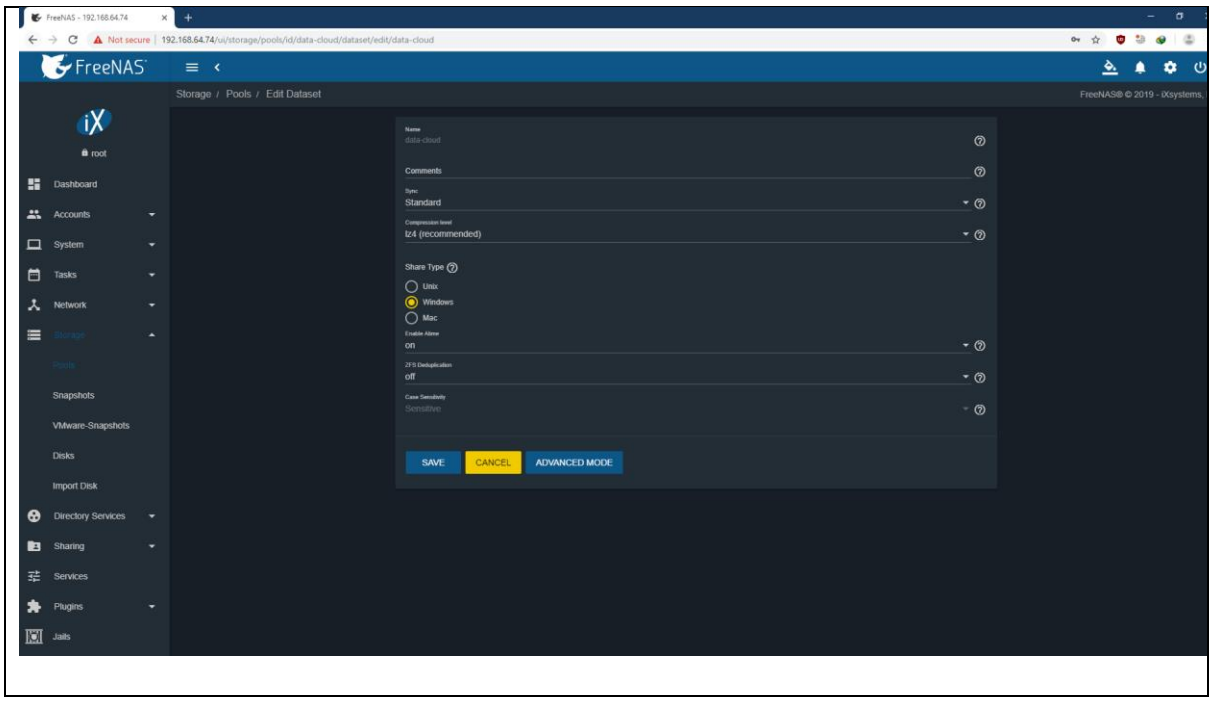


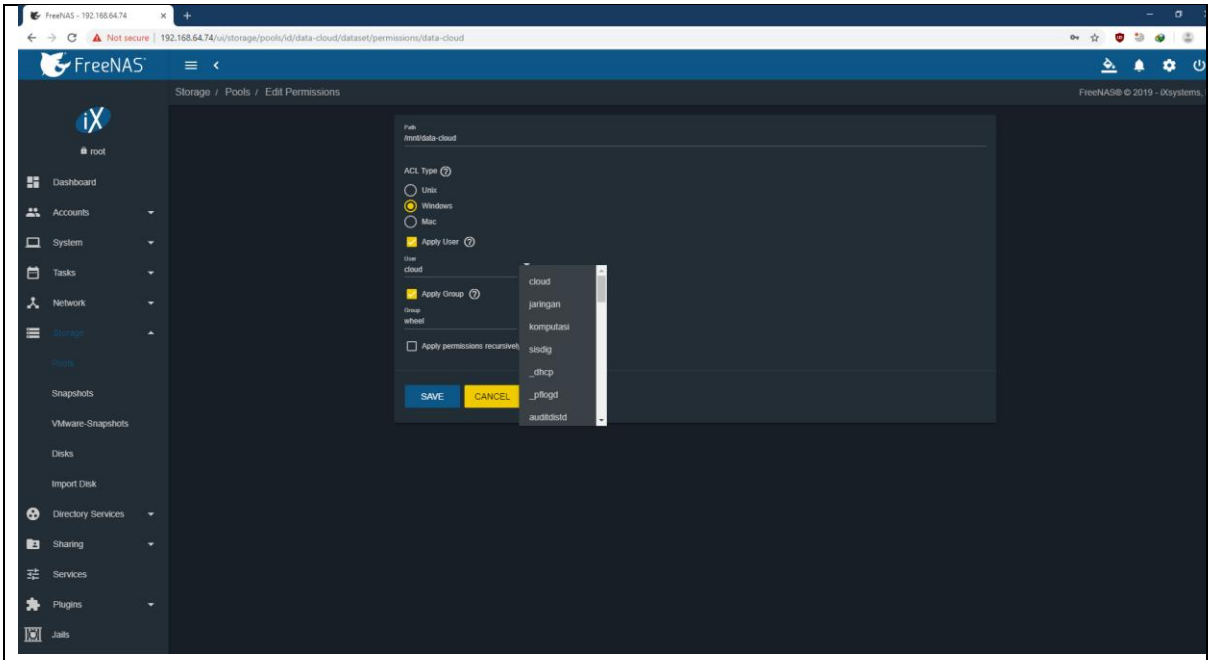
5. Tampilkan hasil dari pembuatan user tambahan pada menu Accounts -> Users

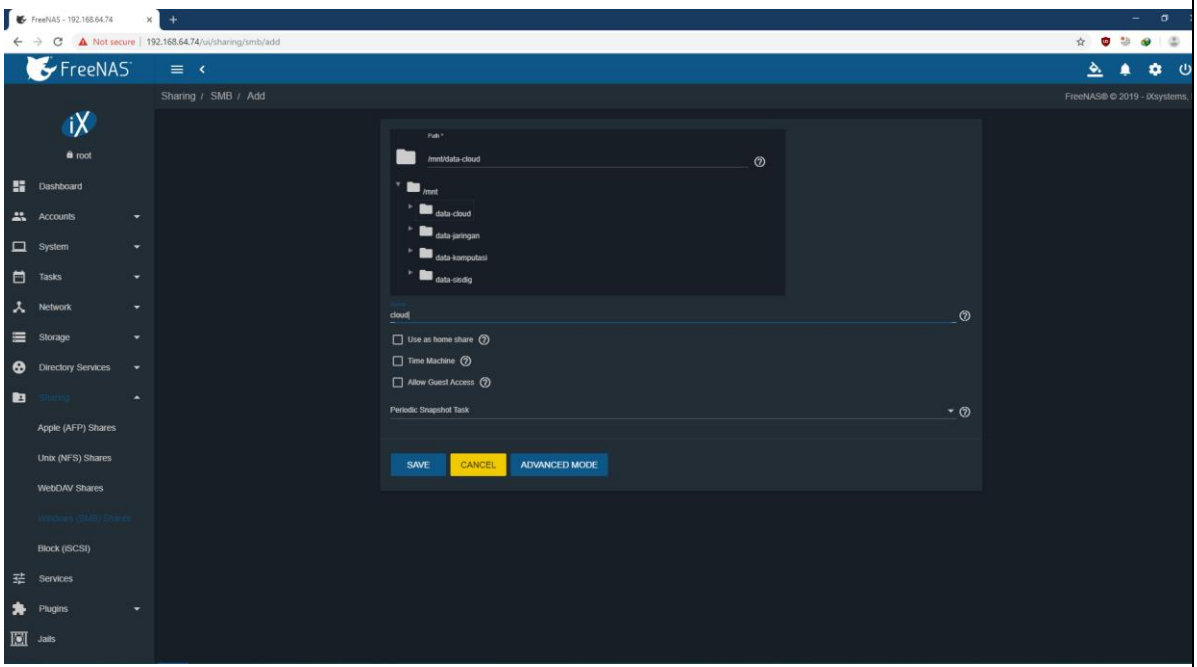

FreeNAS - 192.168.64.74
Not secure | 192.168.64.74/ui/account/users/add
FreeNAS
Accounts / Users / Add
FreeNAS® © 2019 - iXsystems
root
Dashboard
Accounts
Groups
Users
System
Tasks
Network
Storage
Directory Services
Sharing
Services
Plugins
Jails
Reporting
Virtual Machines
Display System Processes
Name & Contact
Full Name *
Lab Cloud
Username *
cloud
Email
Password *
computing
Confirm Password *
computing
ID & Groups
User ID *
1000
New Primary Group
Primary Group
media
Auxiliary Groups
Directories & Permissions
Home Directory
/nonexistent
Home Directory Permissions
Owner Group Other
Read
Write
Execute
Authentication
SSH Public Key
Enable password login
Yes
Shell
csh
Lock User
Permit Sudo
Microsoft Account
SAVE
CANCEL

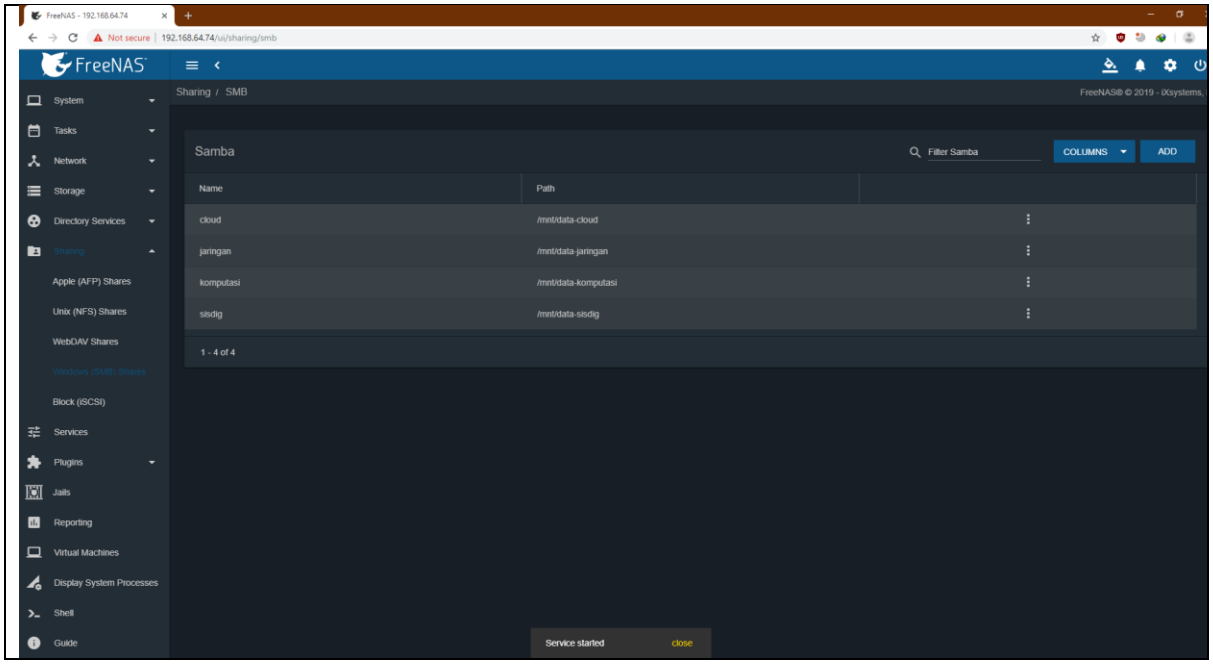


6. Tampilkan hasil dari pembuatan shares tambahan untuk 4 lab pada menu Sharing -> Windows (SMB) Shares

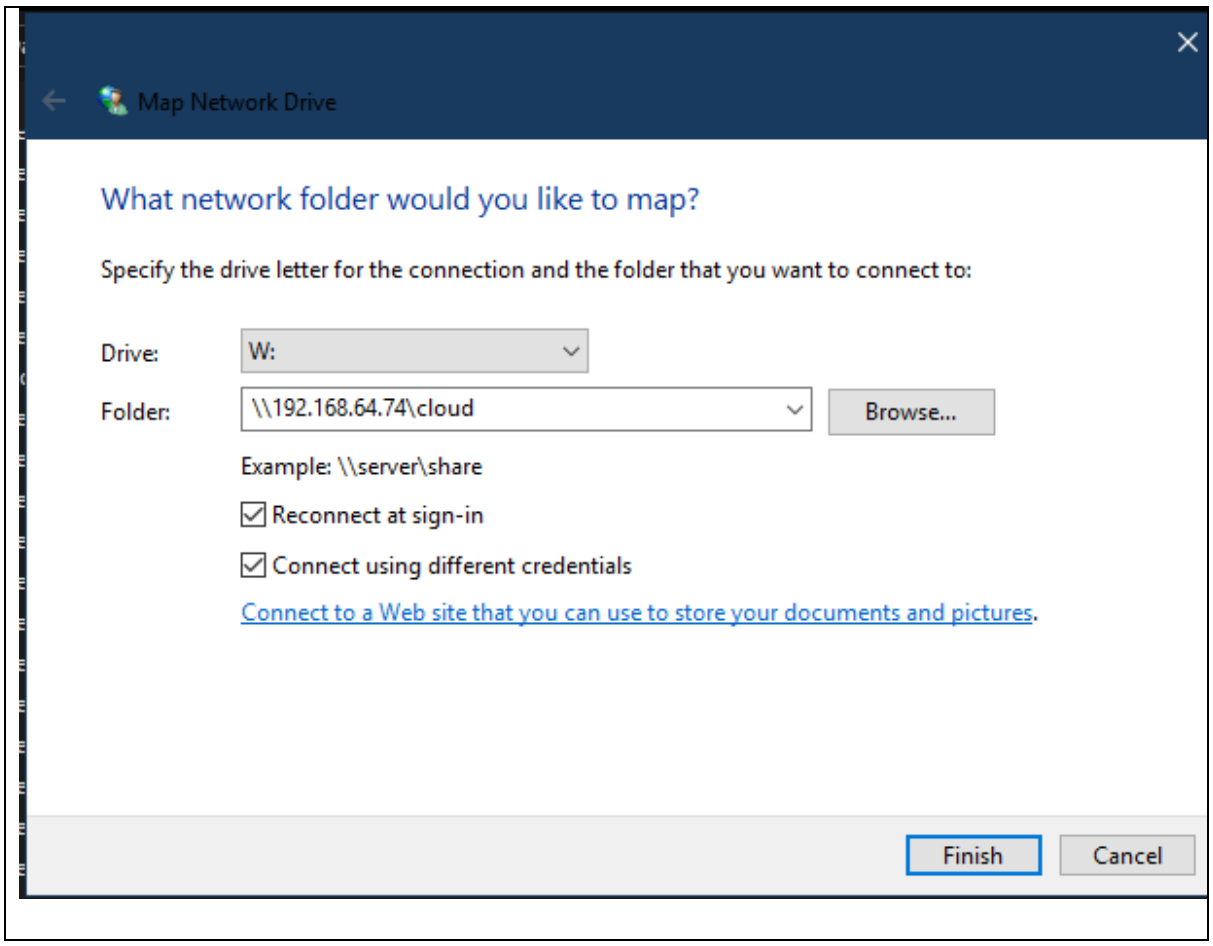


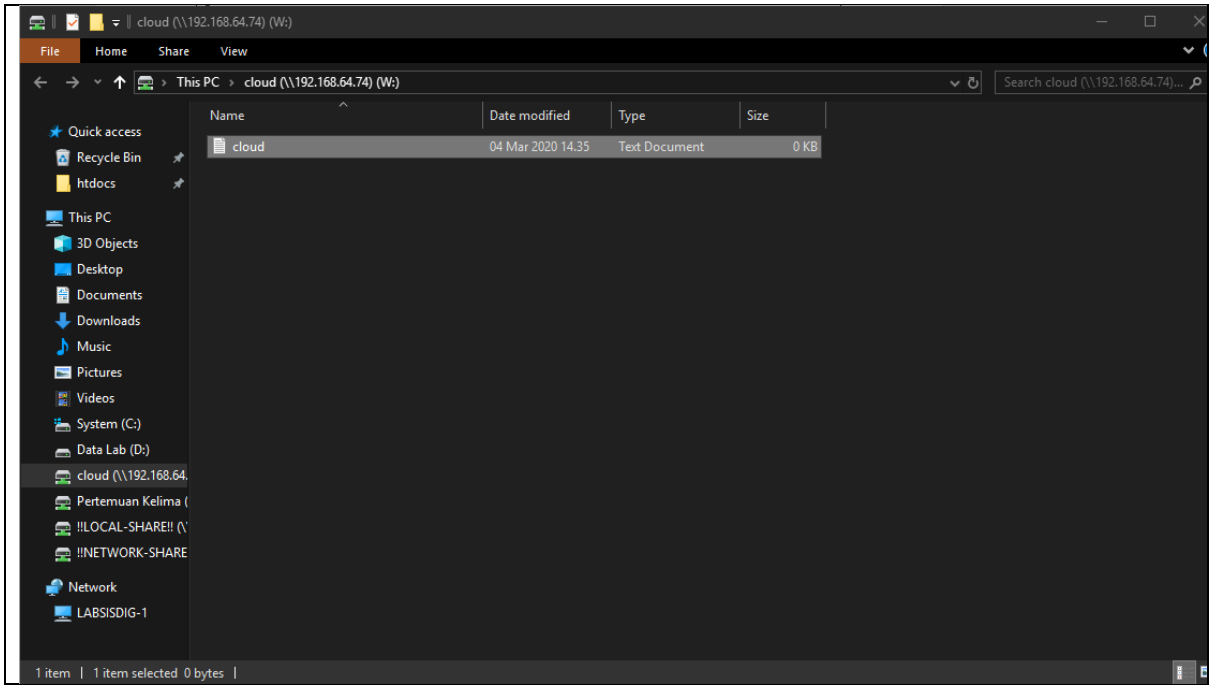

FreeNAS - 192.168.64.74
Not secure | 192.168.64.74/ui/storage/pools/id/data-cloud/dataset/permissions/data-cloud
FreeNAS
Storage / Pools / Edit Permissions
FreeNAS® © 2019 - iXsystems
root
Dashboard
Accounts
System
Tasks
Network
Storage
Pools
Snapshots
VMware-Snapshots
Disks
Import Disk
Directory Services
Sharing
Services
Plugins
Jails
Path
/mnt/data-cloud
ACL Type
Unix
Windows
Mac
Apply User
User
cloud
Apply Group
Group
wheel
Apply permissions recursively
cloud
jaringan
komputasi
sisdig
_dhcp
_pflogd
auditdistd
SAVE
CANCEL


FreeNAS - 192.168.64.74
Not secure | 192.168.64.74/ui/sharing/smb/add
FreeNAS
Sharing / SMB / Add
FreeNAS® © 2019 - iXsystems
root
Dashboard
Accounts
System
Tasks
Network
Storage
Directory Services
Sharing
Apple (AFP) Shares
Unix (NFS) Shares
WebDAV Shares
Block (iSCSI)
Services
Plugins
Jails
Path *
/mnt/data-cloud
/mnt
data-cloud
data-jaringan
data-komputasi
data-sisdig
cloud
Use as home share
Time Machine
Allow Guest Access
Periodic Snapshot Task
SAVE
CANCEL
ADVANCED MODE

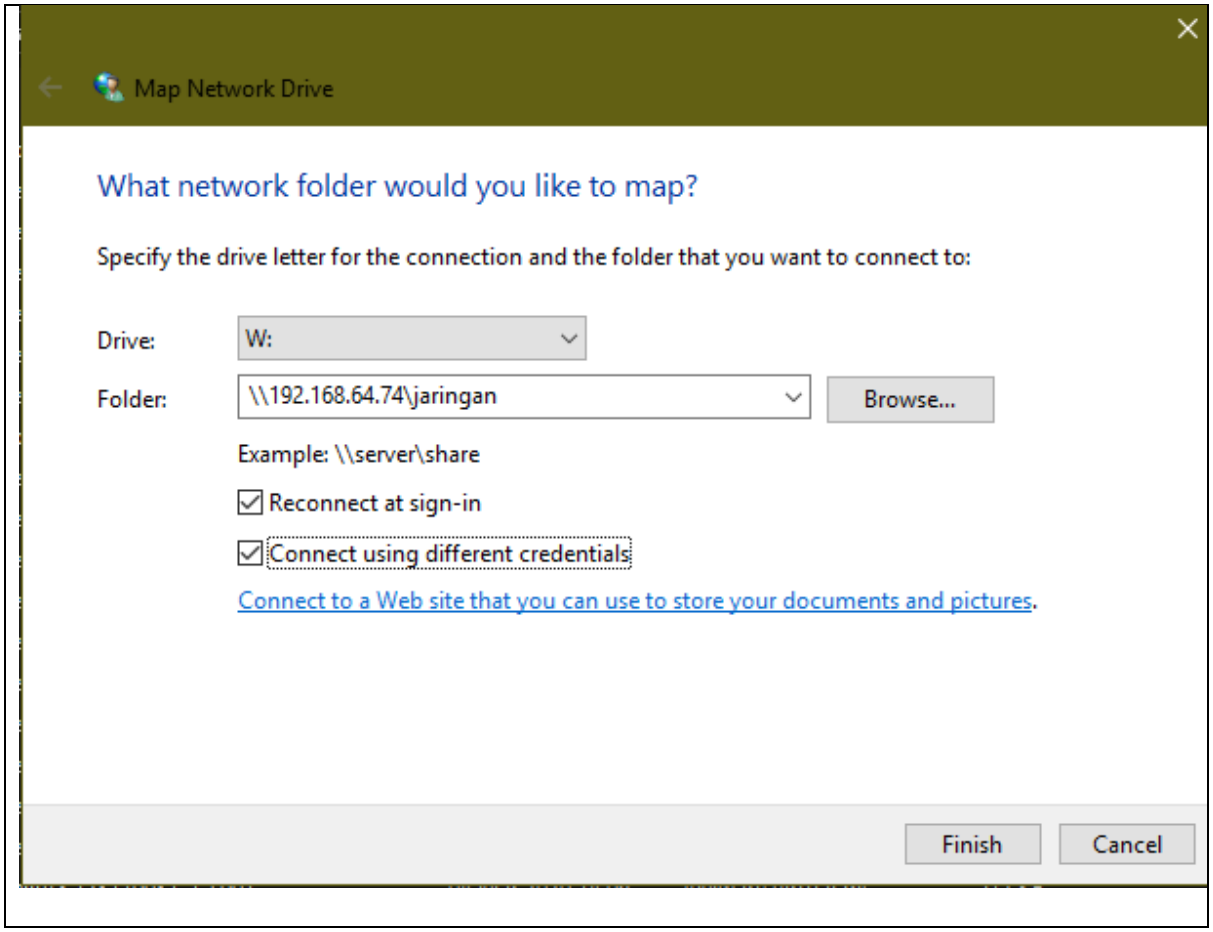


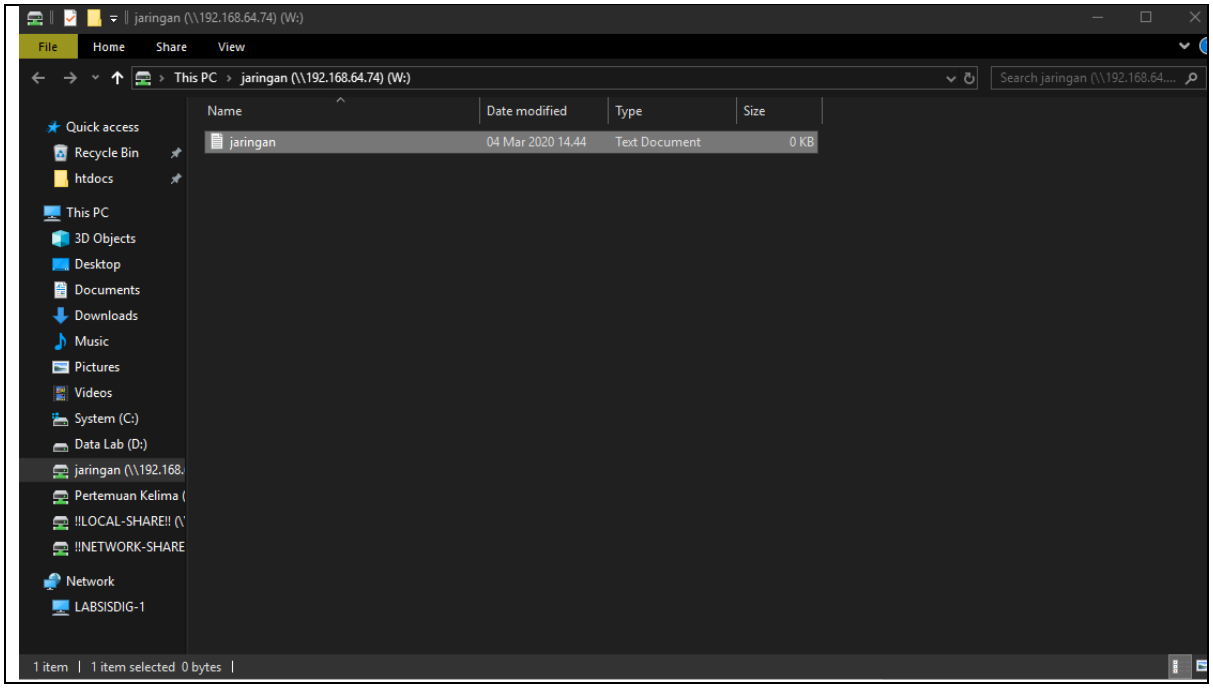
7. Tampilkan hasil akses shares pada Windows Explorer (hasil mapping) untuk Lab Cloud (yang pertama kali dibuat)



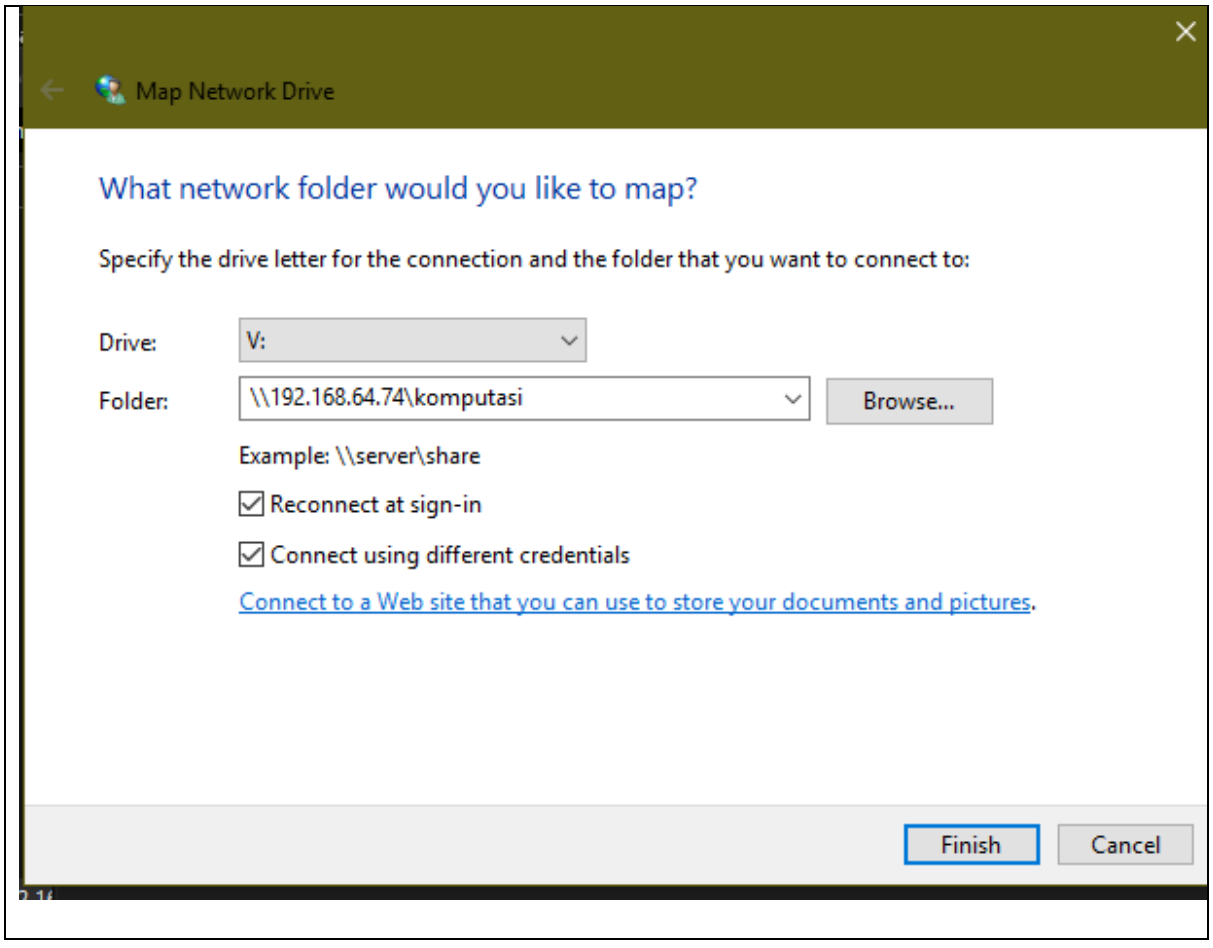


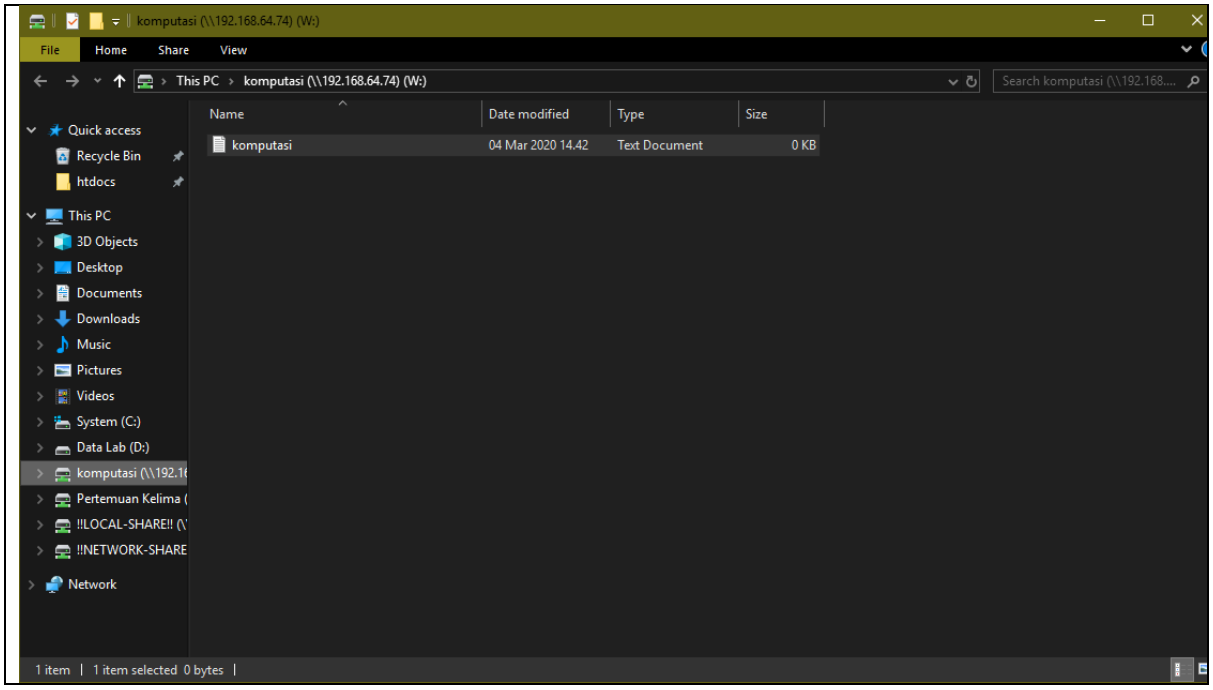
8. Tampilkan hasil akses shares untuk Lab Jaringan



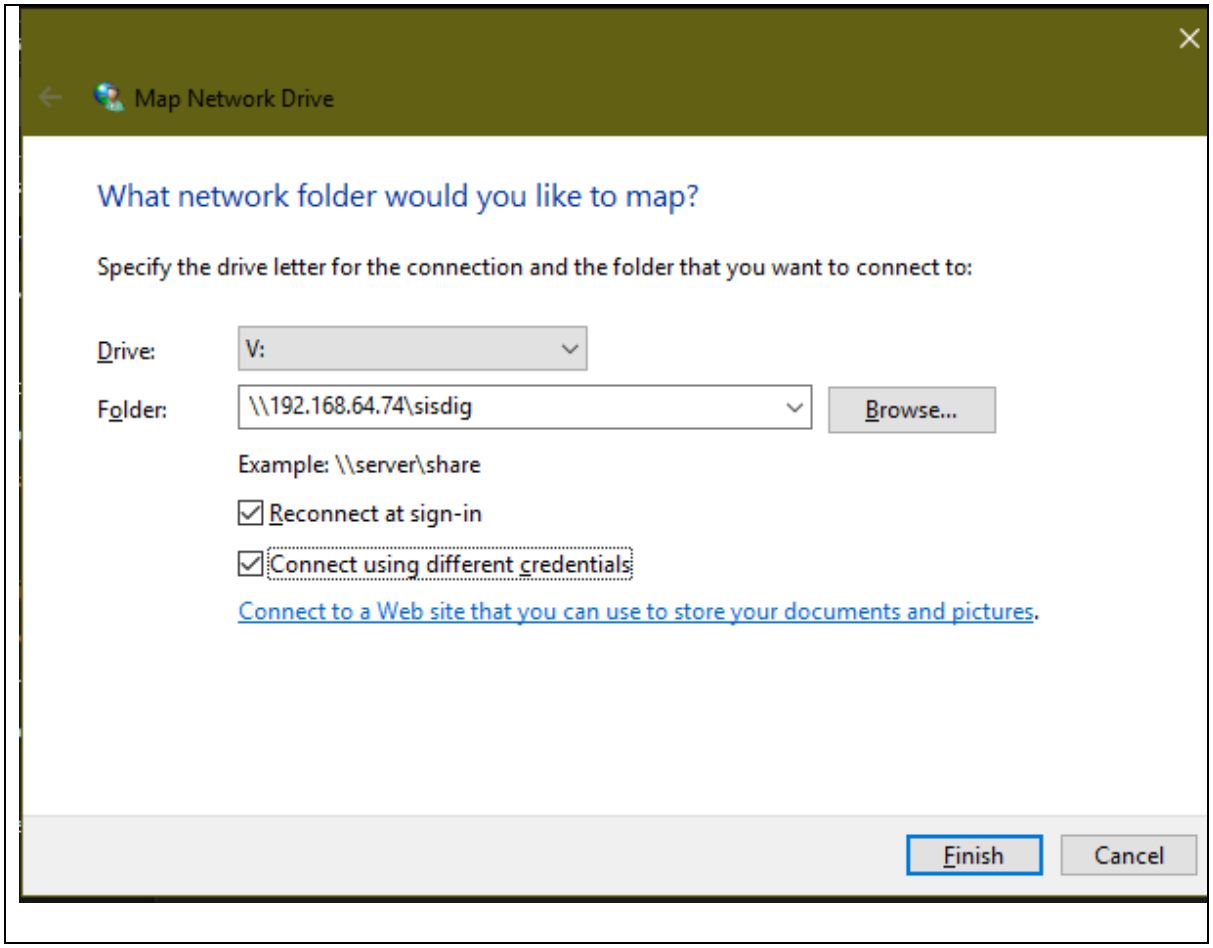


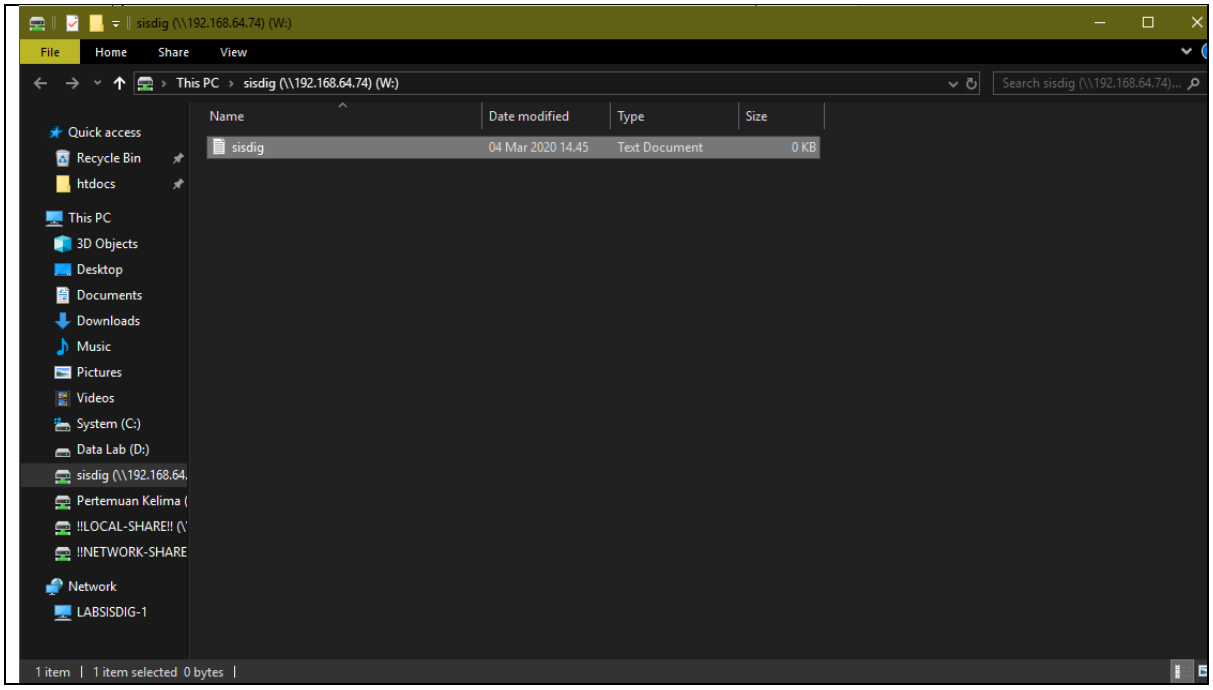
9. Tampilkan hasil akses shares untuk Lab Komputasi





10. Tampilkan hasil akses shares untuk Lab Sisdig

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File
Home
Share
View
This PC
sisdig (\\192.168.64.74) (W:)
Search sisdig (\\192.168.64.74)...
Quick access
Recycle Bin
htdocs
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
System (C:)
Data Lab (D:)
sisdig (\\192.168.64.
Pertemuan Kelima (
!!LOCAL-SHARE!! (\
!!NETWORK-SHARE
Network
LABSISDIG-1
Name
Date modified
Type
Size
sisdig
04 Mar 2020 14.45
Text Document
0 KB
1 item | 1 item selected 0 bytes |

DOKUMENTASI PERTEMUAN KELIMA (BILA ADA)

Storage Technologies

DAS(Direct Attached Network) → SAN(Storage Area Network) → NAS(Network Attached Storage)