Fatima Jinnah Women University
Department of Software Engineering

OPEN ENDED LAB

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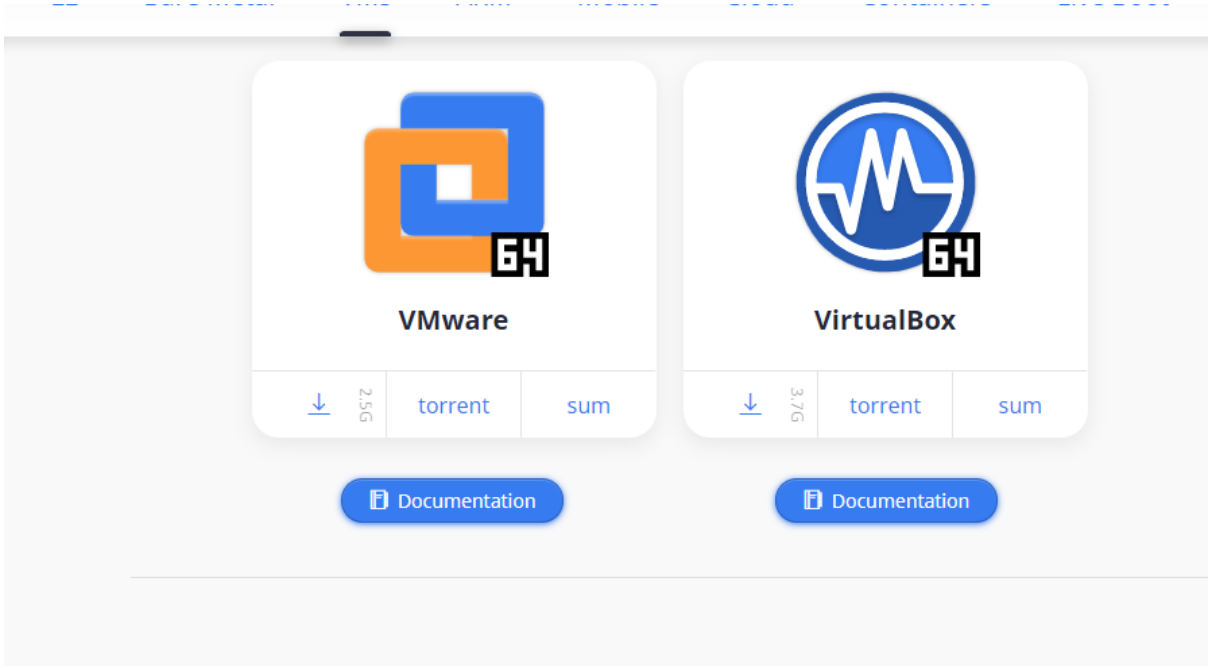
Reg. no: 2020-BSE-024

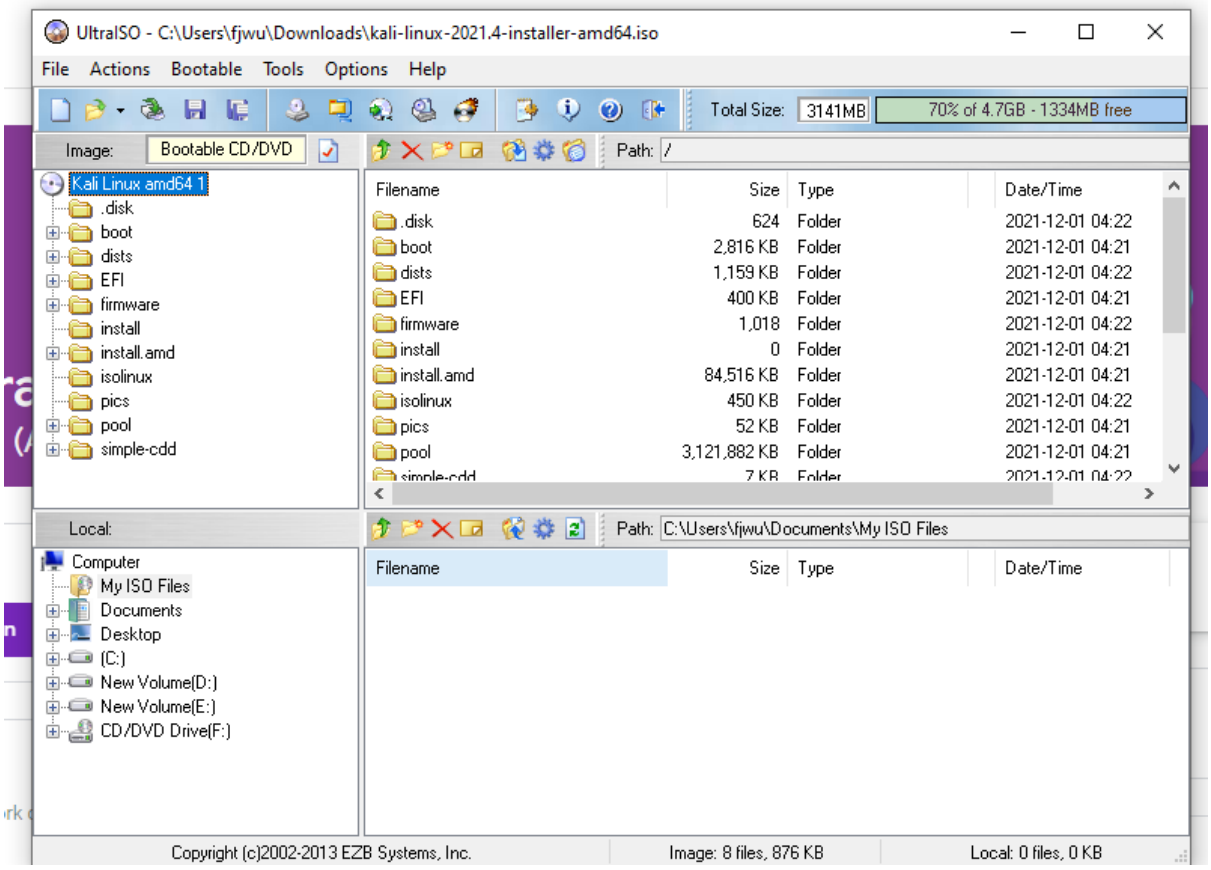
Section: A

Semester: Third

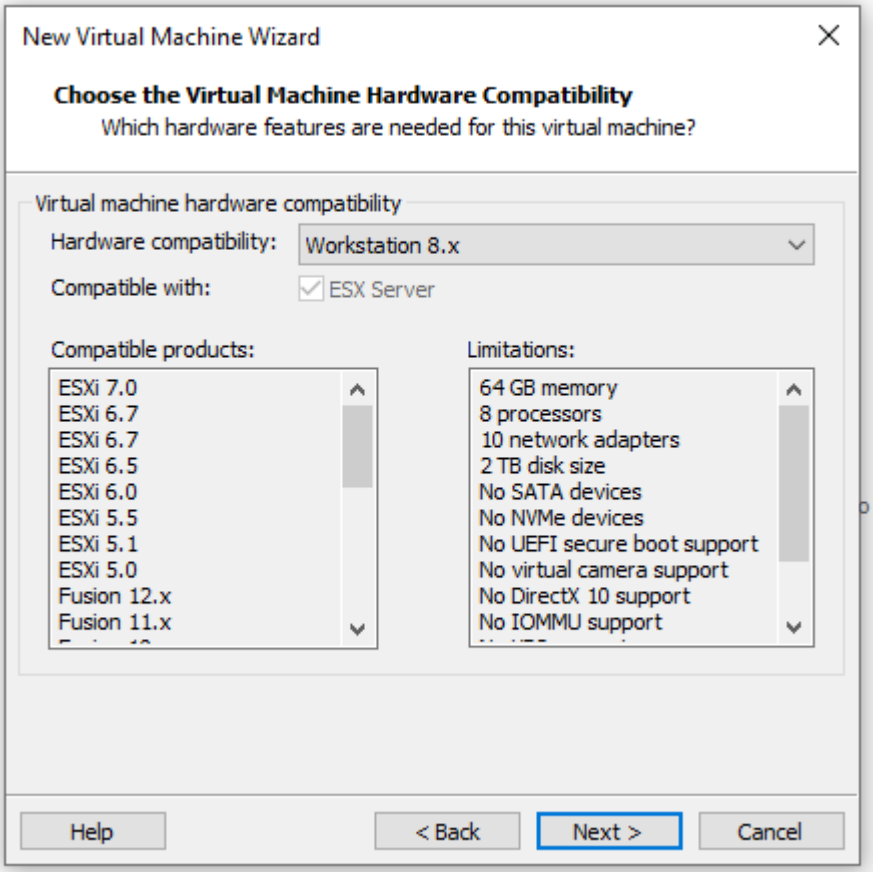
Course: Operating System (LAB)

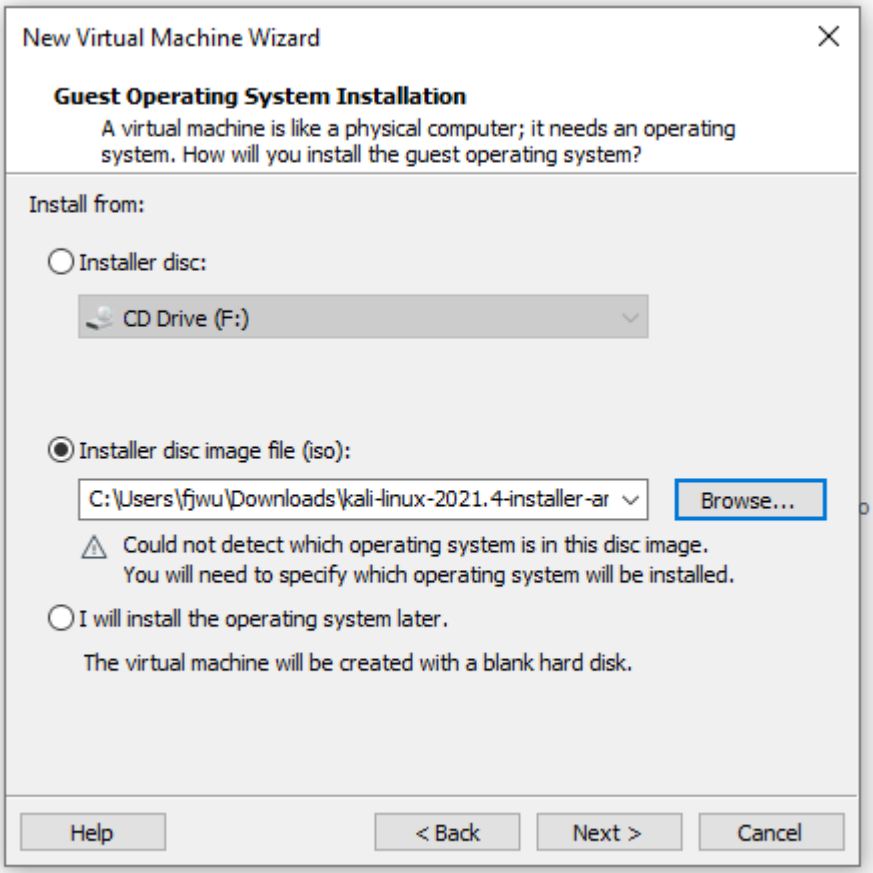
Task # 1

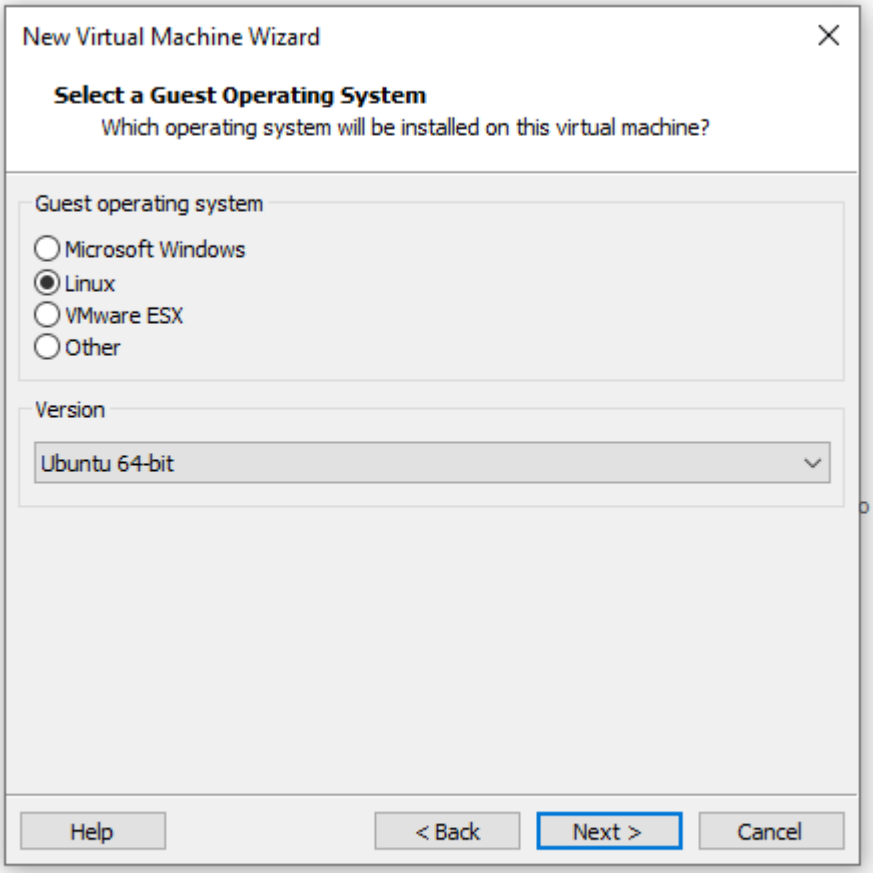

VMware
torrent
sum
Documentation
VirtualBox
torrent
sum
Documentation


UltraISO - C:\Users\fjwu\Downloads\kali-linux-2021.4-installer-amd64.iso
File Actions Bootable Tools Options Help
Total Size: 3141MB
70% of 4.7GB - 1334MB free
Image: Bootable CD/DVD
Path: /
Kali Linux amd64 1
.disk
boot
dists
EFI
firmware
install
install.amd
isolinux
pics
pool
simple-cdd
Filename Size Type Date/Time
.disk 624 Folder 2021-12-01 04:22
boot 2,816 KB Folder 2021-12-01 04:21
dists 1,159 KB Folder 2021-12-01 04:22
EFI 400 KB Folder 2021-12-01 04:21
firmware 1,018 Folder 2021-12-01 04:22
install 0 Folder 2021-12-01 04:21
install.amd 84,516 KB Folder 2021-12-01 04:21
isolinux 450 KB Folder 2021-12-01 04:22
pics 52 KB Folder 2021-12-01 04:21
pool 3,121,882 KB Folder 2021-12-01 04:21
Local:
Path: C:\Users\fjwu\Documents\My ISO Files
Computer
My ISO Files
Documents
Desktop
(C:)
New Volume(D:)
New Volume(E:)
CD/DVD Drive(F:)
Filename Size Type Date/Time
Copyright (c)2002-2013 EZB Systems, Inc.
Image: 8 files, 876 KB
Local: 0 files, 0 KB

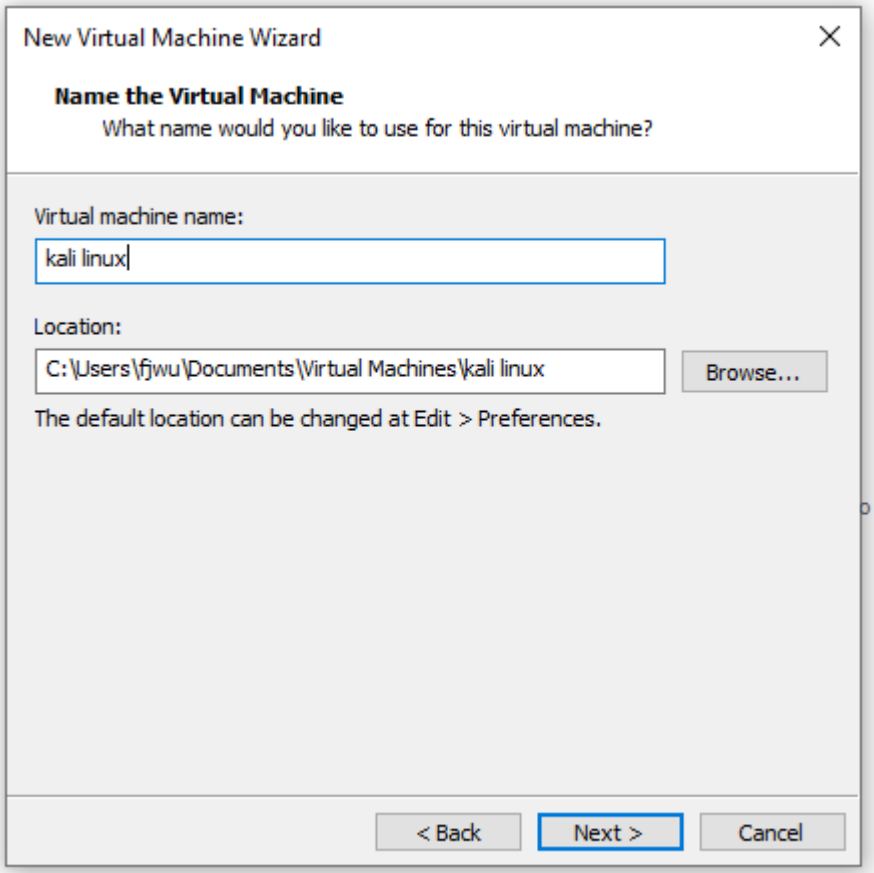
o open it in a tab.

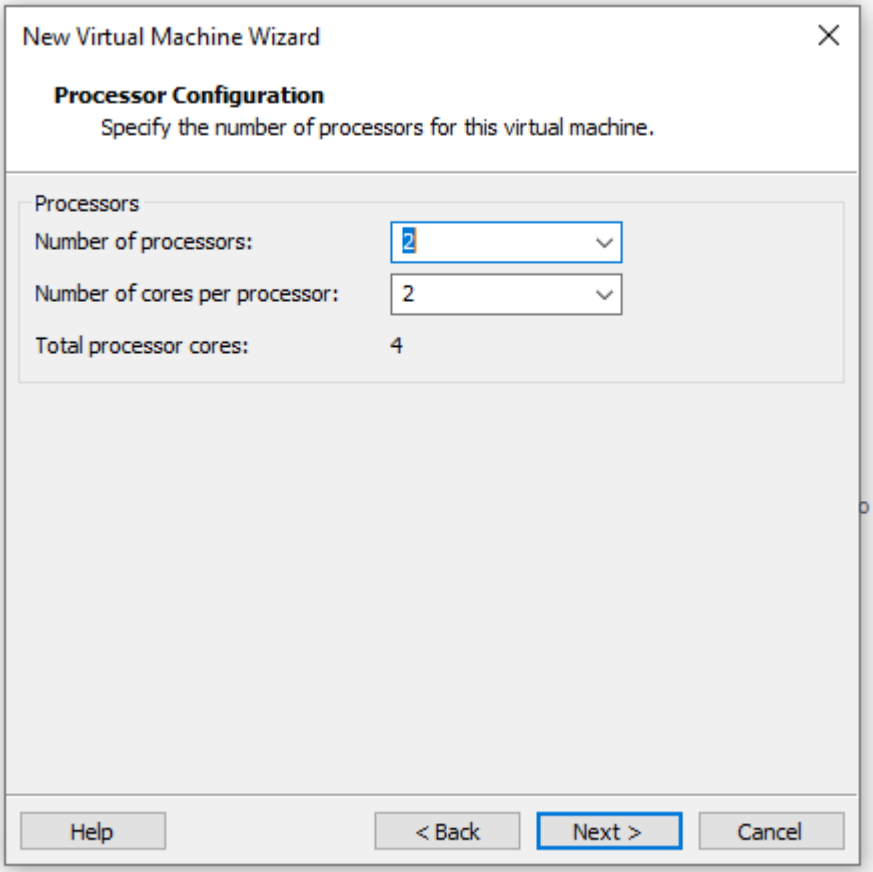

New Virtual Machine Wizard
Choose the Virtual Machine Hardware Compatibility
Which hardware features are needed for this virtual machine?
Virtual machine hardware compatibility
Hardware compatibility:
Workstation 8.x
Compatible with:
ESX Server
Compatible products:
ESXi 7.0
ESXi 6.7
ESXi 6.7
ESXi 6.5
ESXi 6.0
ESXi 5.5
ESXi 5.1
ESXi 5.0
Fusion 12.x
Fusion 11.x
Limitations:
64 GB memory
8 processors
10 network adapters
2 TB disk size
No SATA devices
No NVMe devices
No UEFI secure boot support
No virtual camera support
No DirectX 10 support
No IOMMU support
Help
< Back
Next >
Cancel


New Virtual Machine Wizard
Guest Operating System Installation
A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?
Install from:
Installer disc:
CD Drive (F:)
Installer disc image file (iso):
C:\Users\fjwu\Downloads\kali-linux-2021.4-installer-ar
Browse...
Could not detect which operating system is in this disc image.
You will need to specify which operating system will be installed.
I will install the operating system later.
The virtual machine will be created with a blank hard disk.
Help
< Back
Next >
Cancel

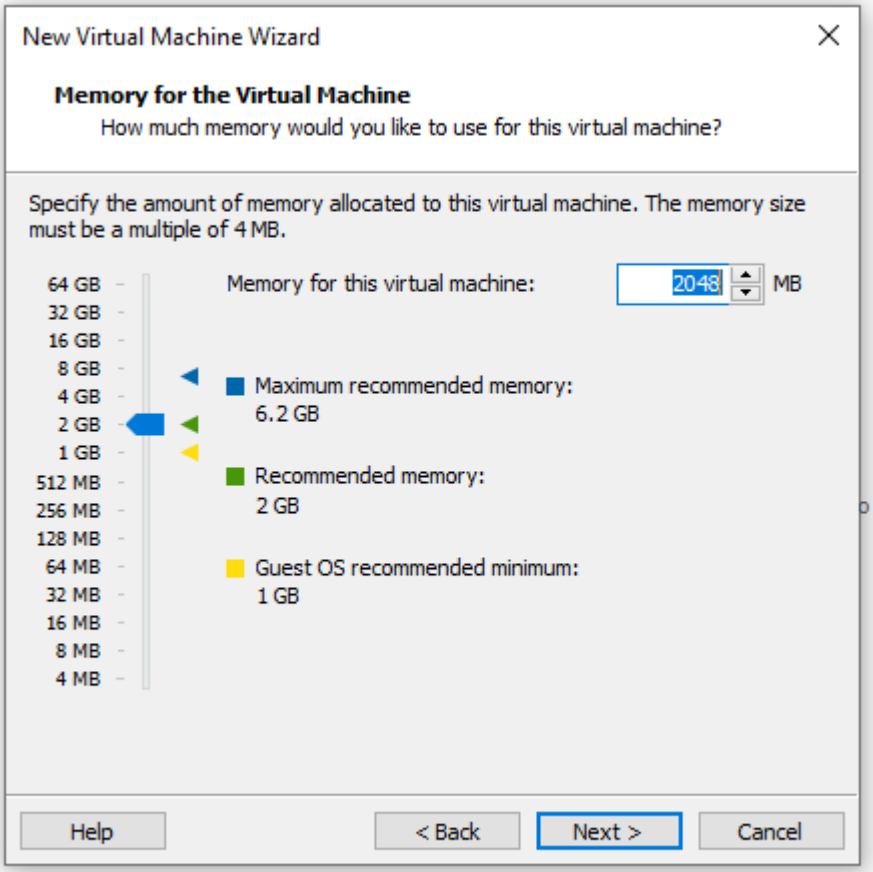

New Virtual Machine Wizard
Select a Guest Operating System
Which operating system will be installed on this virtual machine?
Guest operating system
Microsoft Windows
Linux
VMware ESX
Other
Version
Ubuntu 64-bit
Help
< Back
Next >
Cancel

o open it in a

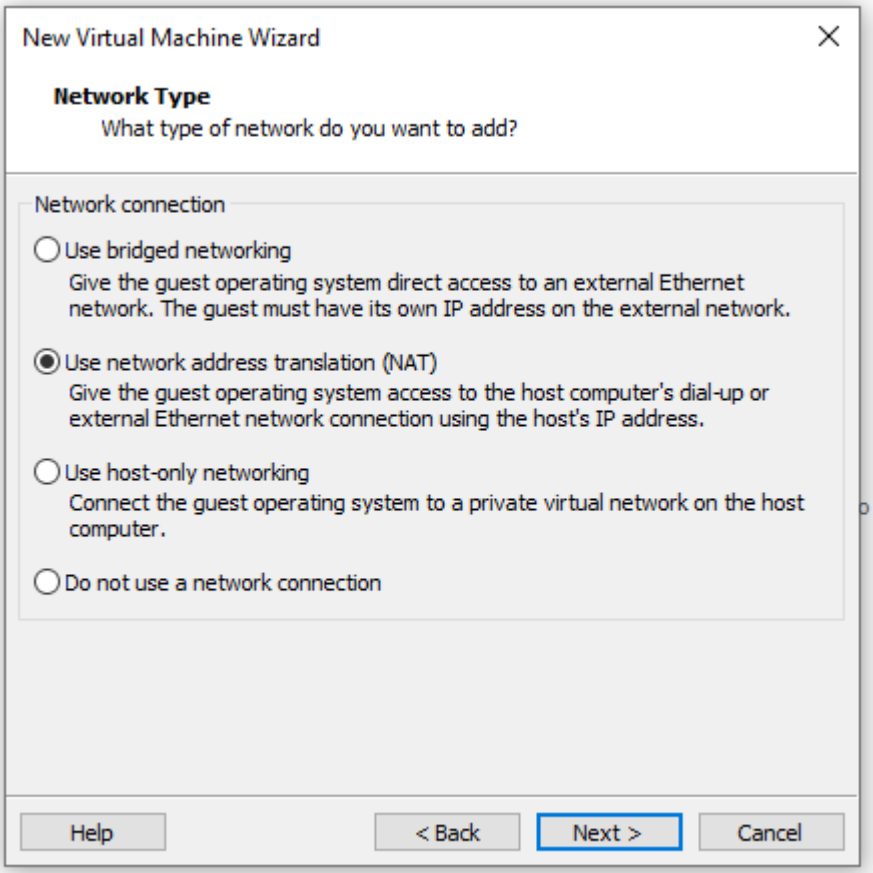

New Virtual Machine Wizard
Name the Virtual Machine
What name would you like to use for this virtual machine?
Virtual machine name:
kali linux
Location:
C:\Users\fjwu\Documents\Virtual Machines\kali linux
Browse...
The default location can be changed at Edit > Preferences.
< Back
Next >
Cancel

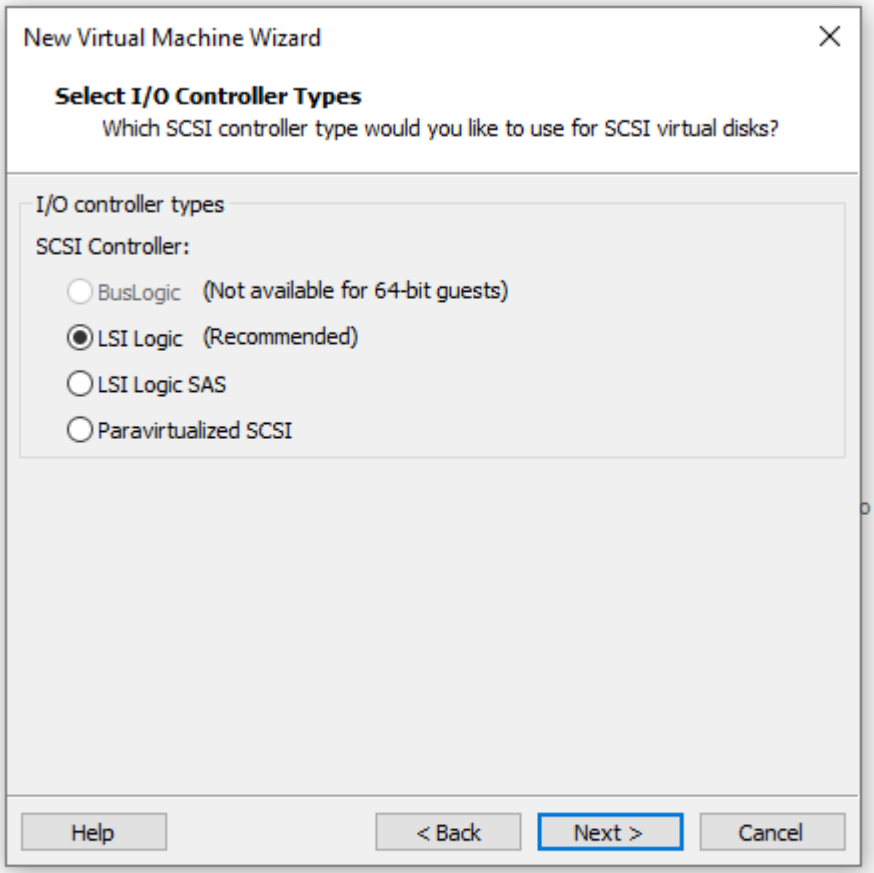

New Virtual Machine Wizard
Processor Configuration
Specify the number of processors for this virtual machine.
Processors
Number of processors:
2
Number of cores per processor:
2
Total processor cores:
4
Help
< Back
Next >
Cancel

o open it in a

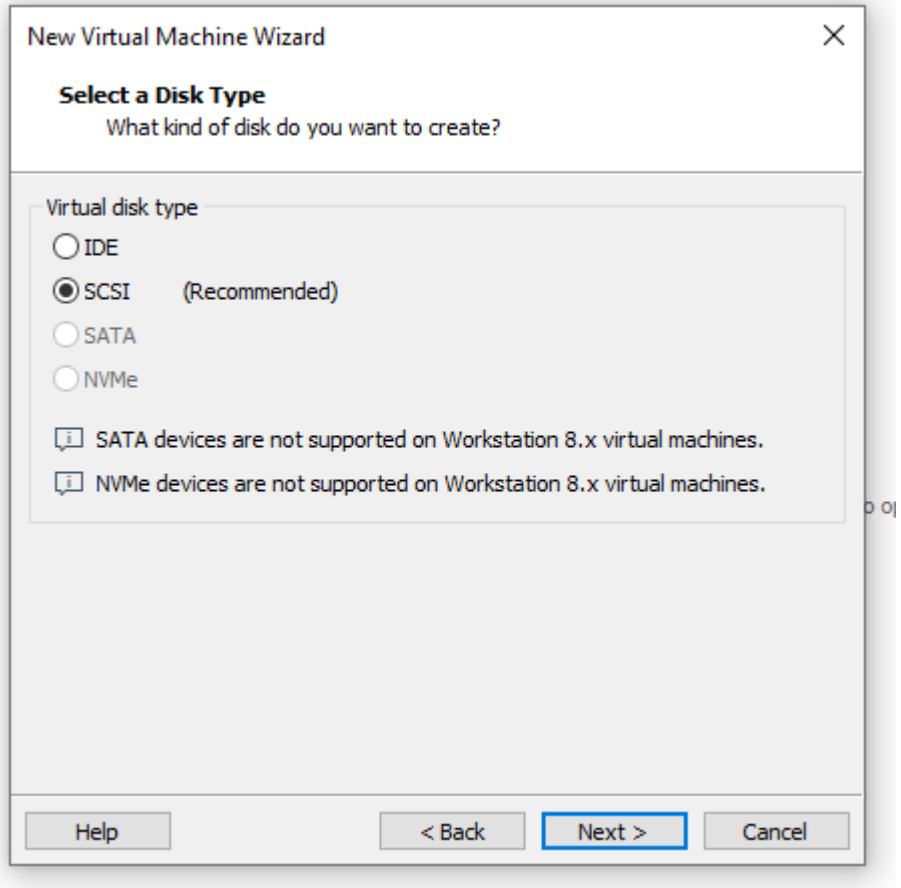

New Virtual Machine Wizard
Memory for the Virtual Machine
How much memory would you like to use for this virtual machine?
Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.
64 GB
32 GB
16 GB
8 GB
4 GB
2 GB
1 GB
512 MB
256 MB
128 MB
64 MB
32 MB
16 MB
8 MB
4 MB
Memory for this virtual machine:
2048
MB
Maximum recommended memory:
6.2 GB
Recommended memory:
2 GB
Guest OS recommended minimum:
1 GB
Help
< Back
Next >
Cancel

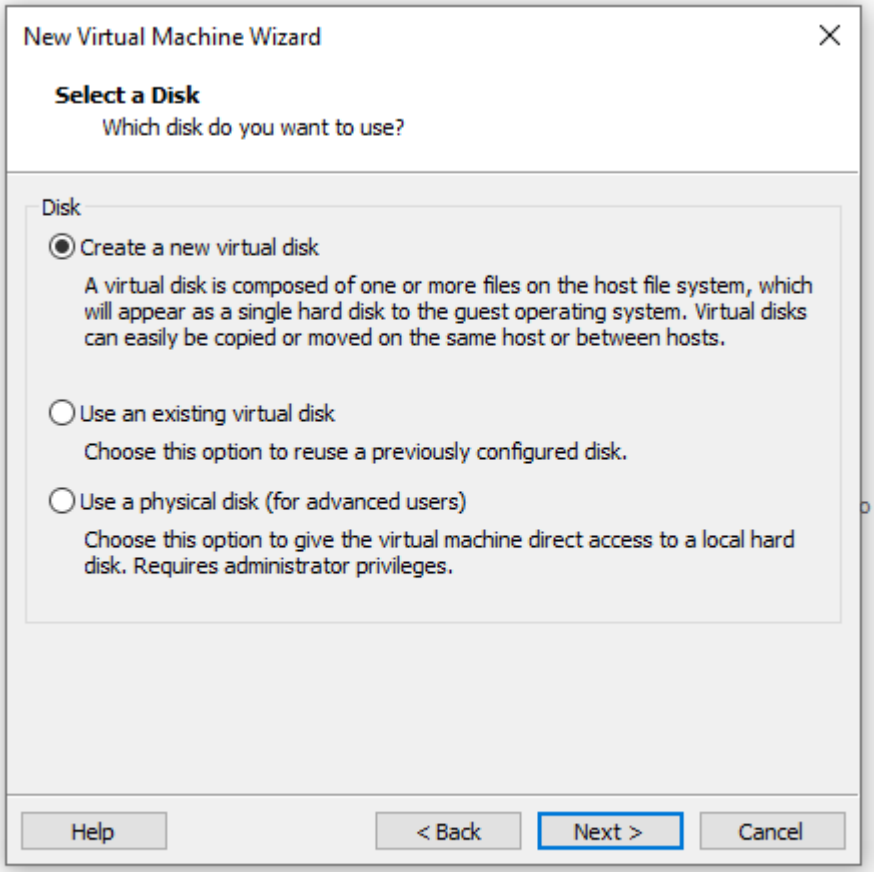
o open it in a

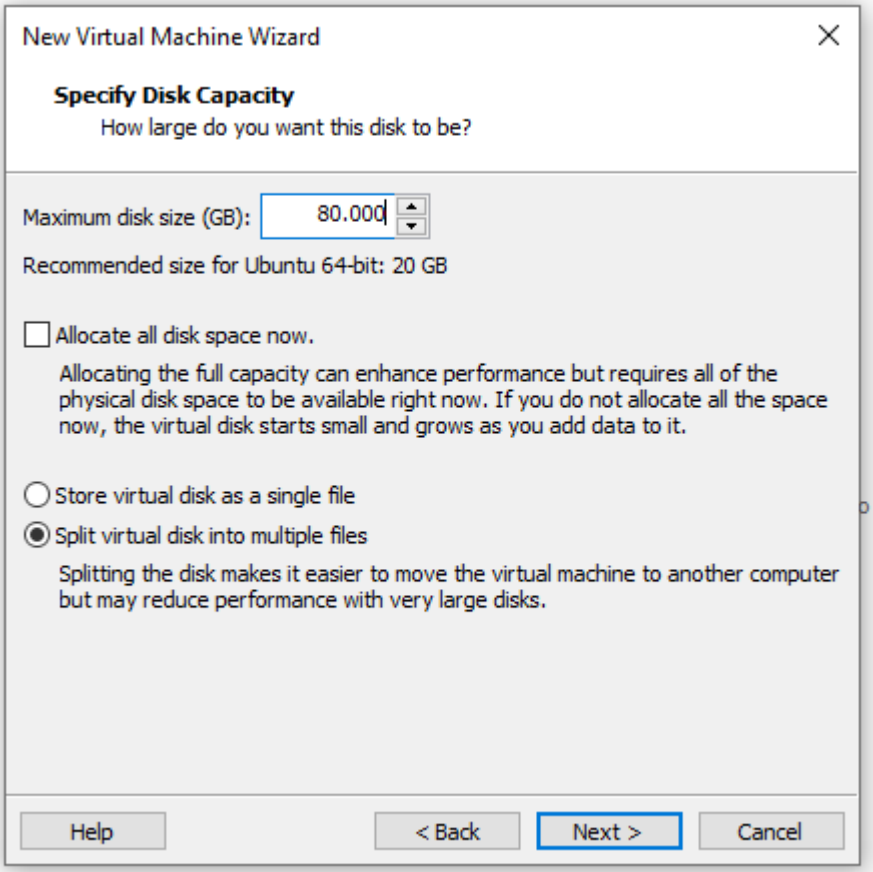

New Virtual Machine Wizard
Network Type
What type of network do you want to add?
Network connection
Use bridged networking
Give the guest operating system direct access to an external Ethernet network. The guest must have its own IP address on the external network.
Use network address translation (NAT)
Give the guest operating system access to the host computer's dial-up or external Ethernet network connection using the host's IP address.
Use host-only networking
Connect the guest operating system to a private virtual network on the host computer.
Do not use a network connection
Help
< Back
Next >
Cancel

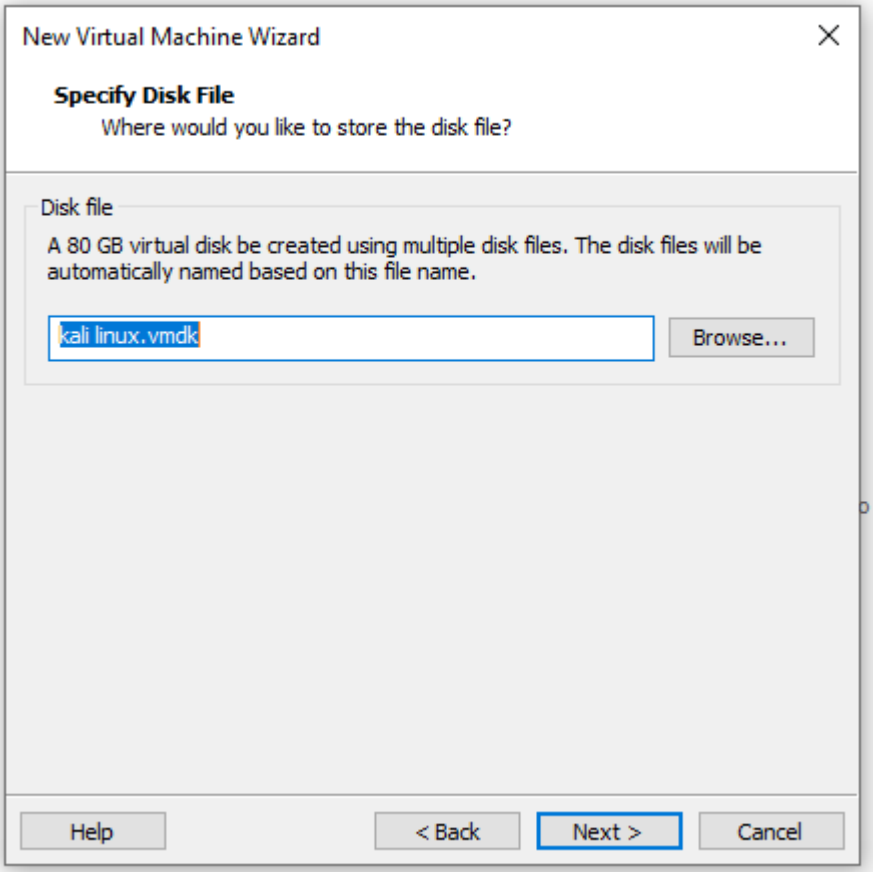

New Virtual Machine Wizard
Select I/O Controller Types
Which SCSI controller type would you like to use for SCSI virtual disks?
I/O controller types
SCSI Controller:
BusLogic (Not available for 64-bit guests)
LSI Logic (Recommended)
LSI Logic SAS
Paravirtualized SCSI
Help
< Back
Next >
Cancel

o open it

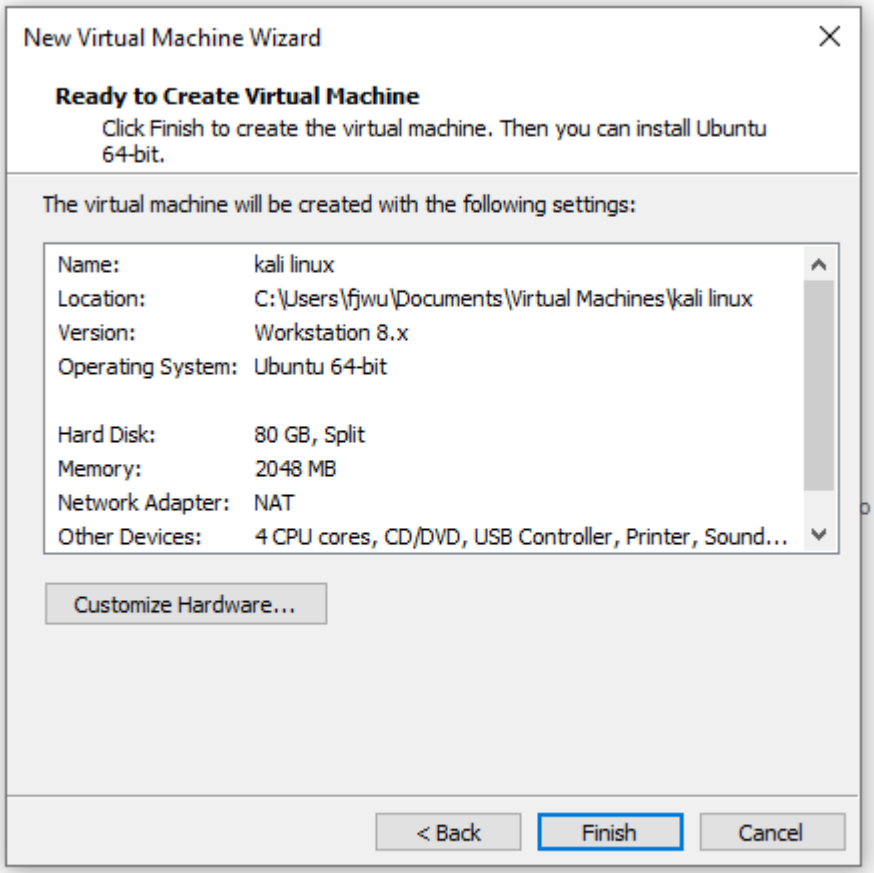

New Virtual Machine Wizard
Select a Disk Type
What kind of disk do you want to create?
Virtual disk type
IDE
SCSI (Recommended)
SATA
NVMe
SATA devices are not supported on Workstation 8.x virtual machines.
NVMe devices are not supported on Workstation 8.x virtual machines.
Help
< Back
Next >
Cancel

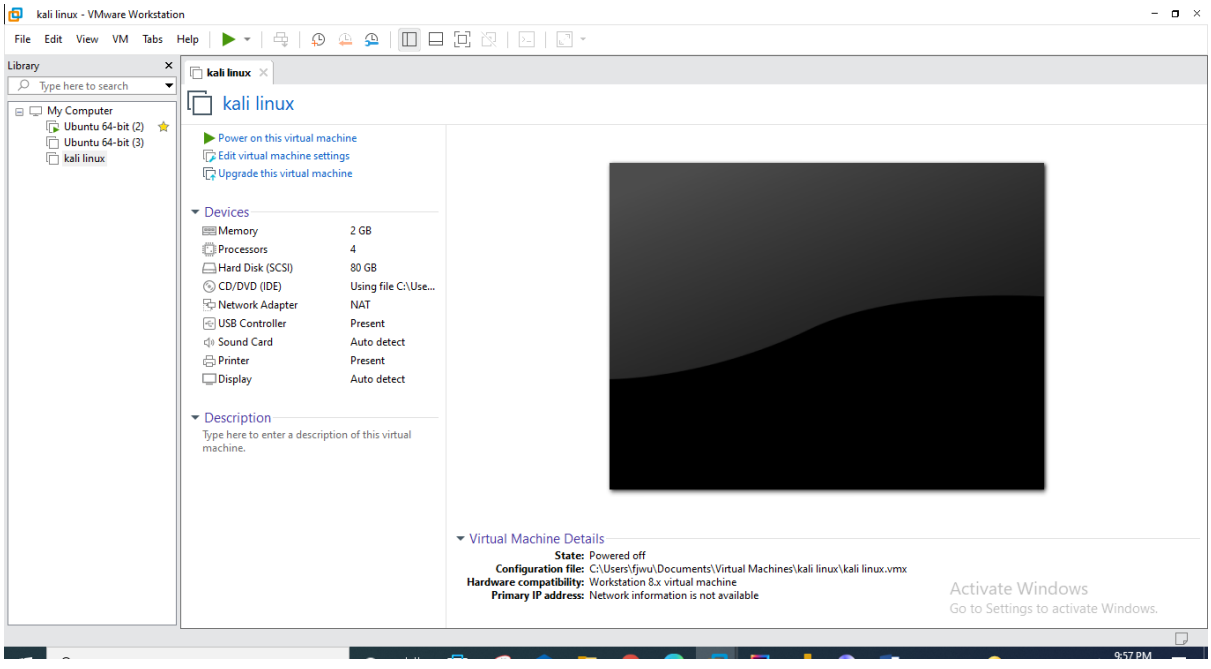

New Virtual Machine Wizard
Select a Disk
Which disk do you want to use?
Disk
Create a new virtual disk
A virtual disk is composed of one or more files on the host file system, which will appear as a single hard disk to the guest operating system. Virtual disks can easily be copied or moved on the same 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.
Help
< Back
Next >
Cancel

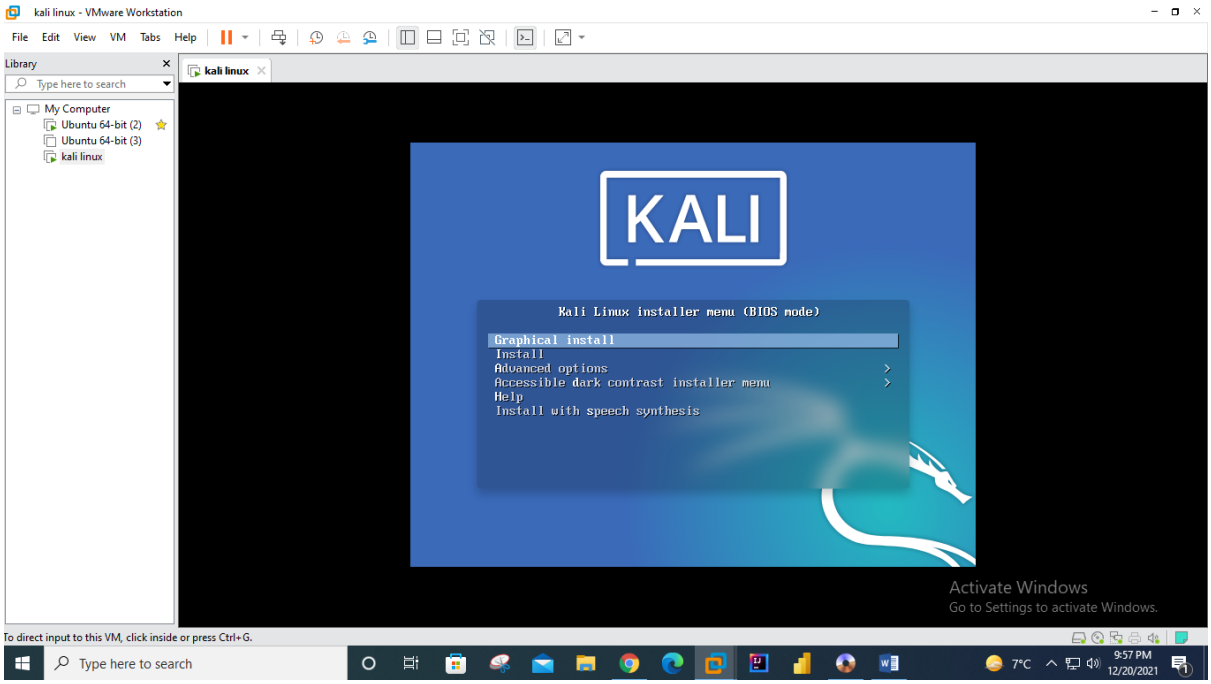

New Virtual Machine Wizard
Specify Disk Capacity
How large do you want this disk to be?
Maximum disk size (GB):
80.000
Recommended size for Ubuntu 64-bit: 20 GB
Allocate all disk space now.
Allocating the full capacity can enhance performance but requires all of the physical disk space to be available 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

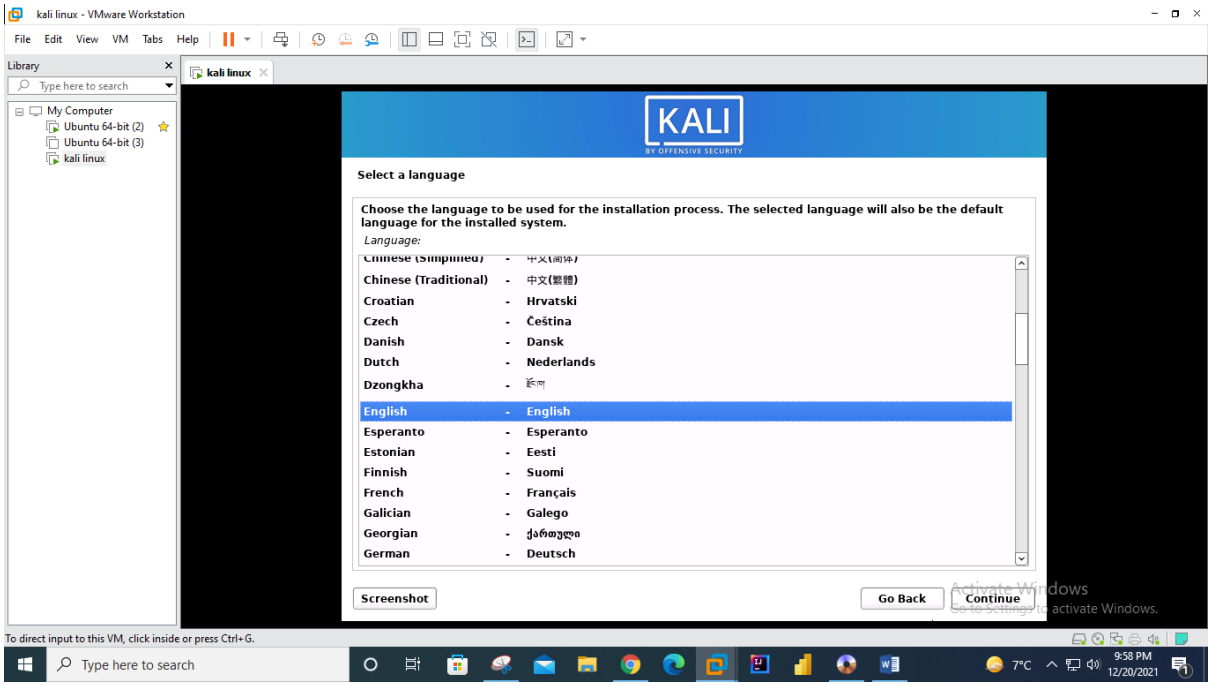

New Virtual Machine Wizard
Specify Disk File
Where would you like to store the disk file?
Disk file
A 80 GB virtual disk be created using multiple disk files. The disk files will be automatically named based on this file name.
kali linux.vmdk
Browse...
Help
< Back
Next >
Cancel

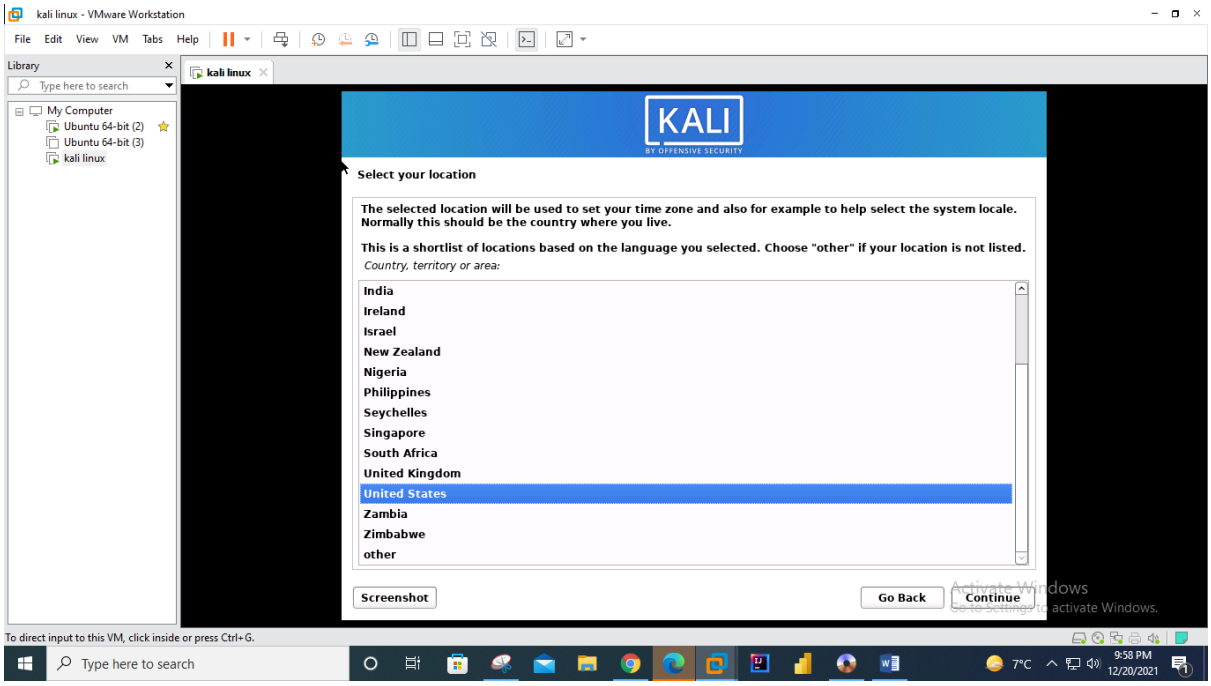
o open it

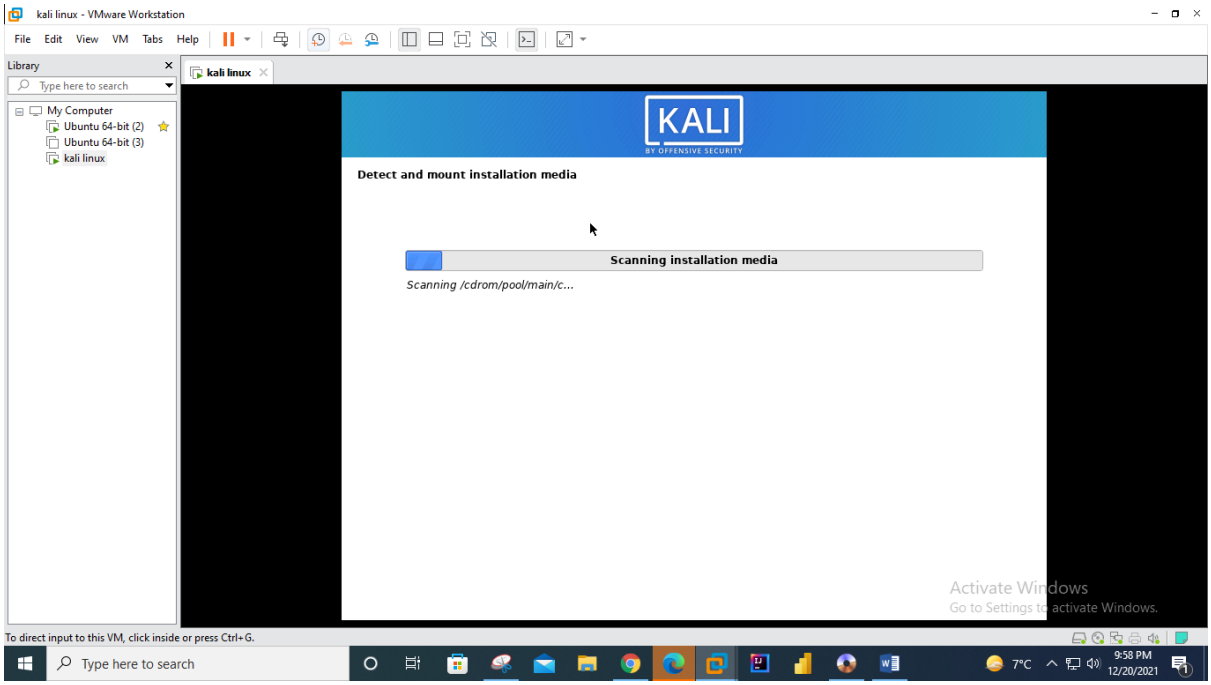

New Virtual Machine Wizard
Ready to Create Virtual Machine
Click Finish to create the virtual machine. Then you can install Ubuntu 64-bit.
The virtual machine will be created with the following settings:
Name: kali linux
Location: C:\Users\fjwu\Documents\Virtual Machines\kali linux
Version: Workstation 8.x
Operating System: Ubuntu 64-bit
Hard Disk: 80 GB, Split
Memory: 2048 MB
Network Adapter: NAT
Other Devices: 4 CPU cores, CD/DVD, USB Controller, Printer, Sound...
Customize Hardware...
< Back
Finish
Cancel

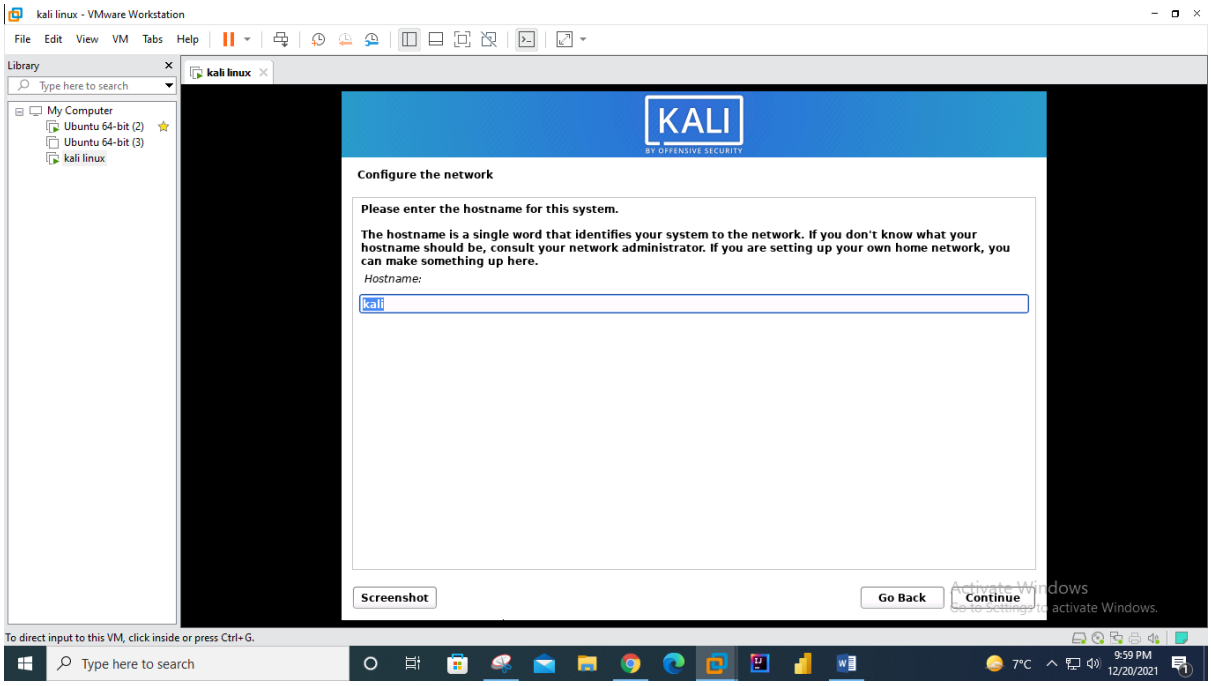

kali linux - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit (2)
Ubuntu 64-bit (3)
kali linux
kali linux
Power on this virtual machine
Edit virtual machine settings
Upgrade this virtual machine
Devices
Memory 2 GB
Processors 4
Hard Disk (SCSI) 80 GB
CD/DVD (IDE) Using file C:\Use...
Network Adapter NAT
USB Controller Present
Sound Card Auto detect
Printer Present
Display Auto detect
Description
Type here to enter a description of this virtual machine.
Virtual Machine Details
State: Powered off
Configuration file: C:\Users\fjwu\Documents\Virtual Machines\kali linux\kali linux.vmx
Hardware compatibility: Workstation 8.x virtual machine
Primary IP address: Network information is not available
Activate Windows
Go to Settings to activate Windows.

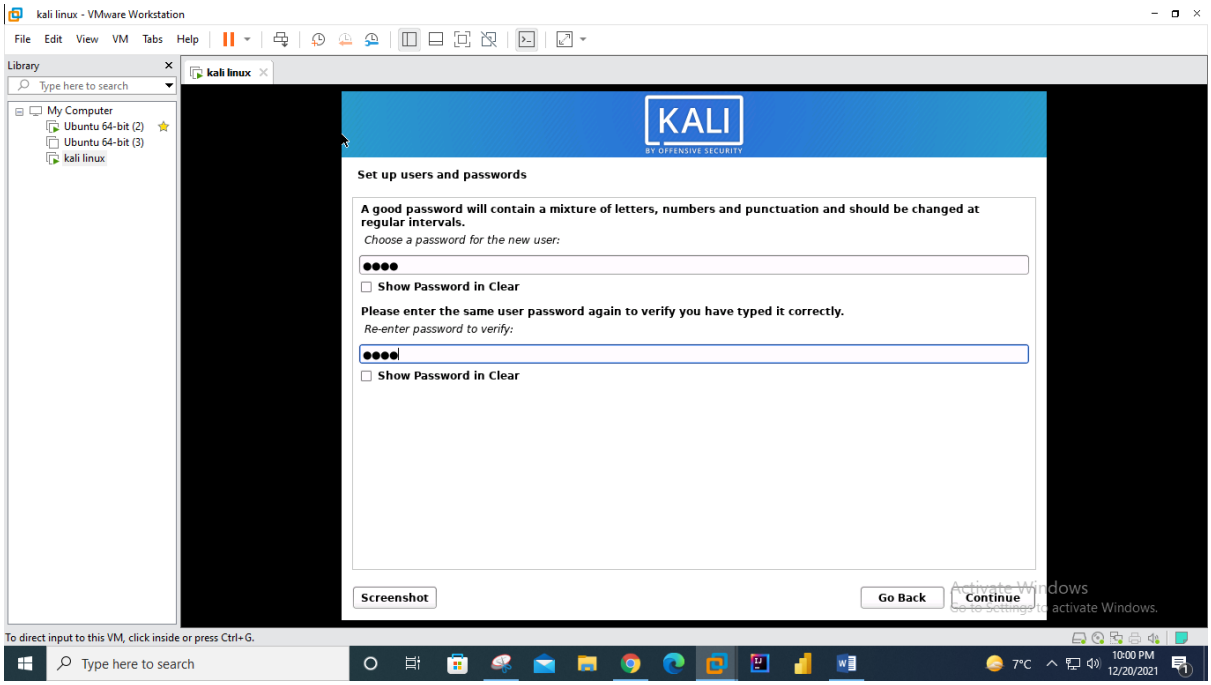

kali linux - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit (2)
Ubuntu 64-bit (3)
kali linux
kali linux
KALI
Xali Linux installer menu (BIOS mode)
Graphical install
Install
Advanced options
Accessible dark contrast installer menu
Help
Install with speech synthesis
Activate Windows
Go to Settings to activate Windows.
To direct input to this VM, click inside or press Ctrl+G.
Type here to search
7°C
9:57 PM
12/20/2021

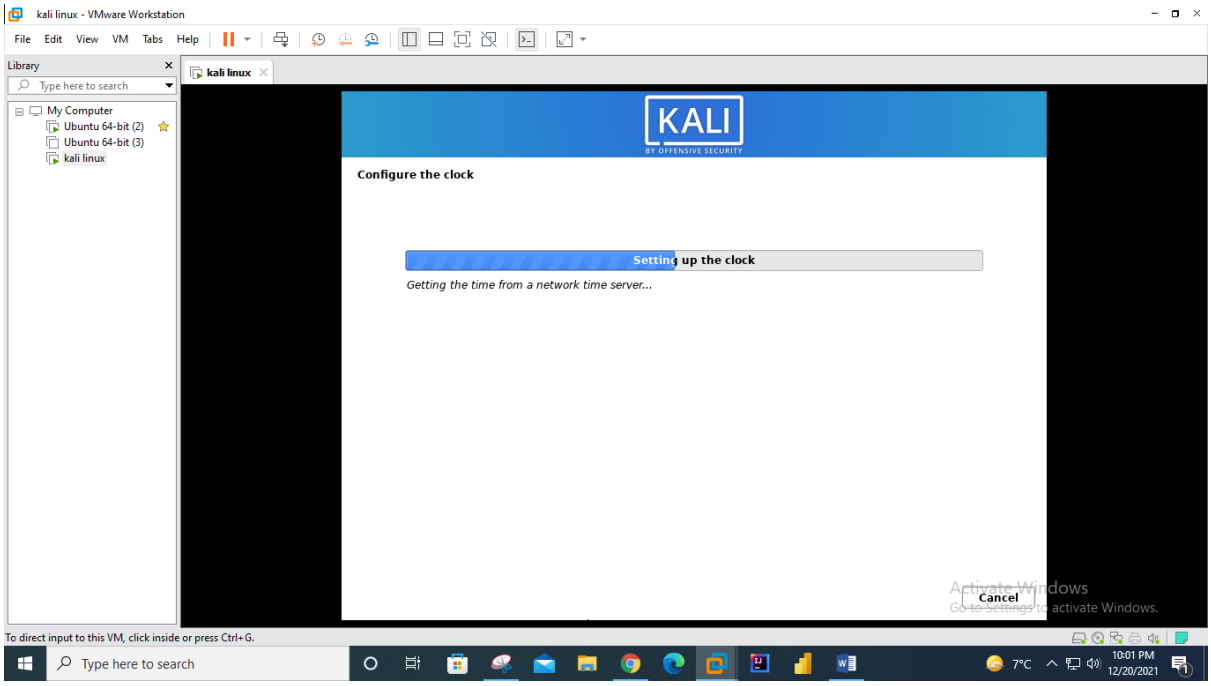

kali linux - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit (2)
Ubuntu 64-bit (3)
kali linux
kali linux
KALI
BY OFFENSIVE SECURITY
Select a language
Choose the language to be used for the installation process. The selected language will also be the default language for the installed system.
Language:
Chinese (Traditional) - 中文(繁體)
Croatian - Hrvatski
Czech - Čeština
Danish - Dansk
Dutch - Nederlands
Dzongkha -
English - English
Esperanto - Esperanto
Estonian - Eesti
Finnish - Suomi
French - Français
Galician - Galego
Georgian - ქართული
German - Deutsch
Screenshot
Go Back
Continue
Activate Windows
Go to Settings to activate Windows.
To direct input to this VM, click inside or press Ctrl+G.
Type here to search
7°C
9:58 PM
12/20/2021

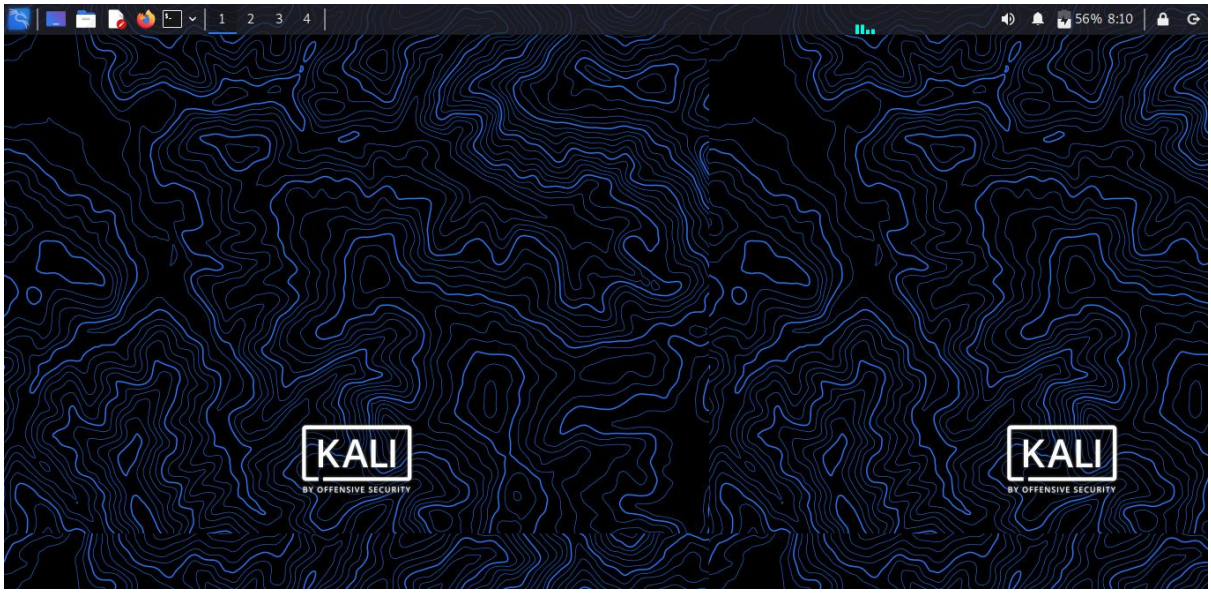

kali linux - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit (2)
Ubuntu 64-bit (3)
kali linux
kali linux
KALI
BY OFFENSIVE SECURITY
Select your location
The selected location will be used to set your time zone and also for example to help select the system locale. Normally this should be the country where you live.
This is a shortlist of locations based on the language you selected. Choose "other" if your location is not listed.
Country, territory or area:
India
Ireland
Israel
New Zealand
Nigeria
Philippines
Seychelles
Singapore
South Africa
United Kingdom
United States
Zambia
Zimbabwe
other
Screenshot
Go Back
Continue
Activate Windows
Go to Settings to activate Windows.
To direct input to this VM, click inside or press Ctrl+G.
Type here to search
7°C
9:58 PM
12/20/2021

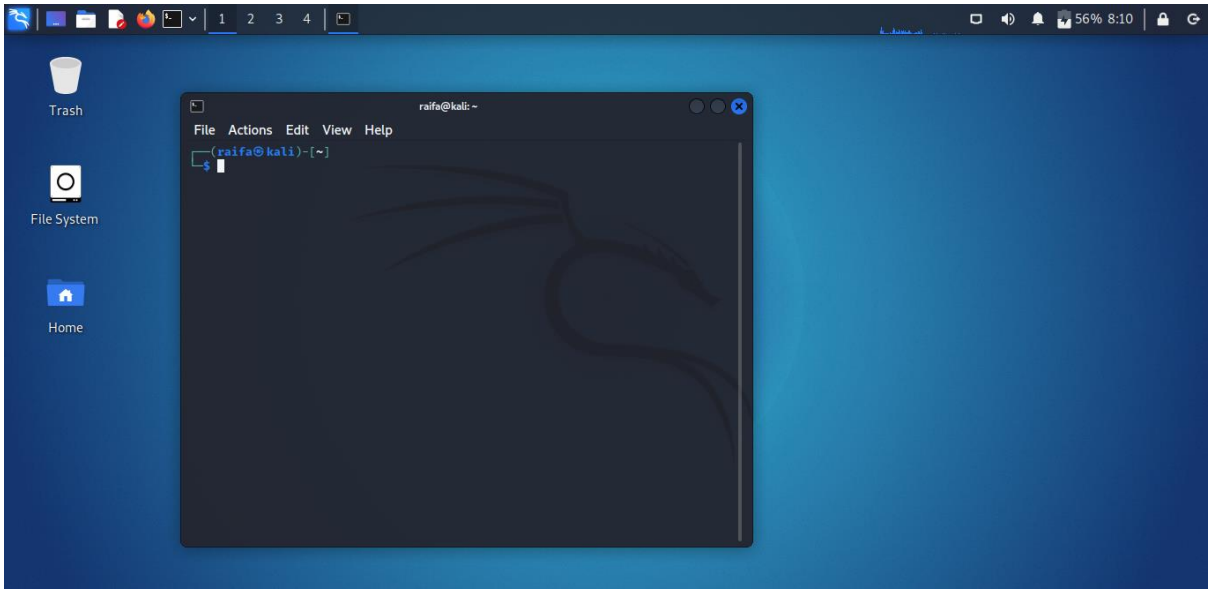

kali linux - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit (2)
Ubuntu 64-bit (3)
kali linux
kali linux
KALI
BY OFFENSIVE SECURITY
Detect and mount installation media
Scanning installation media
Scanning /cdrom/pool/main/c...
Activate Windows
Go to Settings to activate Windows.
To direct input to this VM, click inside or press Ctrl+G.
Type here to search
7°C
9:58 PM
12/20/2021

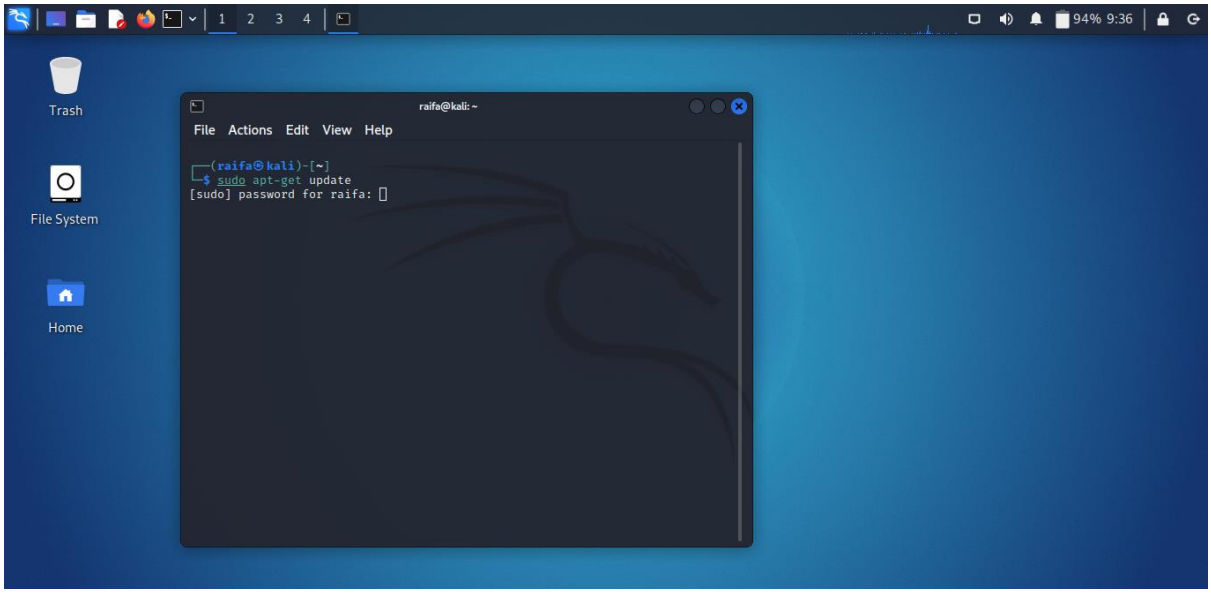

kali linux - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit (2)
Ubuntu 64-bit (3)
kali linux
kali linux
KALI
BY OFFENSIVE SECURITY
Configure the network
Please enter the hostname for this system.
The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.
Hostname:
kali
Screenshot
Go Back
Continue
Activate Windows
To direct input to this VM, click inside or press Ctrl+G.
Type here to search
7°C
9:59 PM
12/20/2021

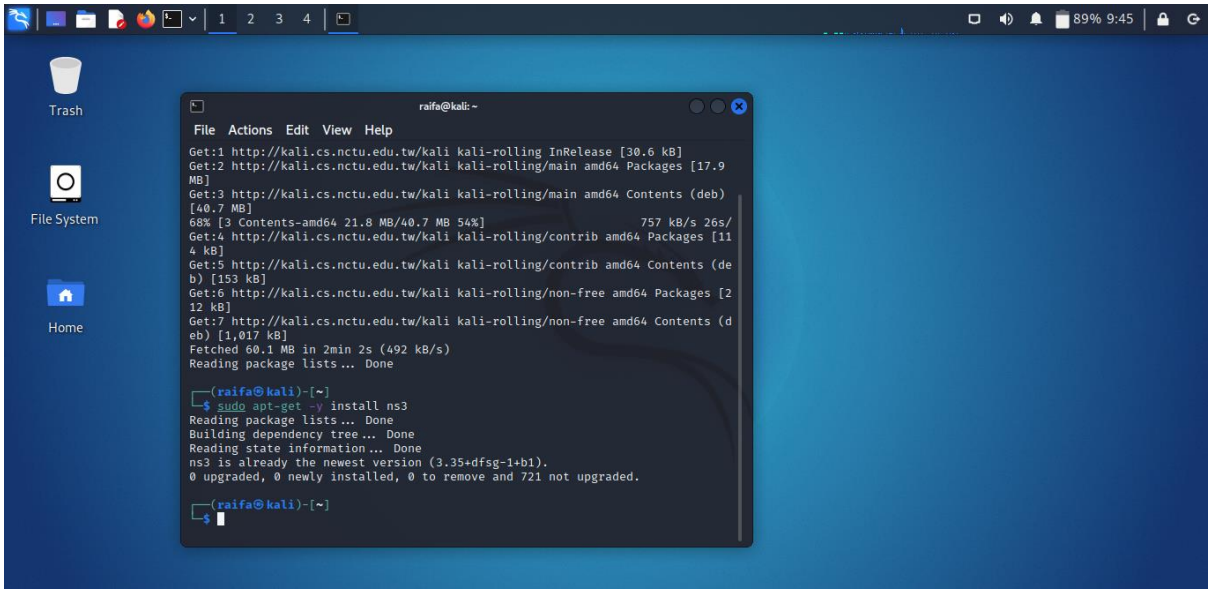

kali linux - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit (2)
Ubuntu 64-bit (3)
kali linux
kali linux
KALI
BY OFFENSIVE SECURITY
Set up users and passwords
A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.
Choose a password for the new user:
Show Password in Clear
Please enter the same user password again to verify you have typed it correctly.
Re-enter password to verify:
Show Password in Clear
Screenshot
Go Back
Continue
Activate Windows
To direct input to this VM, click inside or press Ctrl+G.
Type here to search
7°C
10:00 PM
12/20/2021


kali linux - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
Ubuntu 64-bit (2)
Ubuntu 64-bit (3)
kali linux
kali linux
KALI
BY OFFENSIVE SECURITY
Configure the clock
Setting up the clock
Getting the time from a network time server...
Cancel
Activate Windows
Go to Settings to activate Windows.
To direct input to this VM, click inside or press Ctrl+G.
Type here to search
7°C
10:01 PM
12/20/2021


1 2 3 4
56% 8:10
KALI
BY OFFENSIVE SECURITY
KALI
BY OFFENSIVE SECURITY


1 2 3 4
56% 8:10
Trash
File System
Home
raifa@kali: ~
File Actions Edit View Help
(raifa㉿kali)-[~]
$


1 2 3 4
94% 9:36
Trash
File System
Home
raifa@kali: ~
File Actions Edit View Help
(raifa㉿kali)-[~]
$ sudo apt-get update
[sudo] password for raifa:


1 2 3 4
89% 9:45
Trash
File System
Home
raifa@kali: ~
File Actions Edit View Help
Get:1 http://kali.cs.nctu.edu.tw/kali kali-rolling InRelease [30.6 kB]
Get:2 http://kali.cs.nctu.edu.tw/kali kali-rolling/main amd64 Packages [17.9 MB]
Get:3 http://kali.cs.nctu.edu.tw/kali kali-rolling/main amd64 Contents (deb) [40.7 MB]
68% [3 Contents-amd64 21.8 MB/40.7 MB 54%] 757 kB/s 26s/
Get:4 http://kali.cs.nctu.edu.tw/kali kali-rolling/contrib amd64 Packages [114 kB]
Get:5 http://kali.cs.nctu.edu.tw/kali kali-rolling/contrib amd64 Contents (deb) [153 kB]
Get:6 http://kali.cs.nctu.edu.tw/kali kali-rolling/non-free amd64 Packages [212 kB]
Get:7 http://kali.cs.nctu.edu.tw/kali kali-rolling/non-free amd64 Contents (deb) [1,017 kB]
Fetched 60.1 MB in 2min 2s (492 kB/s)
Reading package lists ... Done
(raifa㉿kali)-[~]
$ sudo apt-get -y install ns3
Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
ns3 is already the newest version (3.35+dfsg-1+b1).
0 upgraded, 0 newly installed, 0 to remove and 721 not upgraded.
(raifa㉿kali)-[~]
$