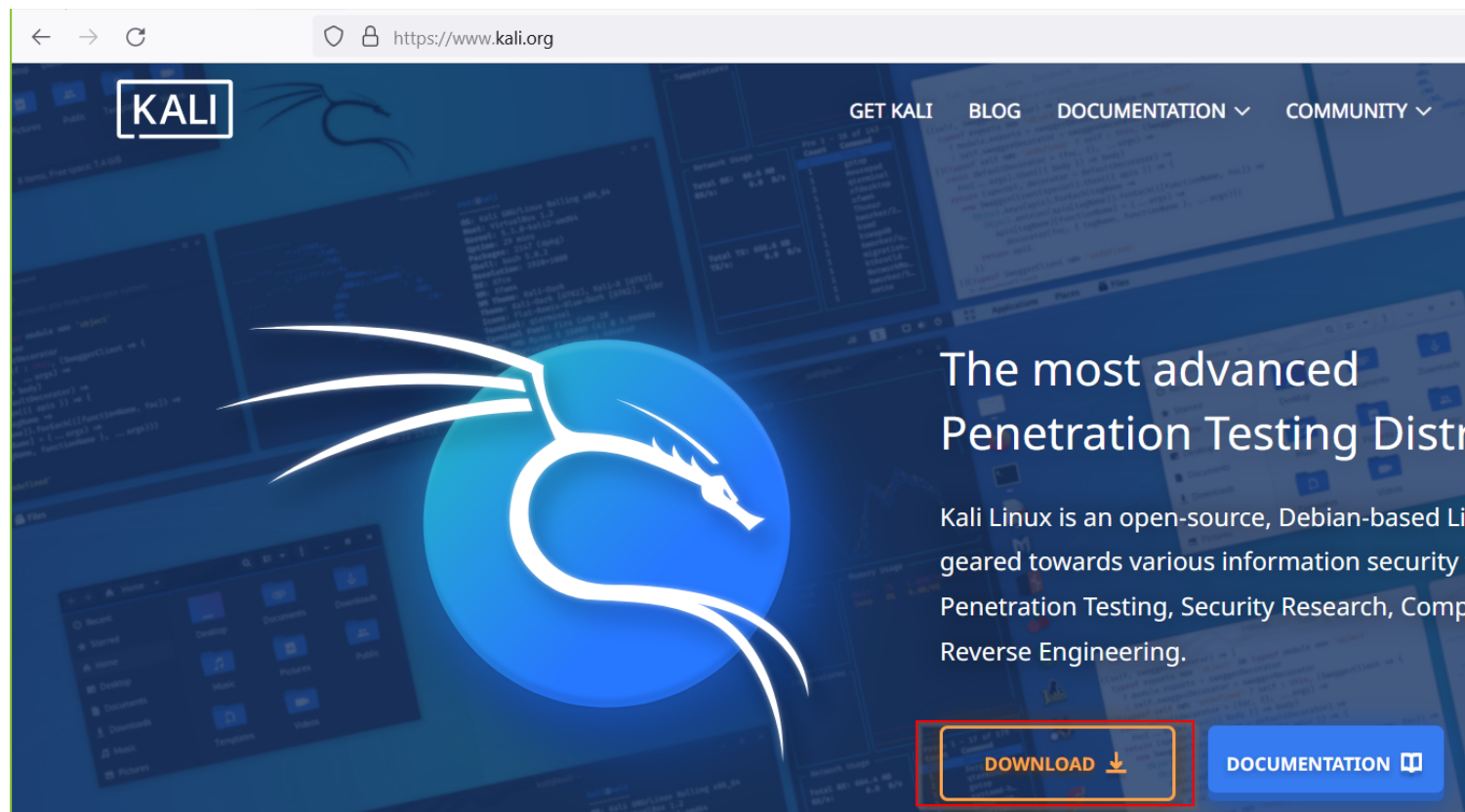# Kali Installation-VM Creation

Ensure that you already have a virtualization software already installed on the computer ie VMware Workstation or VirtualBox Get to kali.org website and click on "DOwnload" option.

A new page will load. Scroll down to the images section and choose the system architecture. Click on the download button.

Kali Linux 2023.3 Changelog [8]

64-bit | 32-bit | Apple Silicon (ARM64)

🏅 Recommended

Installer

Complete offline installation
with customization

⬇ 3.9G | torrent | sum

Your download will now start. Wait for it to get done.
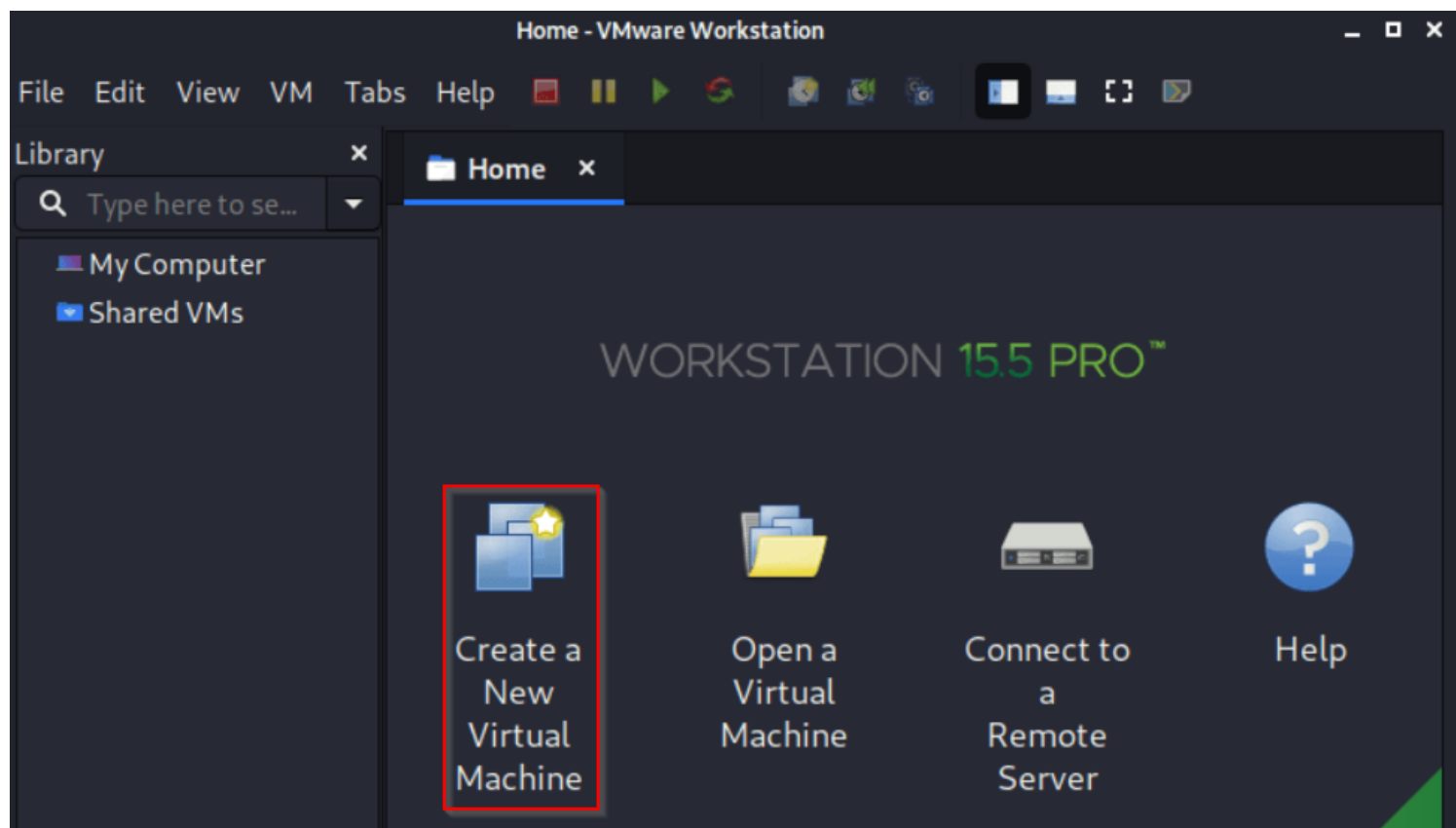
kali-linux-2023.3-installer-amd64.iso ②

1h 8m left — 41.1 MB of 3.9 GB (1.0 MB/sec)

Show all downloads

Open your virtual machine software ie VMware Workstation or VirtualBox. We shall use VMware Work station. Upon starting up VMware Workstation, select "Create a New Virtual Machine".

Select "Custom (advanced)" for the Virtual Machine Configuration, this will allow us to have more control over the creation of the VM. Then click "Next"
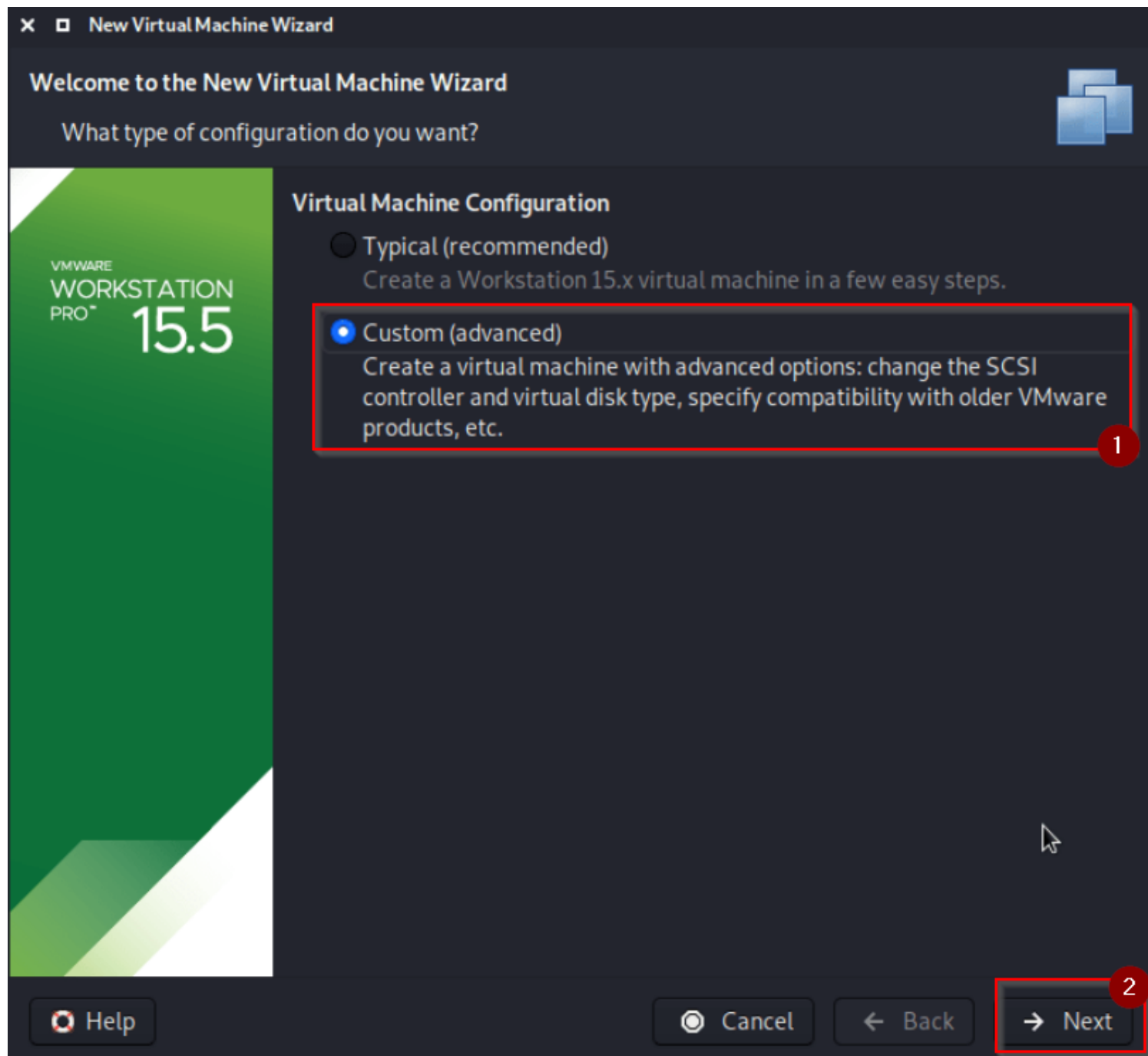
The next screen is "Virtual Machine Hardware Compatibility", which we use "Workstation 8.x". Then click "Next"

Choose the Virtual Machine Hardware Compatibility

Which hardware features are needed for this virtual machine?

Virtual Machine Hardware Compatibility

Hardware compatibility: ☑ ESX Server Compatible

Workstation 8.x ▼

Compatible Products	Limitations
ESXi 6.7 U2	64 GB memory
ESXi 6.7	8 processors
ESXi 6.5	10 network adapters
ESXi 6.0	2 TB disk size
ESXi 5.5	No SATA devices
ESXi 5.1	No NVMe devices
ESXi 5.0	No UEFI secure boot support
Fusion 11.x	No virtual camera support
Fusion 10.x	No DirectX 10 support
Fusion 8.x	No IOMMU support
Fusion 7.x	No VBS support
Fusion 6.x	No Trusted Platform Module
Fusion 5.x	
Fusion 4.x	
Workstation 15.x	

Select "Use ISO image". Then select "Browse" and navigate to the location of the Kali Linux ISO image that we downloaded. THen click "Next"
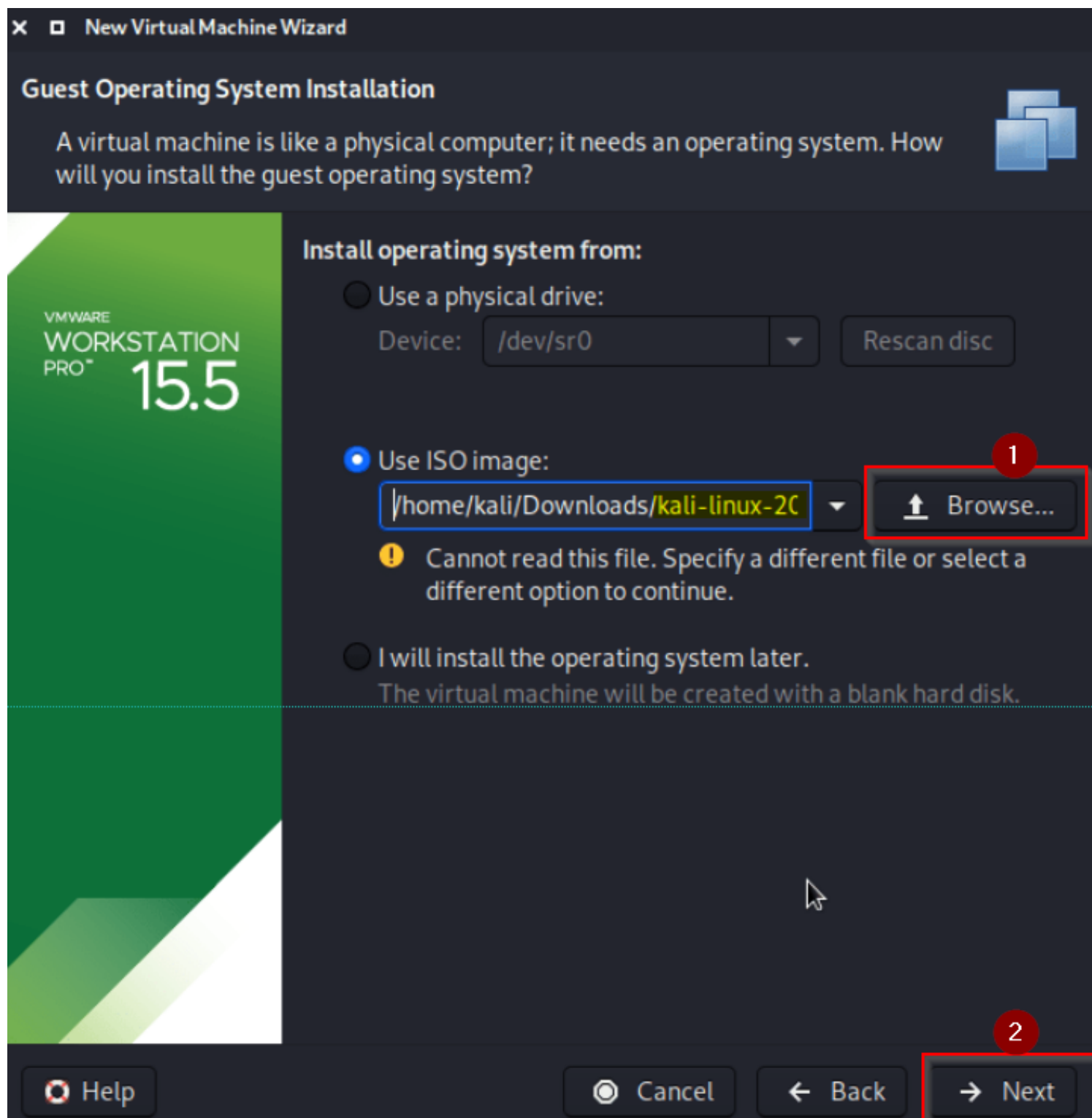
Select "Linux", and then the latest version of Debian for the version (as Kali is based on Debian). In this example, we are going to be use the x64 image to install Kali, so we have selected 64-bit. Then click "Next"
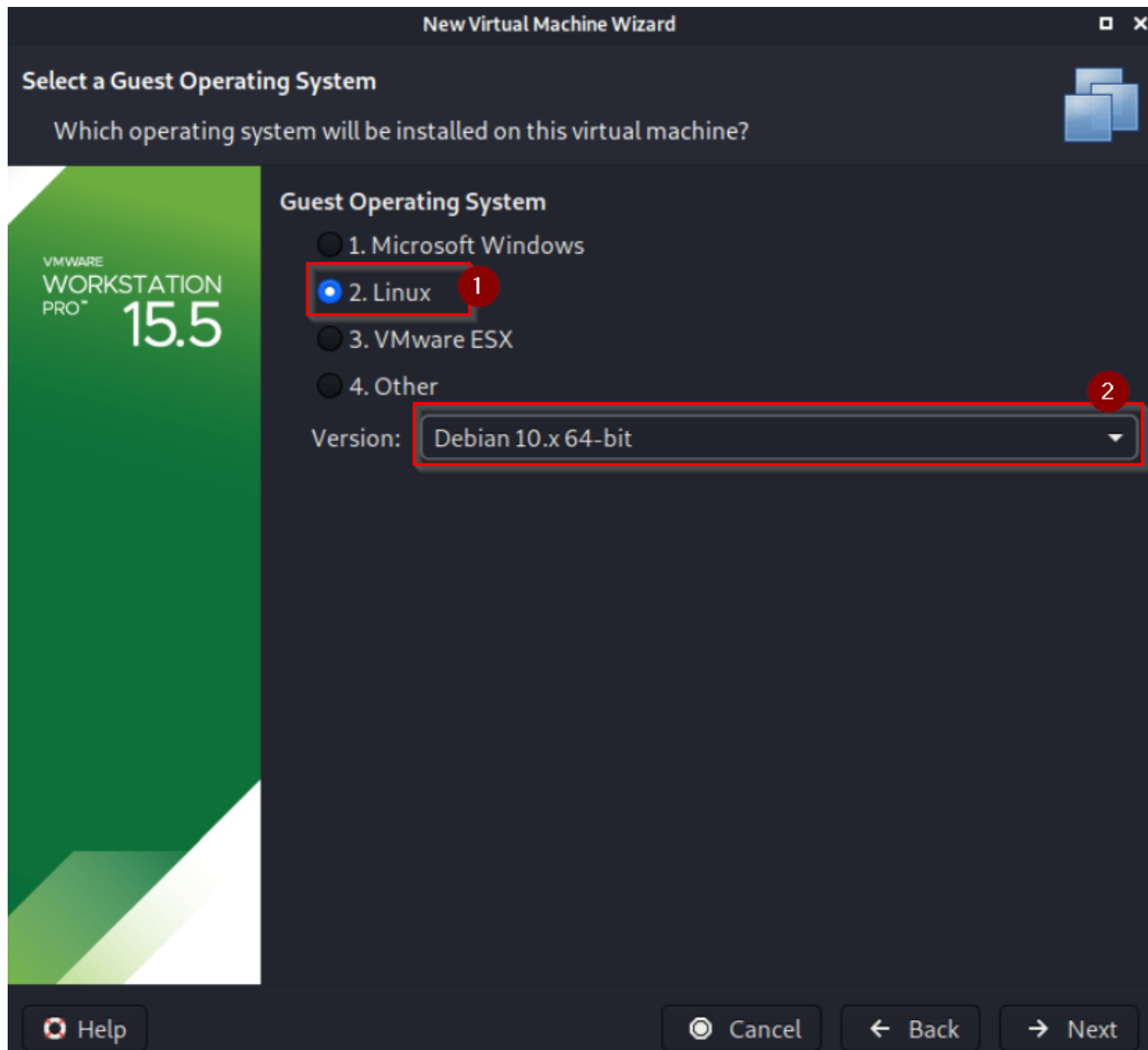
Give the virtual machine any name. This name is also used as the filename (such as the configuration, hard disk and snapshot - which is not changed from this point).
You can also choose the location of your virtual machine by clicking on "Browse". Then click "Next"
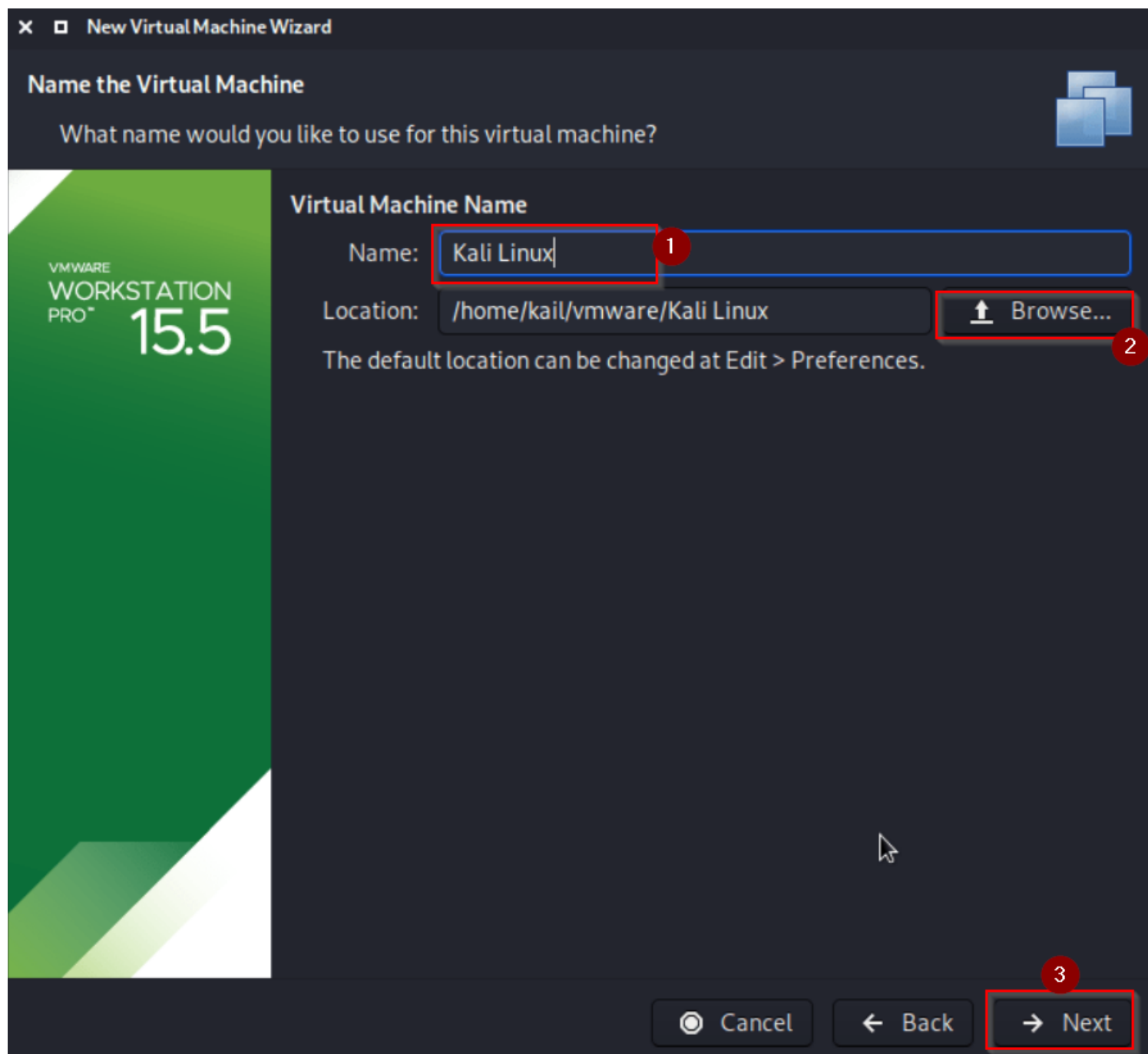
Define how many resources to give the VM. Kali will be able to perform more tasks simultaneously and quicker if it is allocated more resources. Select "2 processors" and "2 cores per processors", giving a total of 4 cores. You may wish to use more or less depending on your system requirements. Then click "Next"
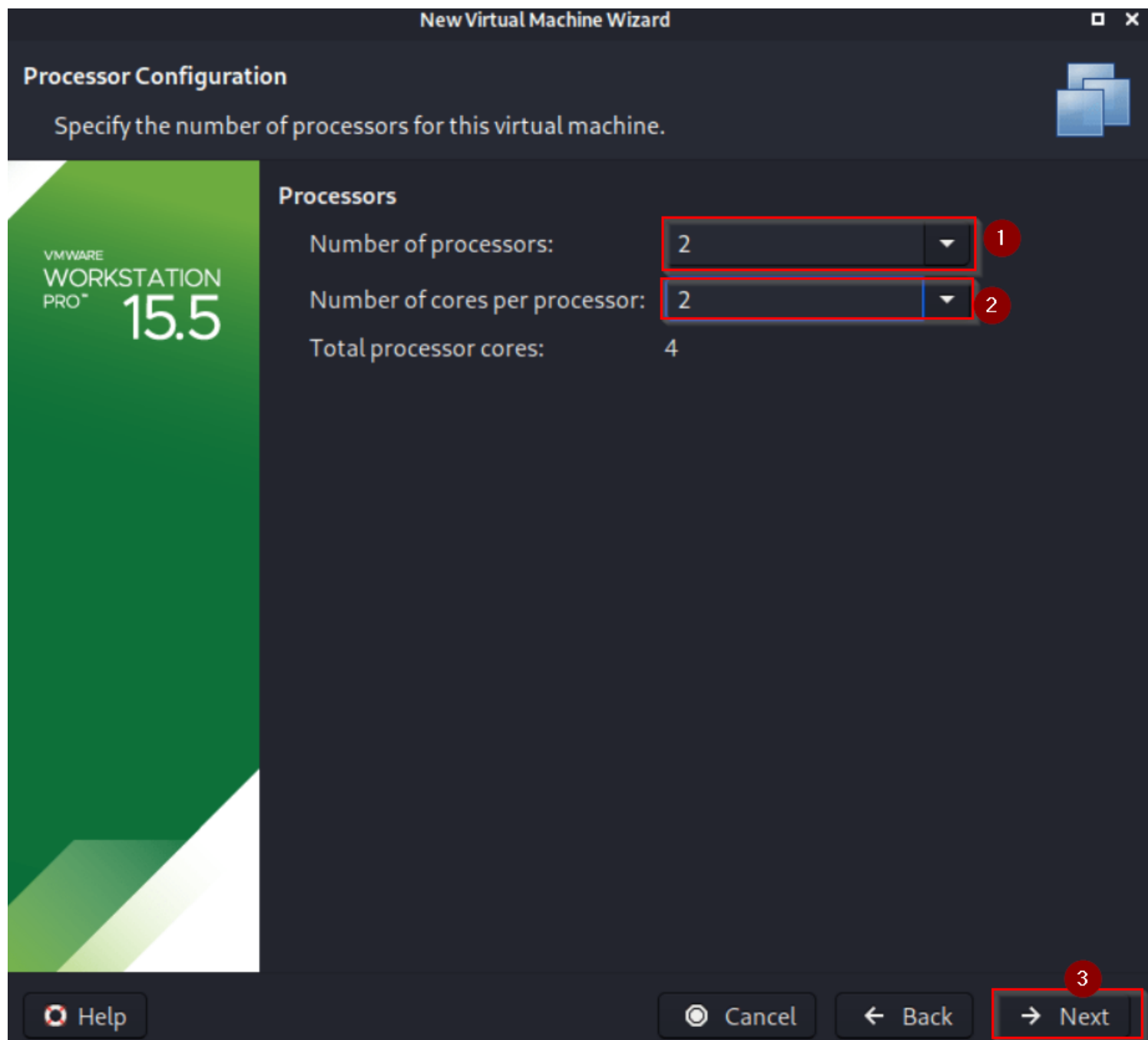
Define how much RAM to use. Again, the higher amount of RAM, the more applications can be open and at increased performance. Various tools inside of Kali can be demanding of resources. Select 2GB (2048 MB) for RAM. You may wish to use more or less depending on your system requirements. Then click "Next"
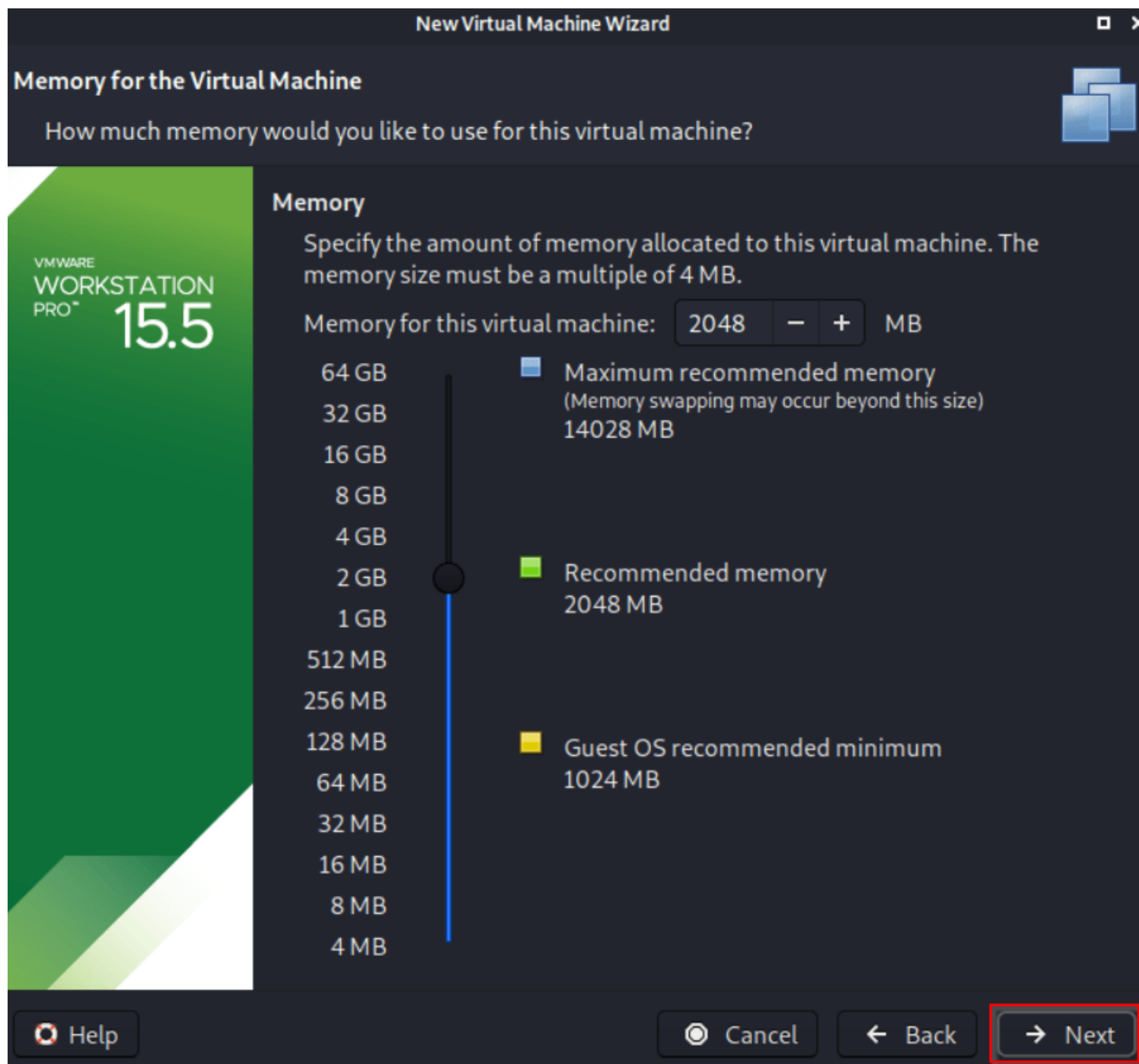
Choose the "Network Connection Type". Lets use the default "NAT connection". However, this can easy be altered (even when the VM is powered on). This allows Kali VM to communicate to the Internet, as well as the rest of the LAN connection, without it taking up an additional IP address. The downside to this is it will not be able to receive reverse shells (without port forwarding inside of VMware).
Click "Next"

New Virtual Machine Wizard

Network Type

What type of network do you want to add?
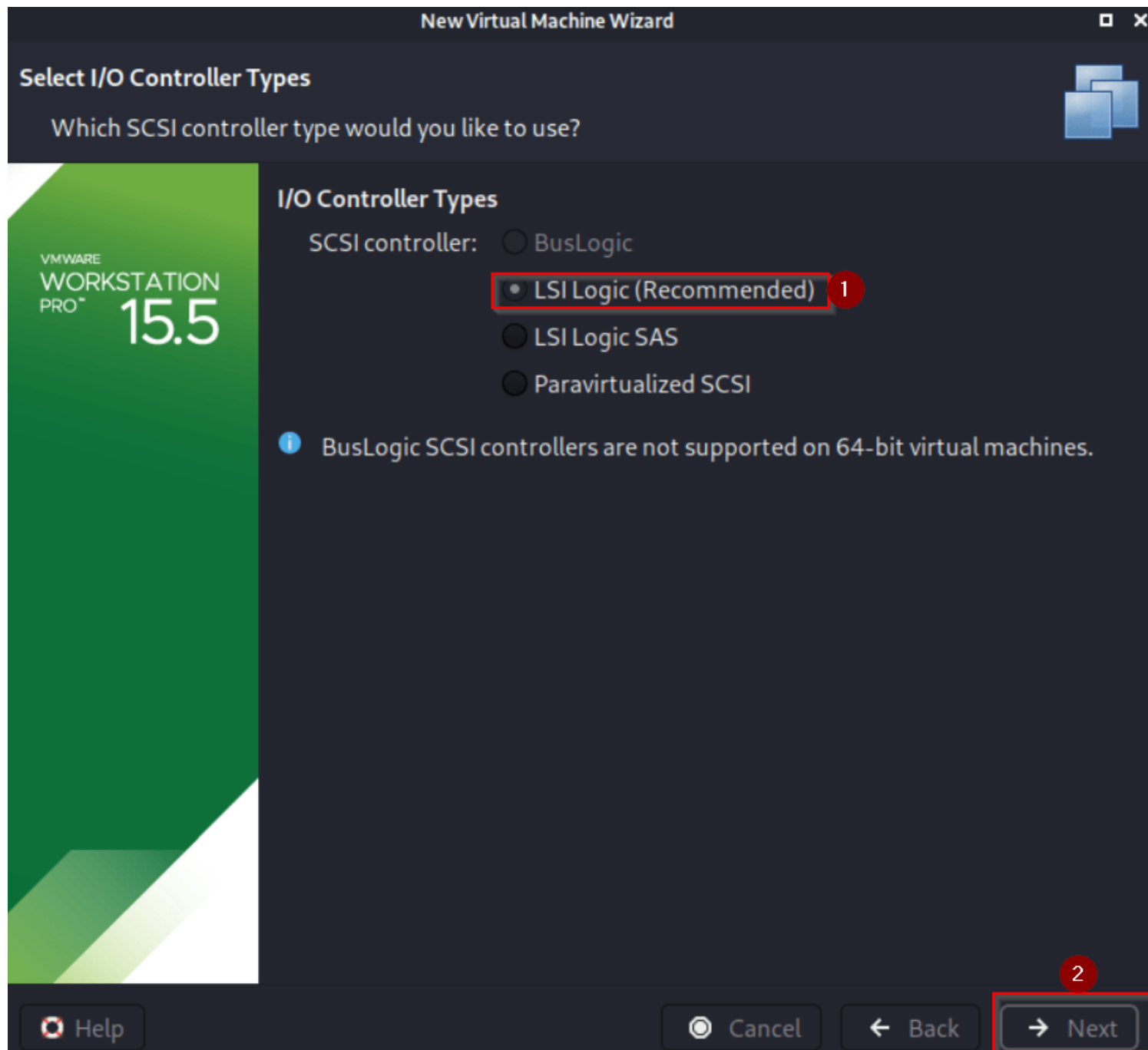
VMWARE
WORKSTATION
PRO
15.5

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)** 1
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**
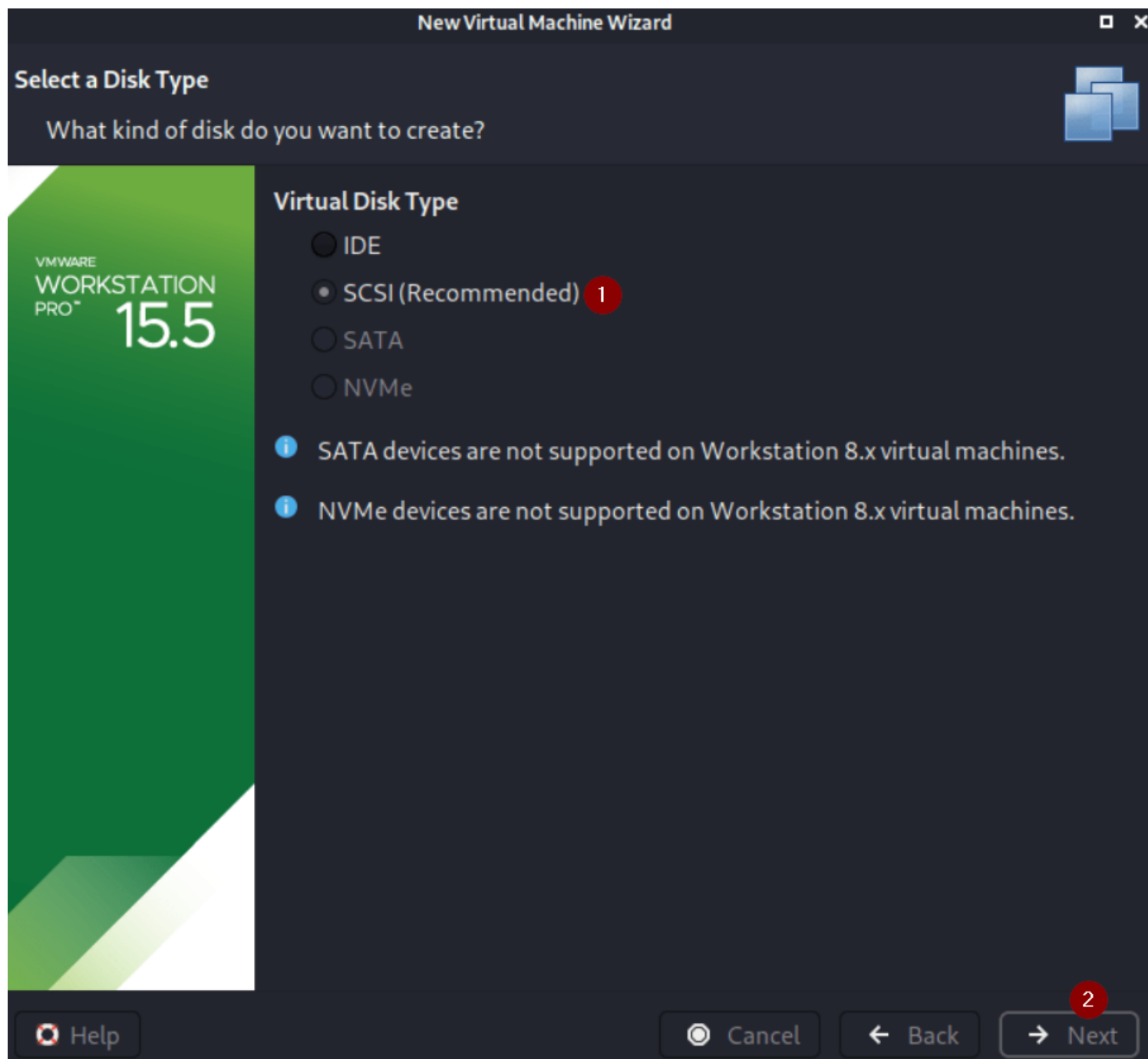
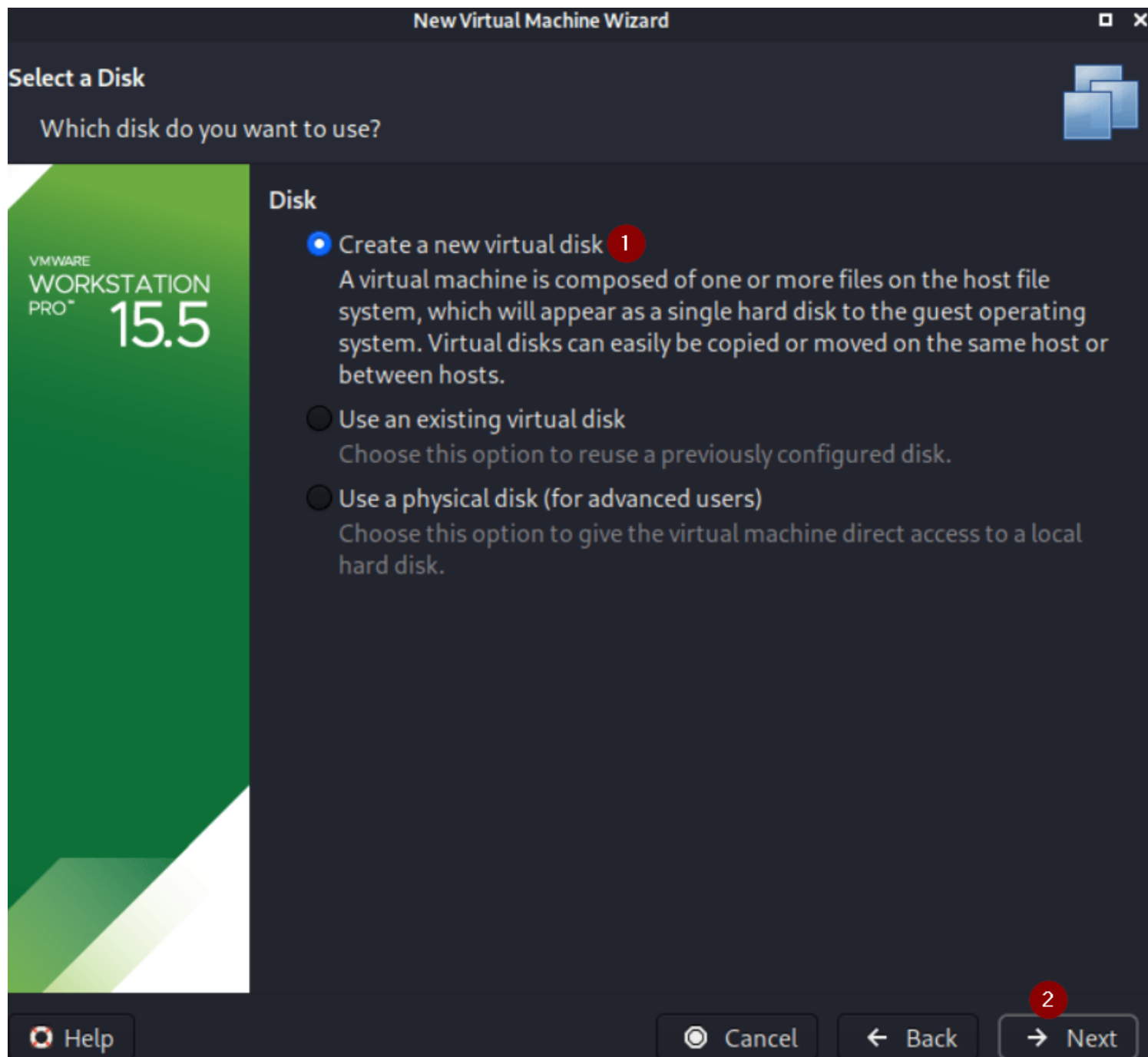⬡ Help   ◎ Cancel   ← Back   → Next 2

Select the I/O controller or go by the default "LSI Logic". Click "Next"

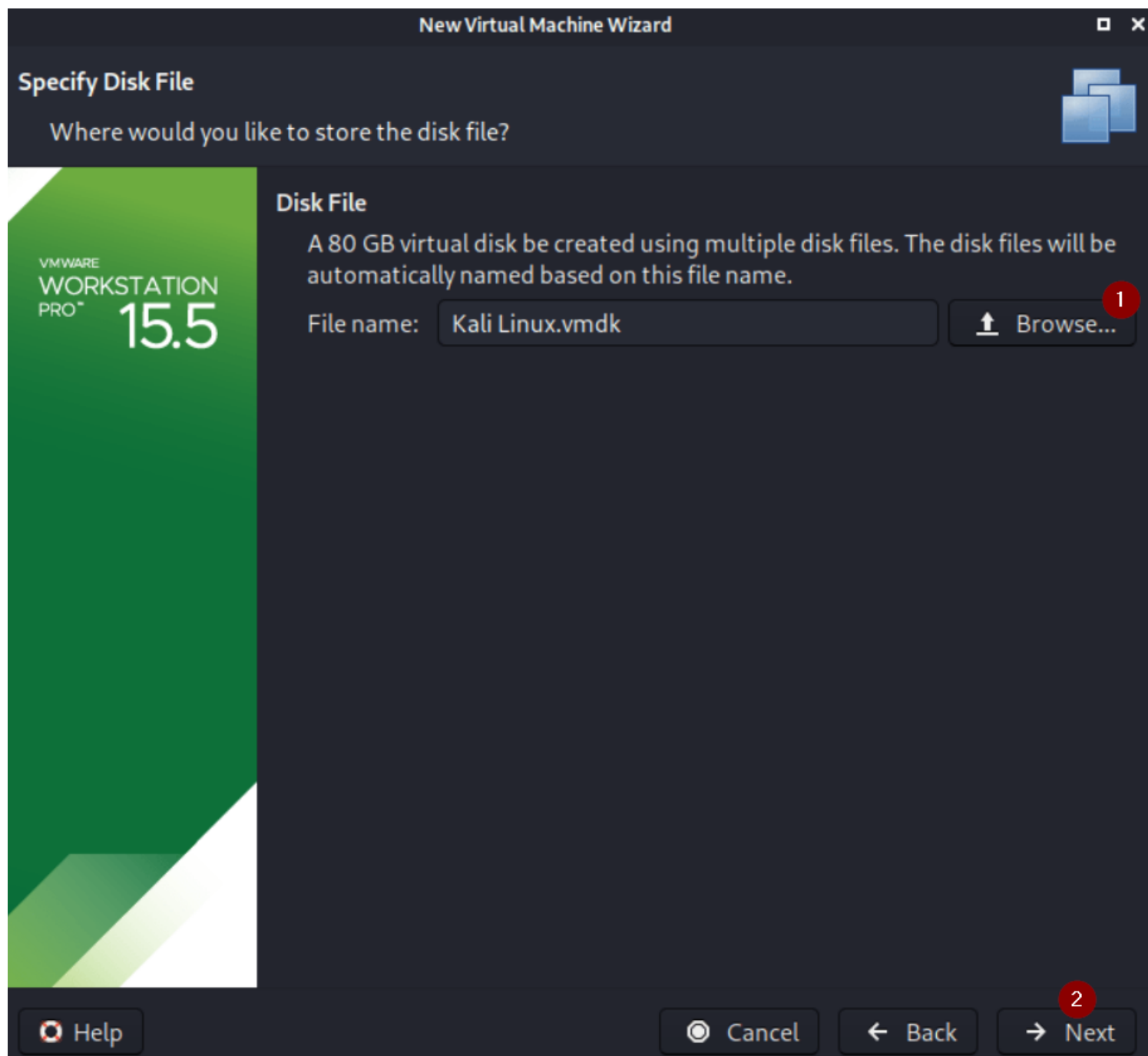Select the "Virtual Disk Type" or accept the default "SCSI" and click "Next"

Choose "create a new virtual disk" and click "Next"

New Virtual Machine Wizard

Select a Disk

Which disk do you want to use?

VMWARE
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15.5

Disk

◉ Create a new virtual disk ①
A virtual machine 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.

Help   ◉ Cancel   ← Back   → Next ②

Allocate the "Disk Size", allows us to define how large the virtual hard disk will be. We also don't have it in a single file, but instead "Split virtual disk into multiple files". The VM hard disk will grow over time, to the maximum size, as we do not enable the "Allocate all disk space". It is possible to increase/decrease the hard disk after the VM has been created, however, if you have installed Kali, you'll need to then also grow or shrink the partition for the space to reflect that. Click "Next"
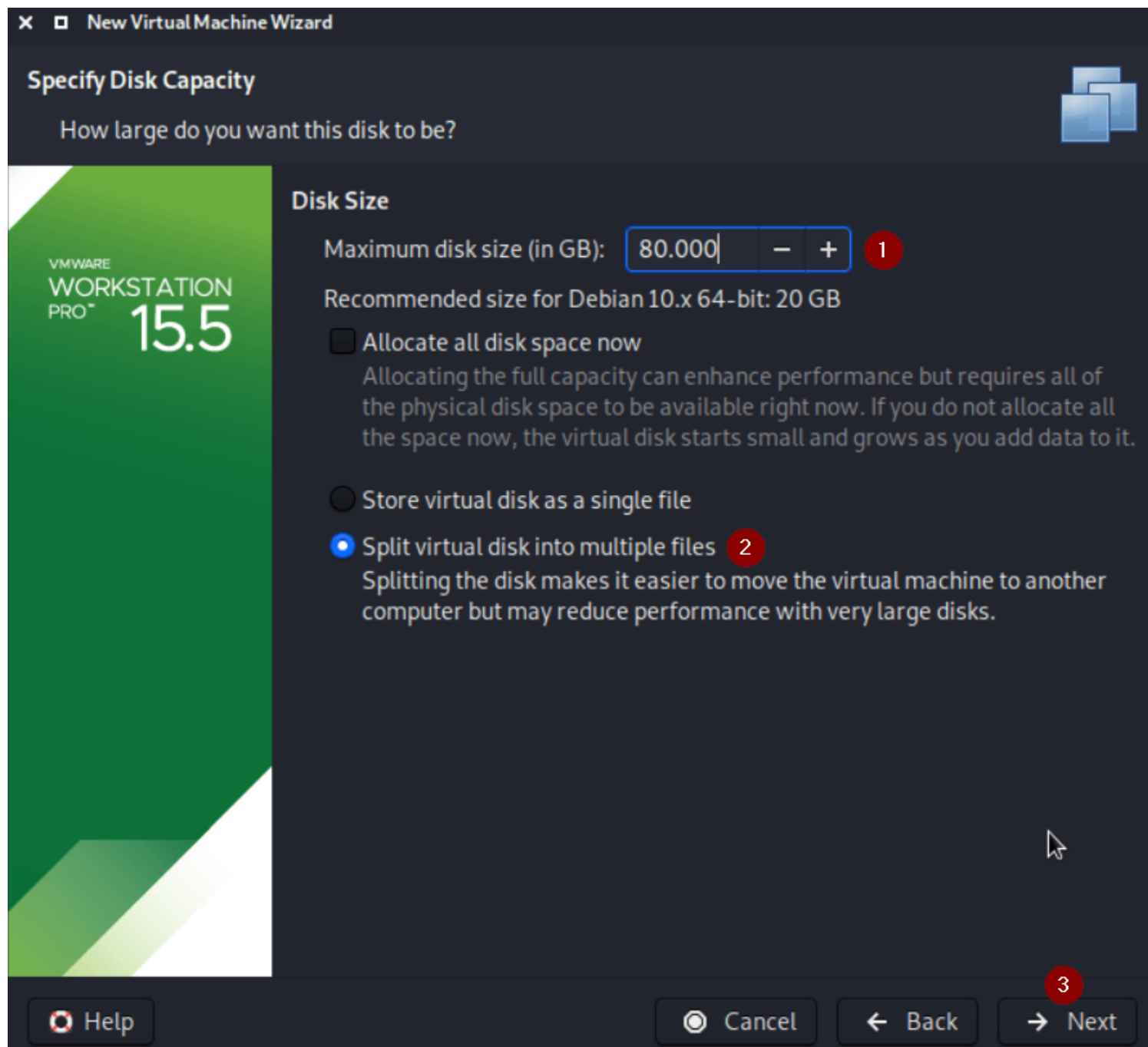
Accept the default "disk file" name, which has been defined from our VM name earlier in the setup process. Click "Next"

Specify Disk File

Where would you like to store the disk file?

WORKSTATION PRO 15.5

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.

File name: Kali Linux.vmdk   ⬆ Browse... **1**

Help   ◎ Cancel   ← Back   → Next **2**

We now have an overview of the settings that we selected. Click "Finish".
You can also try and "Customize Hardware" at this stage, before the VM is fully created.
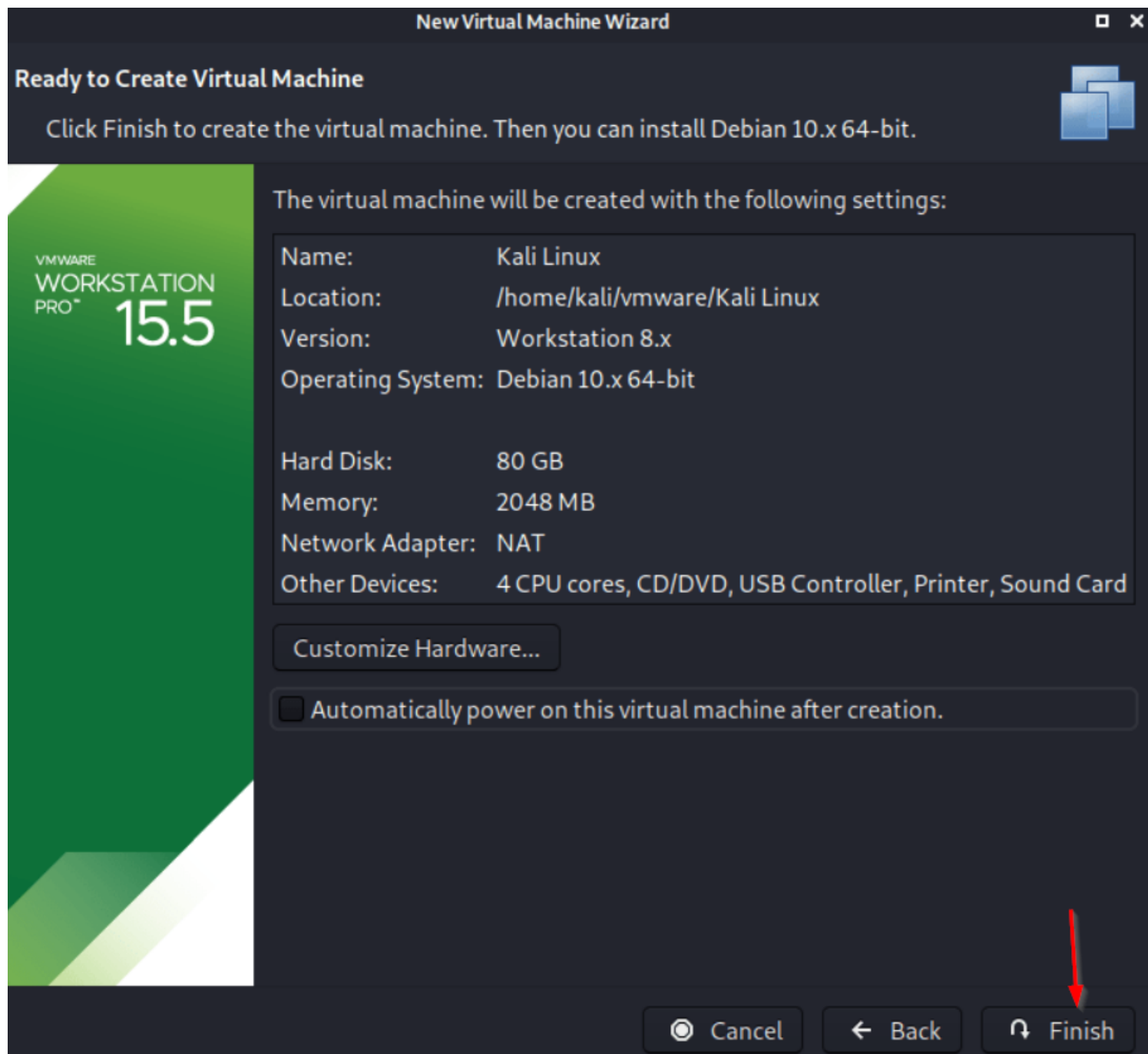
If this is the first time using the wizard, you may have the following prompt explaining how installing "VMware tools" will give you a better experience when using the VM.
After reading and understanding the page, you may tick the "Don't show this page again", before pressing close.

New Virtual Machine Wizard

Virtual Machine Created

Virtual machine created successfully. You still need to install the operating system and VMware Tools.

VMWARE
WORKSTATION
PRO™ 15.5

Install the Guest Operating System

A new virtual machine is like a physical computer with a blank hard disk. The typical way to install the operating system is:

1. Insert the installation CD-ROM or DVD.
2. Power on the virtual machine.
3. Install the operating system as you would for a physical computer.

See the Guest Operating System Installation Guide for details.

Install VMware Tools

Special device drivers and utilities can help a virtual machine work more seamlessly with the host computer. To install them:

1. Power on the virtual machine.
2. Let the guest operating system load, and login if necessary.
3. From the menu bar, select VM > Install VMware Tools..

See the VMware Tools Installation Guide for details.

☐ Don't show this page again

✕ Close

Before we start up the VM, we can decide to make some changes in the VM settings by pressing "Edit virtual machine settings". These setings can be the memory, processor etc
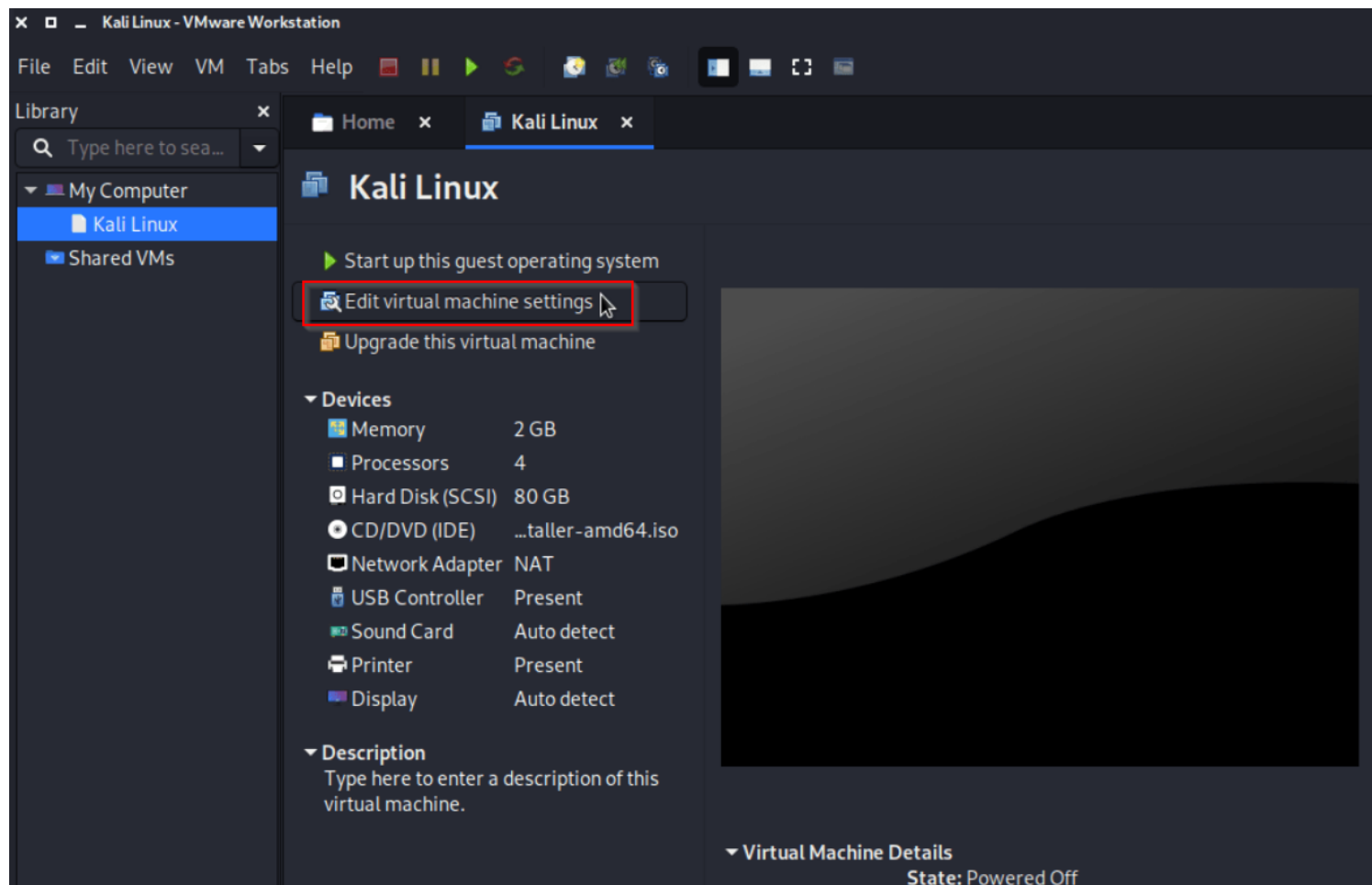
Navigate to the "Printer" section, and then press "Remove" since we do not have the use for a printer in this setup.
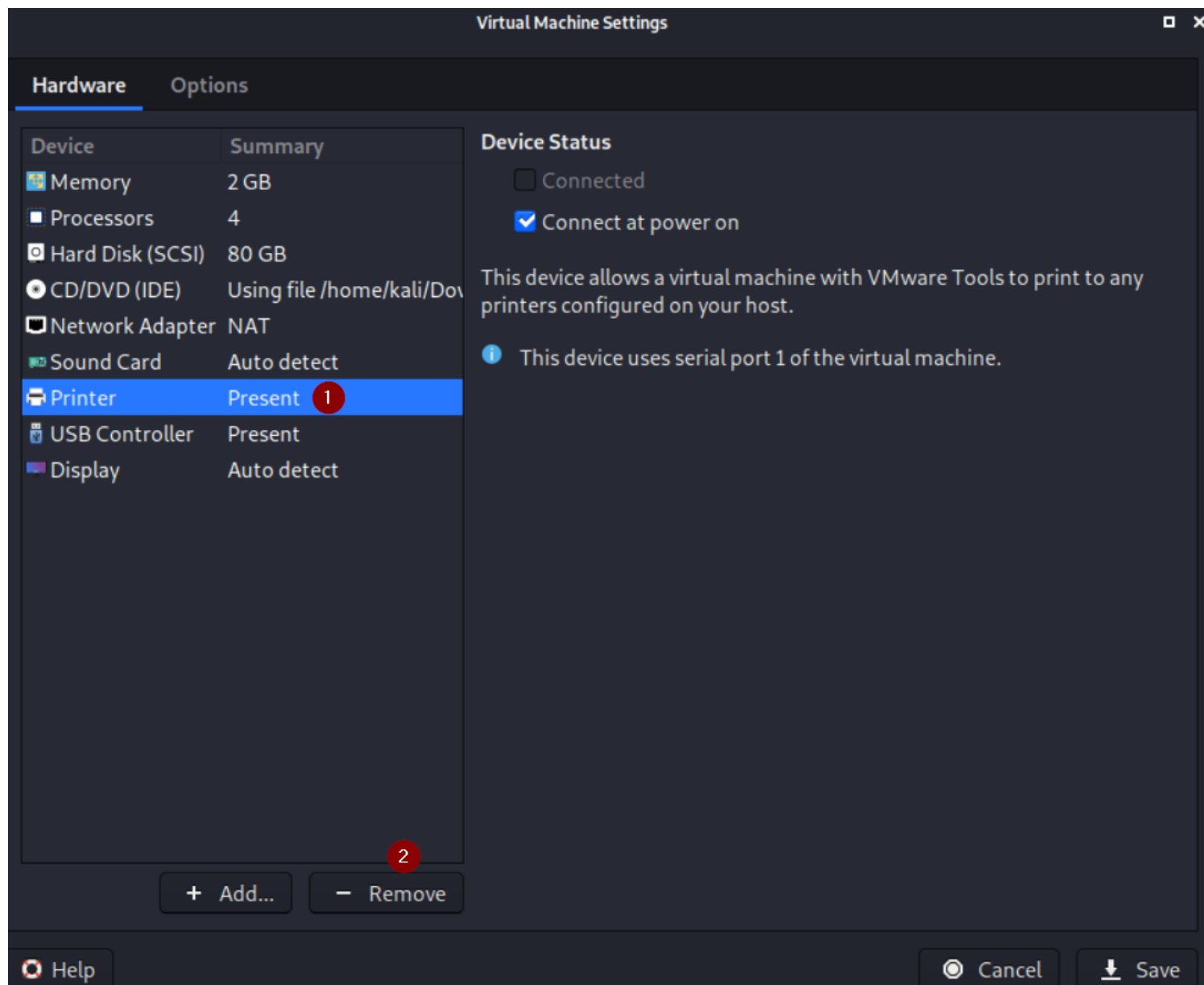
One may wish to edit the "USB" settings to alter how USB devices behave. Here we have disabled "Automatically connect new USB devices" (may not have the option depending on your VMware version) and enabled "Show all USB input devices".
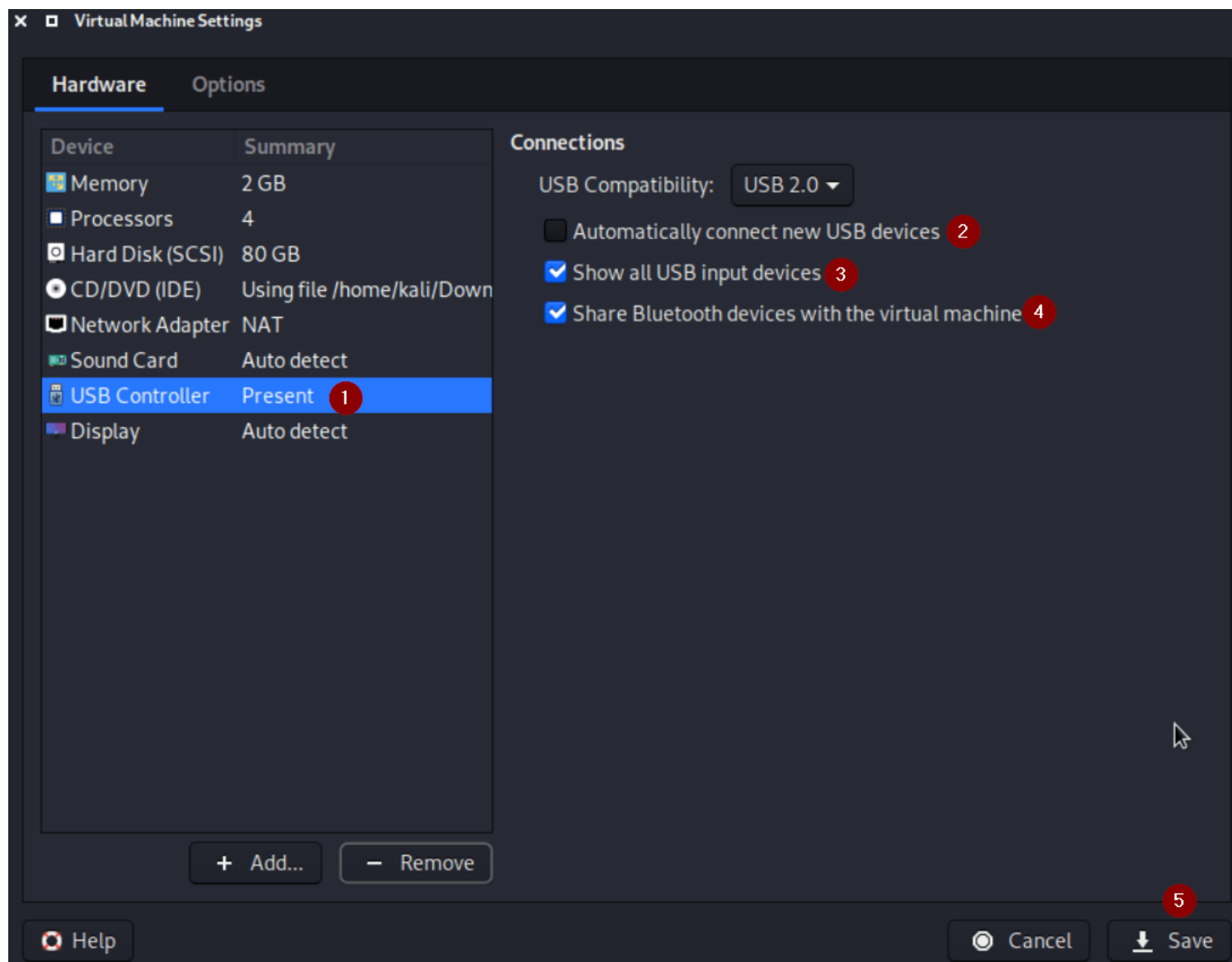
Then move over to the "Options" tab. In "Shared folders", select "Always enable" incase you have any share paths to add. Otherwise leave out this option.
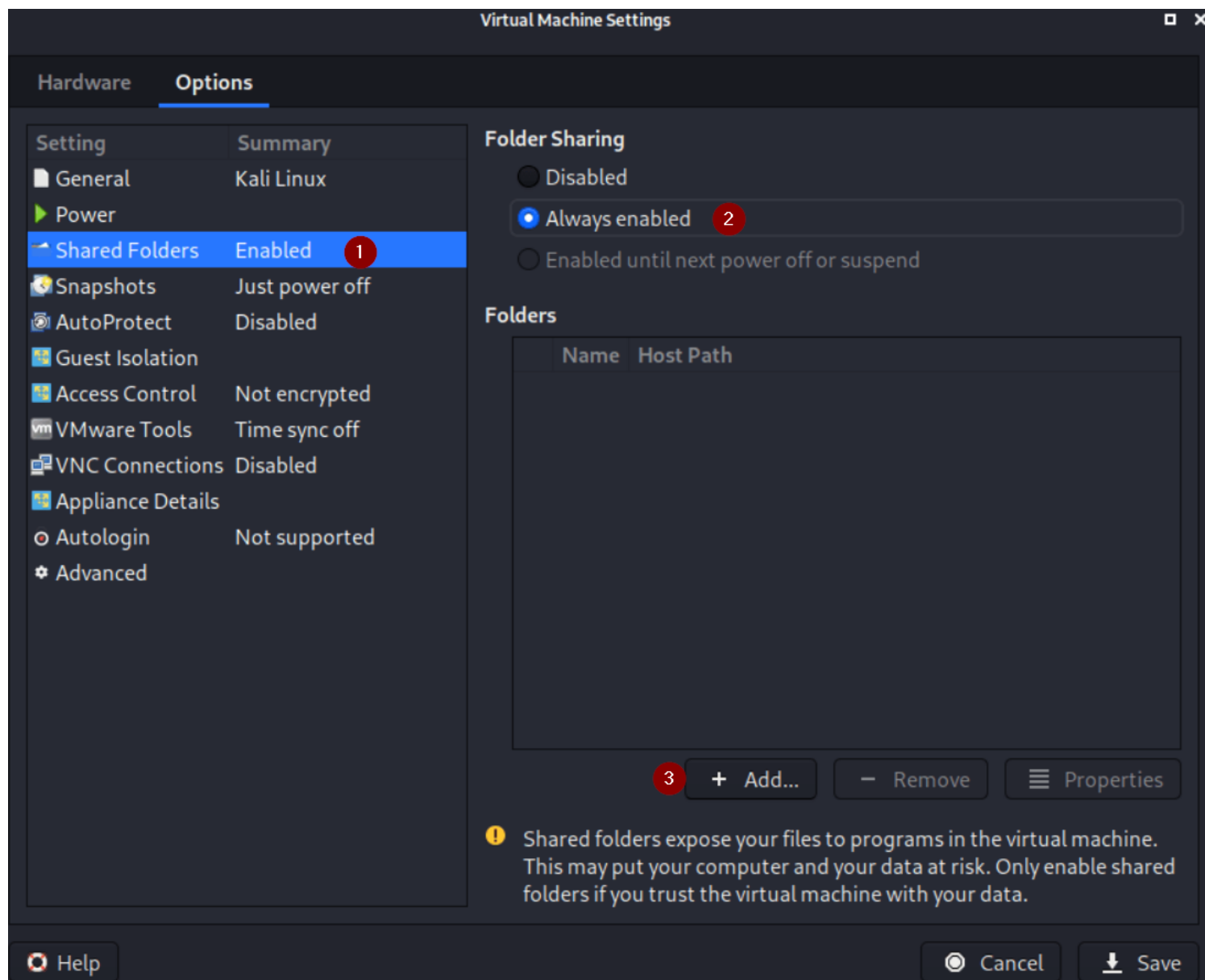
Once we are done, go ahead and start your VM

Kali GNU/Linux

Advanced options for Kali GNU/Linux

23/23

Booting in 1 seconds