Top 5 tips for installing and using VMware virtual machine

VMware Workstation is software that allows you to create a virtual machine that runs in parallel on the physical computer. To experience the best VMware, you can use 5 VMware tips through the tutorial below.

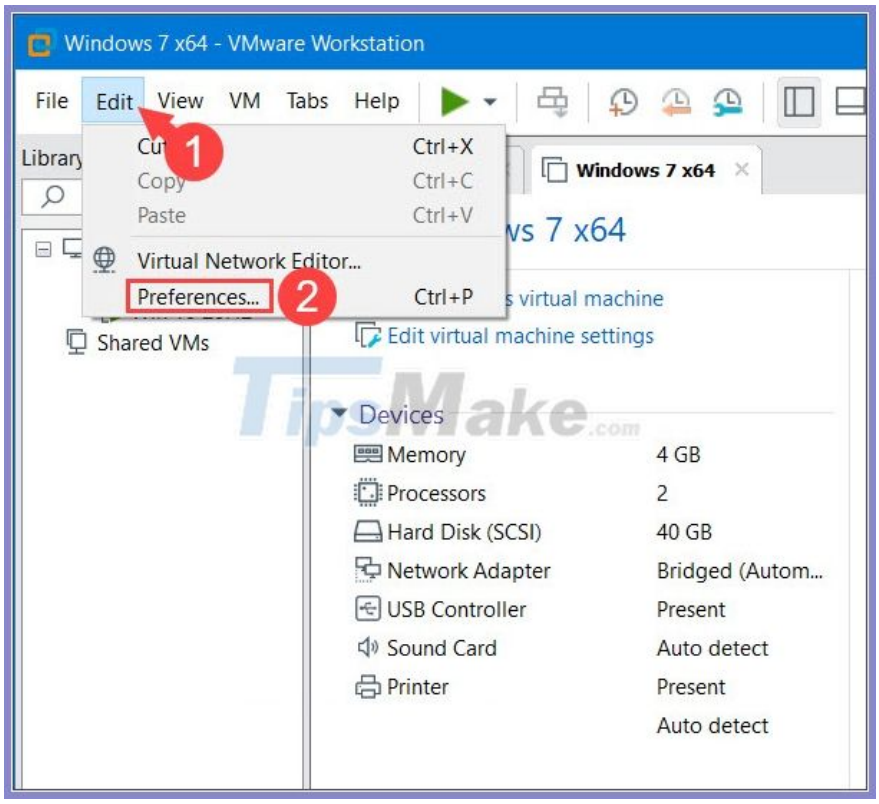
1. How to speed up VMware virtual machine

VMware is the leading virtualization tool used by programmers and developers. However, setting VMware defaults can not be that fast and we have to do some speed up in the article below.

1.1 Setup RAM on VMware

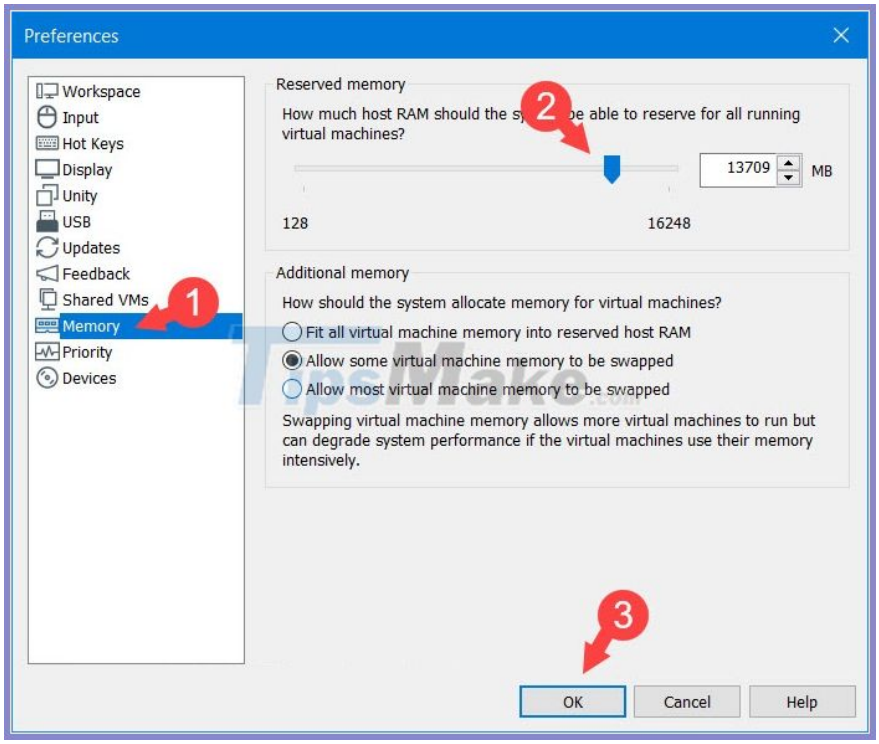
If your computer has a lot of RAM, you should set a little more RAM for **VMware** to make **VMware** run smoother.

Step 1: Open **VMware** and click on the **Edit** menu **(1)** => **Preferences… (2)** .



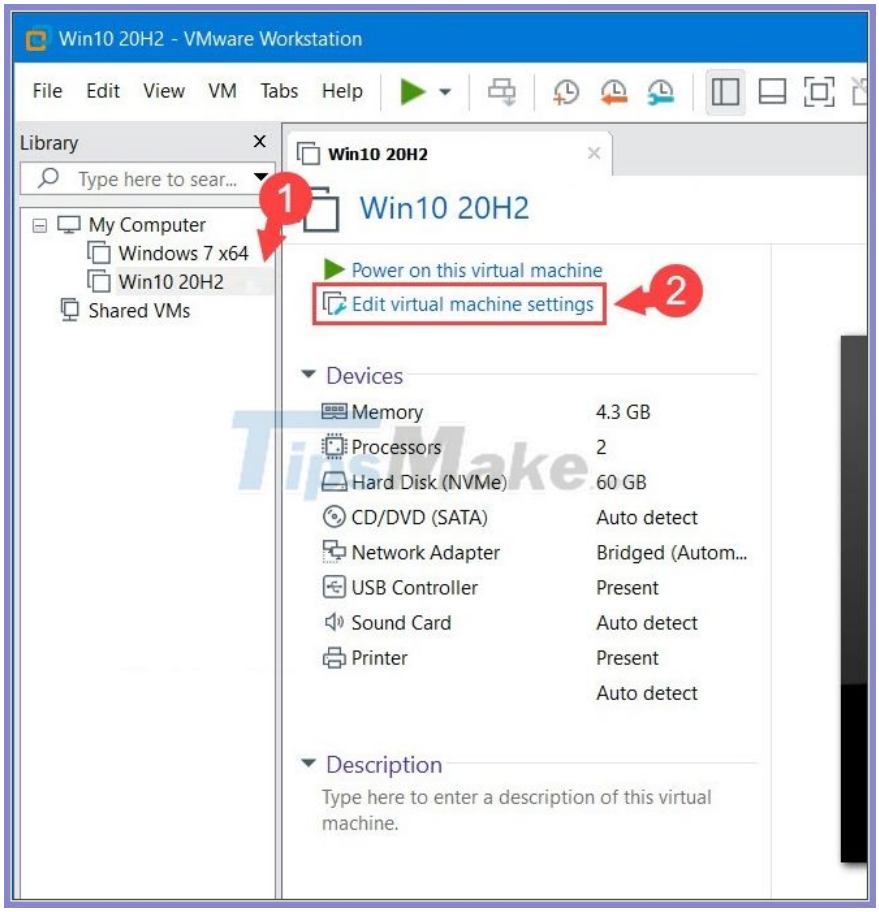
Step 2: You click on **Memory (1)** => set the Ram level for VMware by sliding the slider to the right **(2)** => **OK (3)** .

Note: You should set the Ram level for VMware to approximately 70-80% of the RAM on your computer to provide good performance and not make your computer slow, laggy.

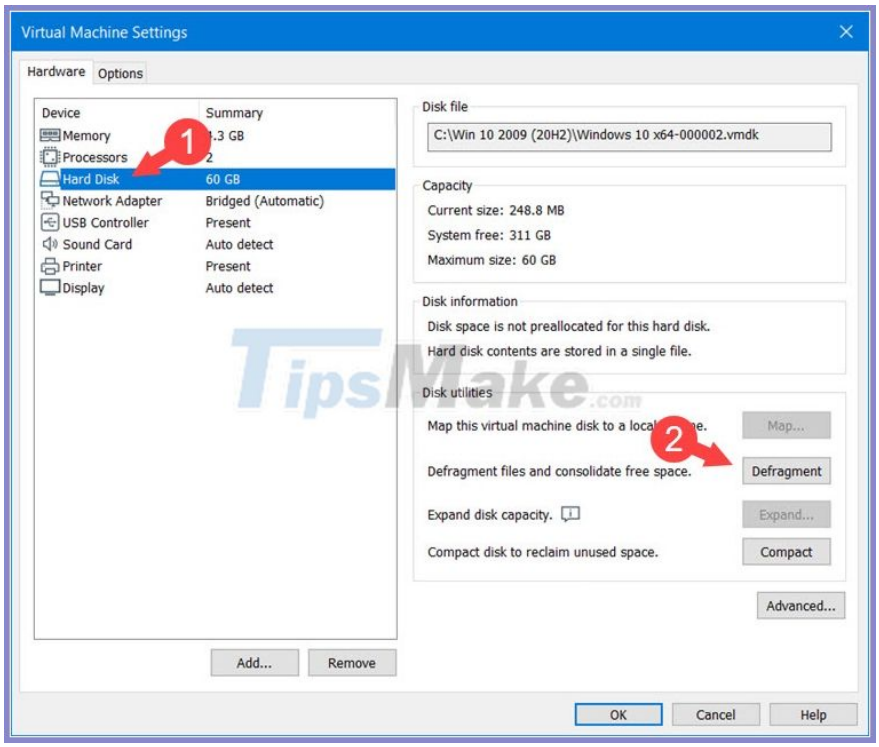


1.2. Defragment hard drives on virtual machines

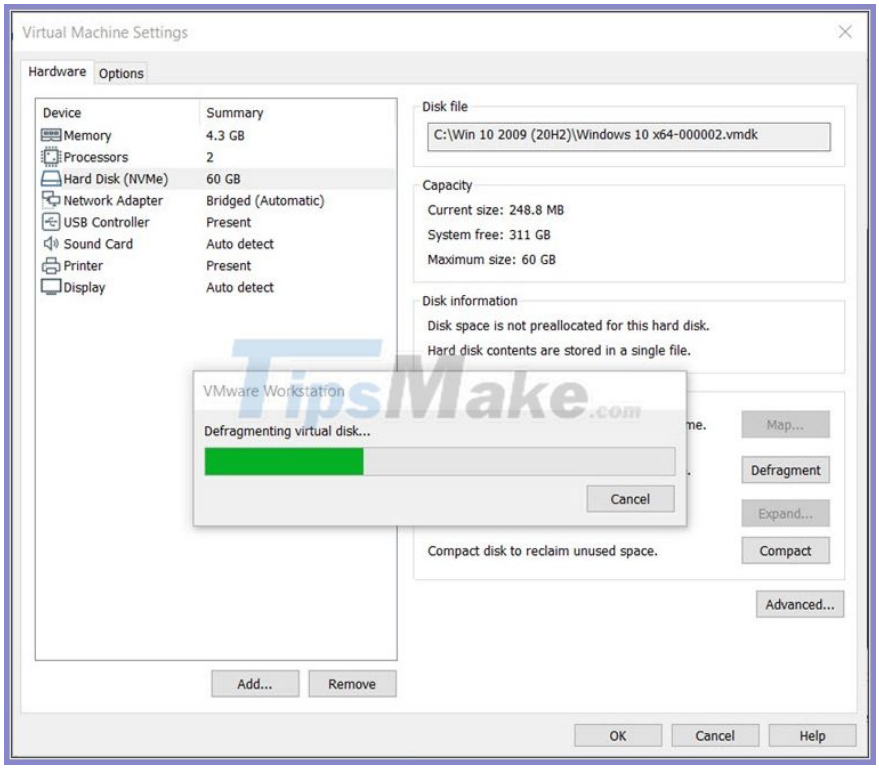
Step 1: Click on the virtual machine **(1)** => **Edit virtual machine settings (2)** .



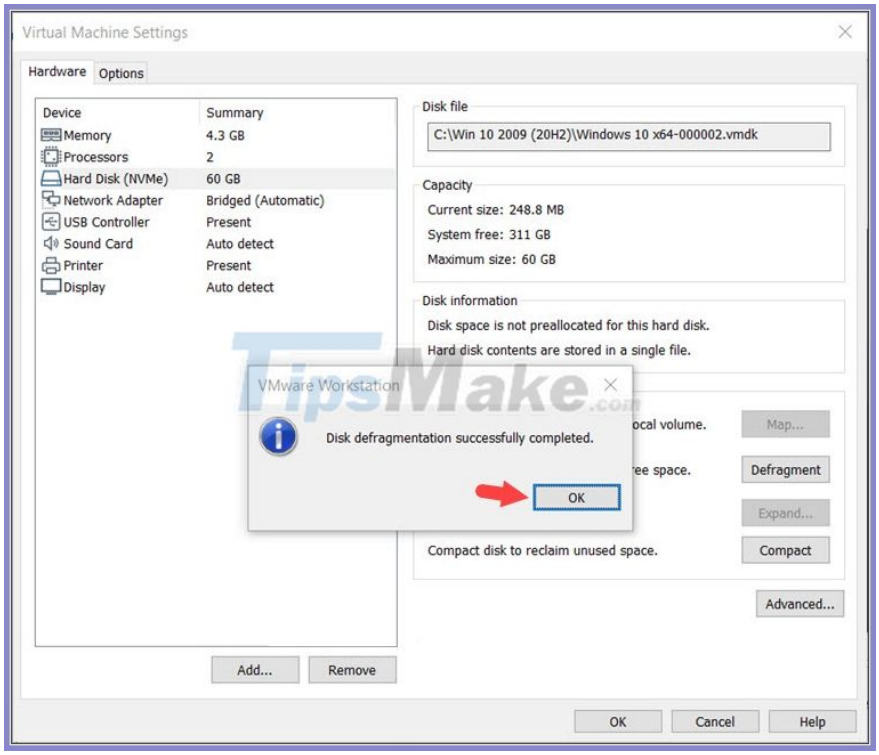
Step 2: Click on **Hard Disk (1)** => **Defragment (2)** .



After that, the hard drive defragmentation process will take place.

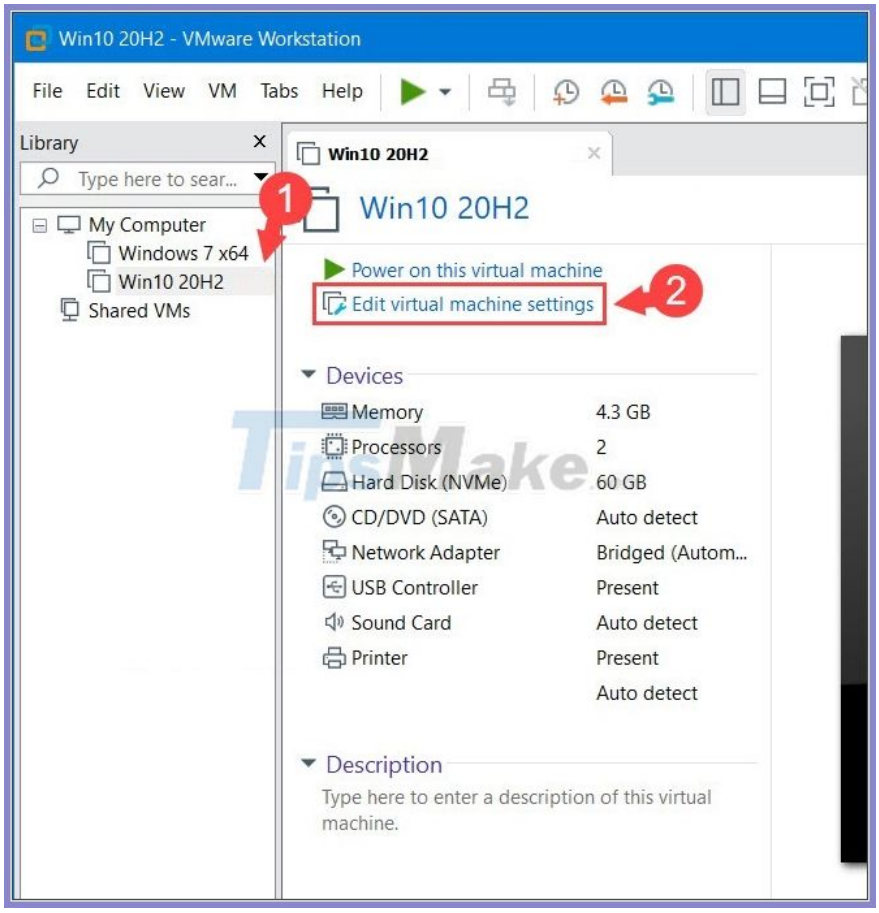


Step 3: After the notification pops up, it's done. Click **OK** to continue.

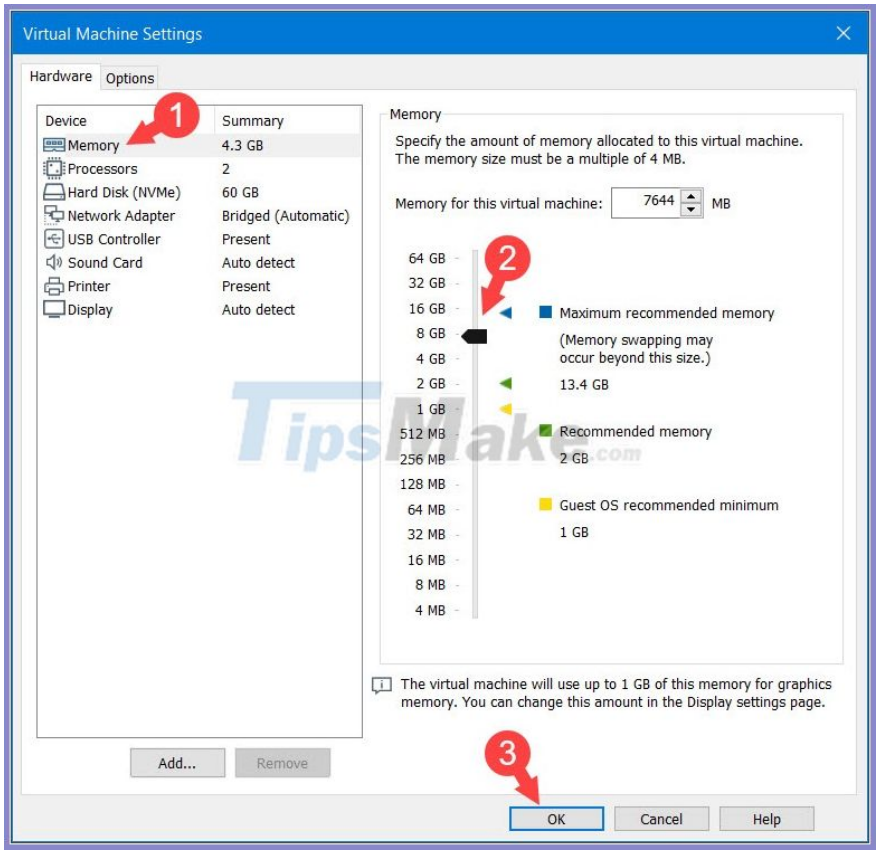


1.3. Setup Ram for VMware virtual machine

Step 1: Click on the virtual machine you need to set up Ram **(1)** => **Edit virtual machine settings (2)** .

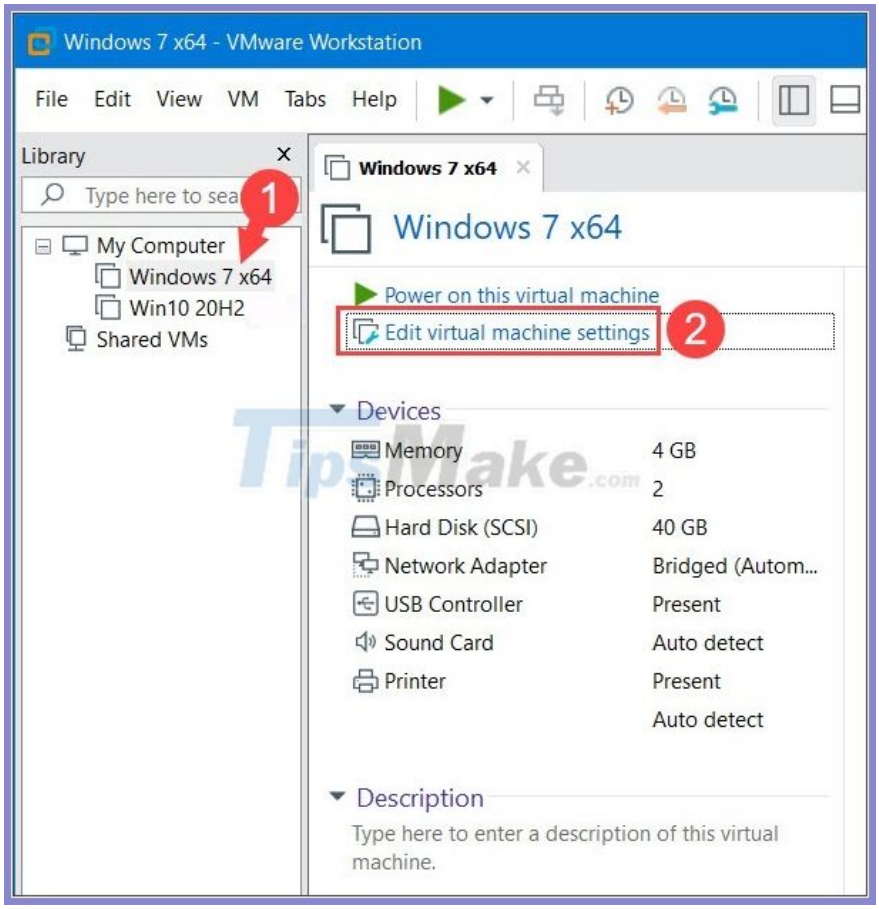


Step 2: Choose **Memory (1)** => adjust the Ram level **(2)** in accordance with your computer => **OK (3)** .



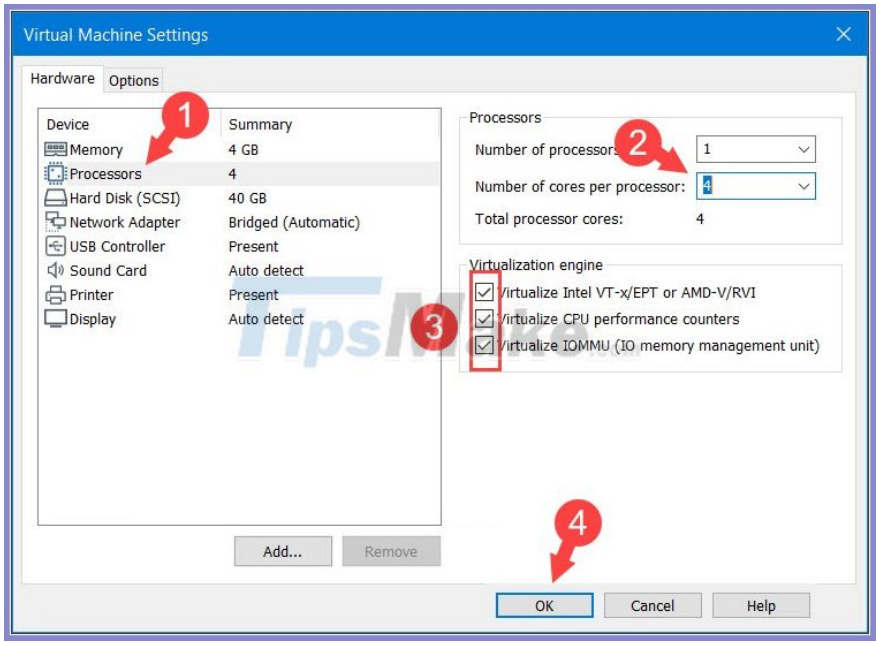
1.4. Set virtualization and CPU multiplier on VMware virtual machine

Step 1: Click on the virtual machine you need to set up **(1)** => **Edit virtual machine settings (2)** .



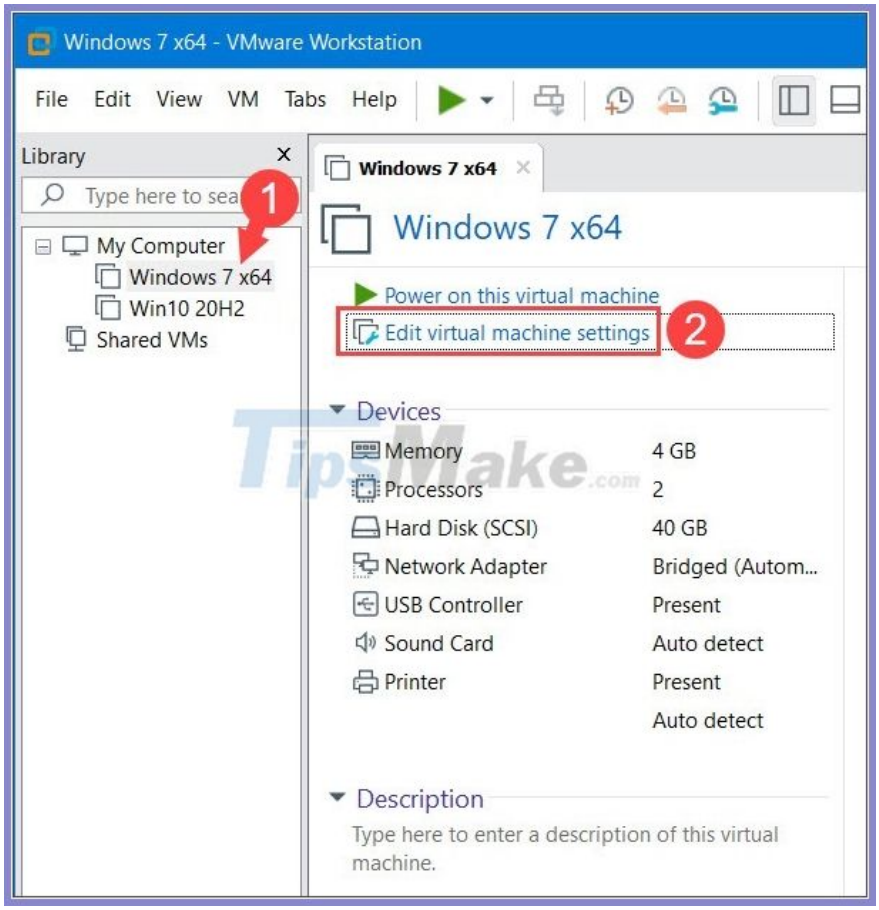
Step 2: Select **Processors (1)** => set the CPU multiplier in **Number of cores per processor (2)** . In addition, you can set virtualization and check 3 boxes in the **Virtualization engine (3)** if your CPU supports virtualization. Press **OK (4)** to save the settings.

Note: **Number of processor** means the number of CPUs on the mainboard and most motherboards today use 1 CPU, except for some main series for the server such as **ASUS Z10PA-D8C, Gigabyte C621-WD12…** only supports 2 CPUs. You should set this to 1 to avoid errors when using VMware.

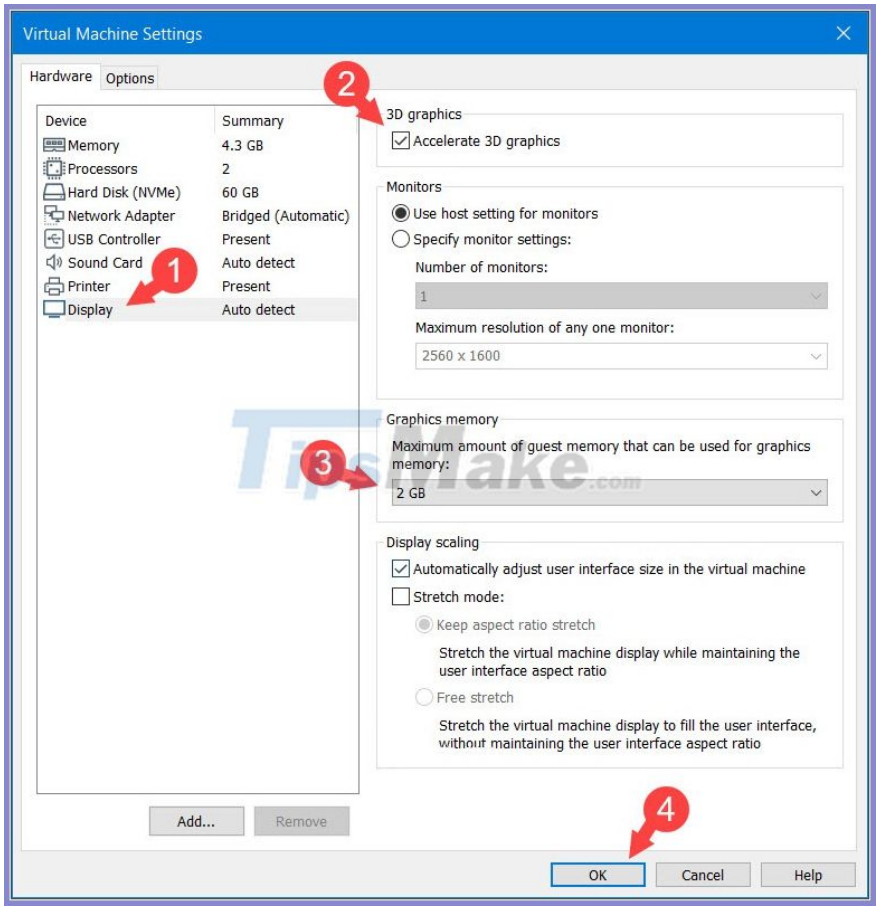


1.5. Accelerated graphics processing settings on VMware virtual machines

Step 1: Click on the virtual machine you need to set up **(1)** => **Edit virtual machine settings (2)** .



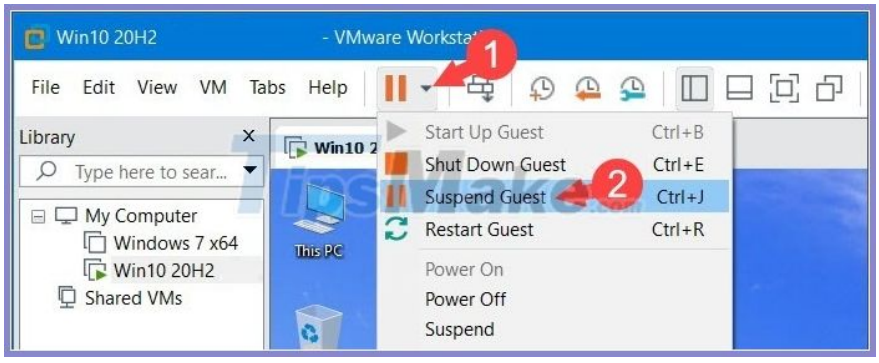
Step 2: Go to **Display (1)** => check **Accelerate 3D graphics (2)** => set **VRAM (3)** for virtual machine => **OK (4)** .



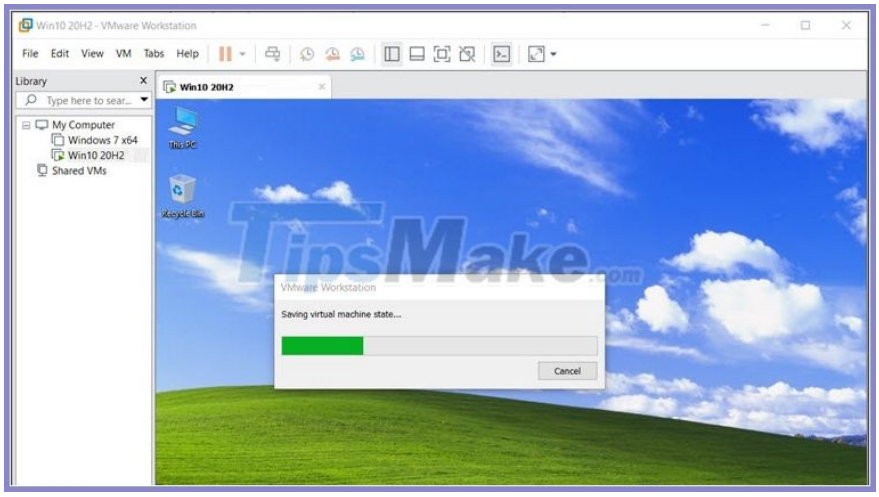
1.6. Use the Suspend feature instead of Power Off

This feature helps you quickly open a virtual machine similar to sleep, hibernate on Windows.

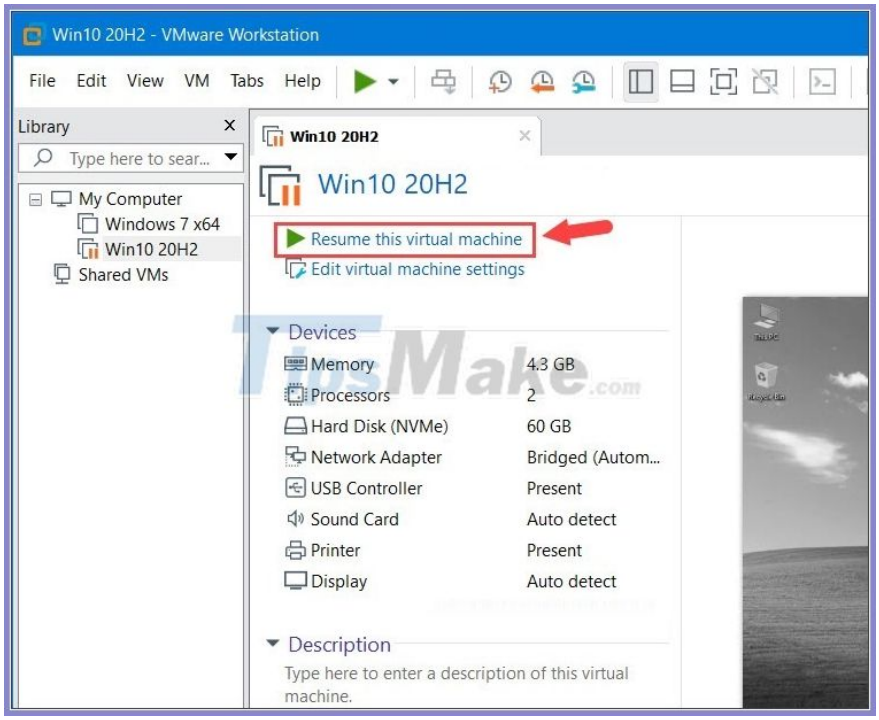
Step 1: You click on **Power (1)** => **Suspend Guest (2)** .



After that, VMware will save your settings and temporarily close your virtual machine.



Step 2: To reopen the virtual machine, click **Resume this virtual machine and you** 're done.



With optimized and accelerated ways for VMware virtual machines, you will work more efficiently and comfortably.

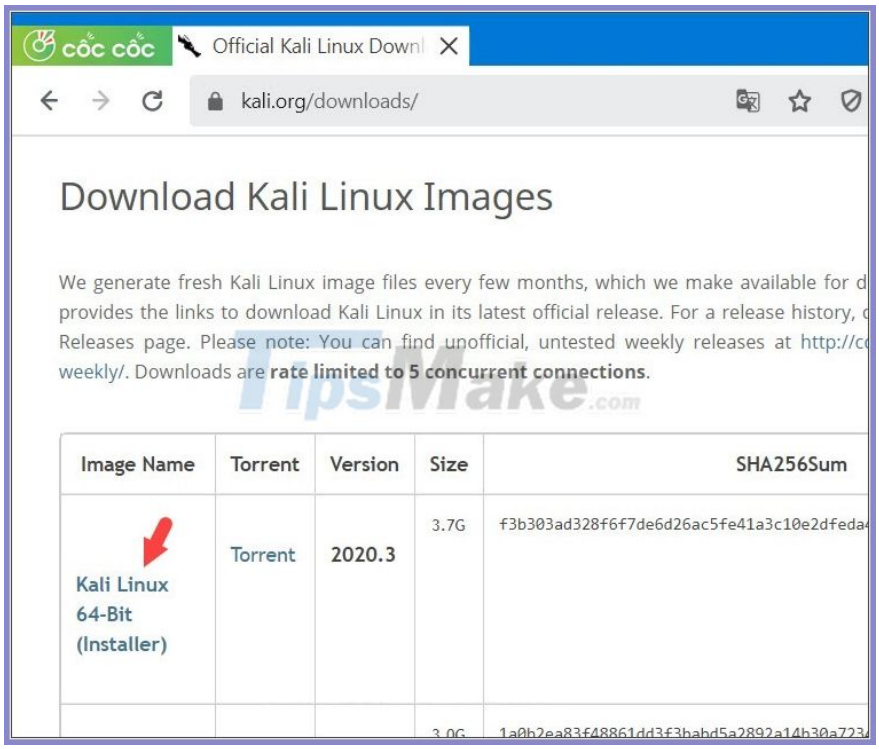
2. How to install Kali Linux on VMware

Kali Linux is an operating system that integrates a lot of security tools for security researchers and hackers to use. To experience Kali Linux, you can install it on VMware virtual machine through the tutorial below.

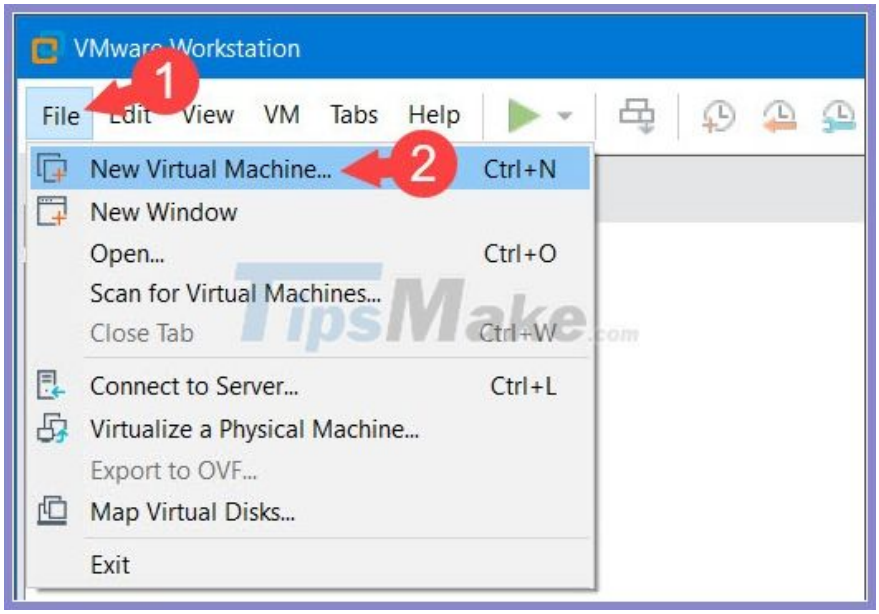
2.1. Setting up Kali Linux on VMware

First, visit link here to download the Kali Linux installer.

Click on **Kali Linux 64-Bit (Installer)** to download.

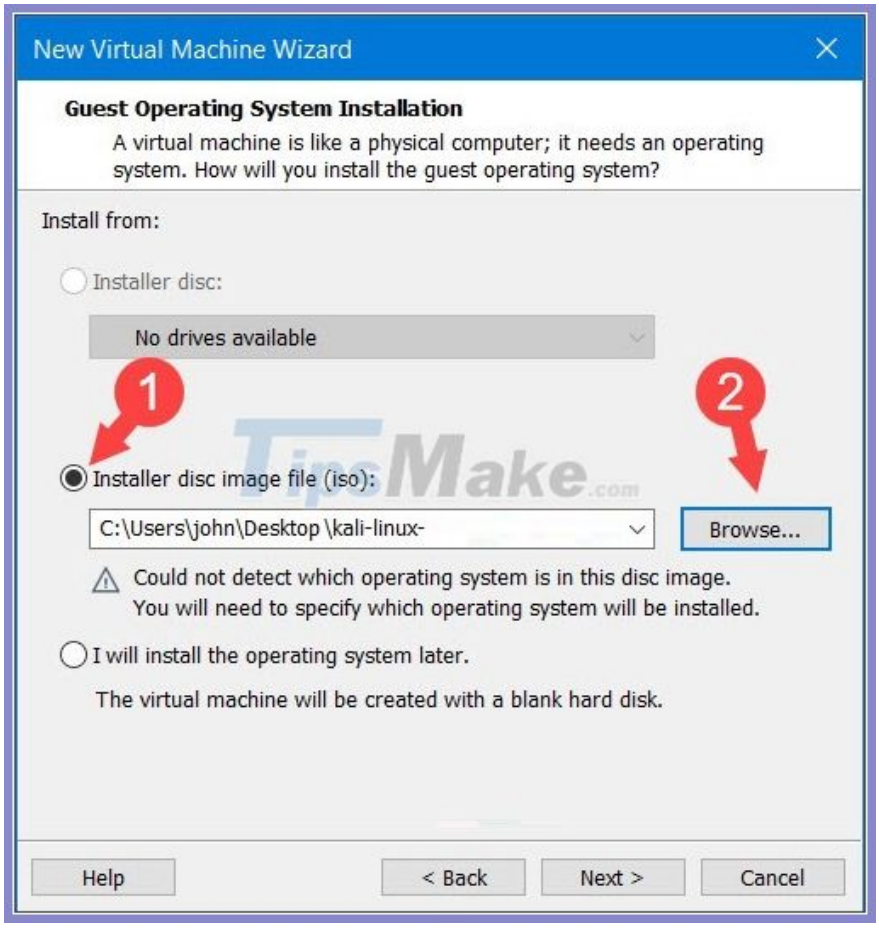


Step 1: Open VMware, click on **File** menu **(1)** => **New Virtual Machine… (2)** .

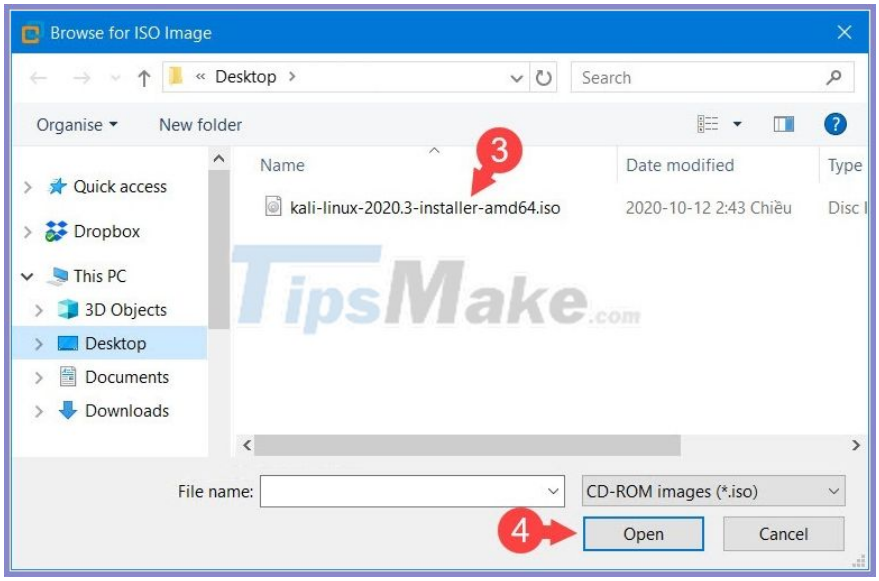


Step 2: You click on **Typical (1)** => **Next (2)** .

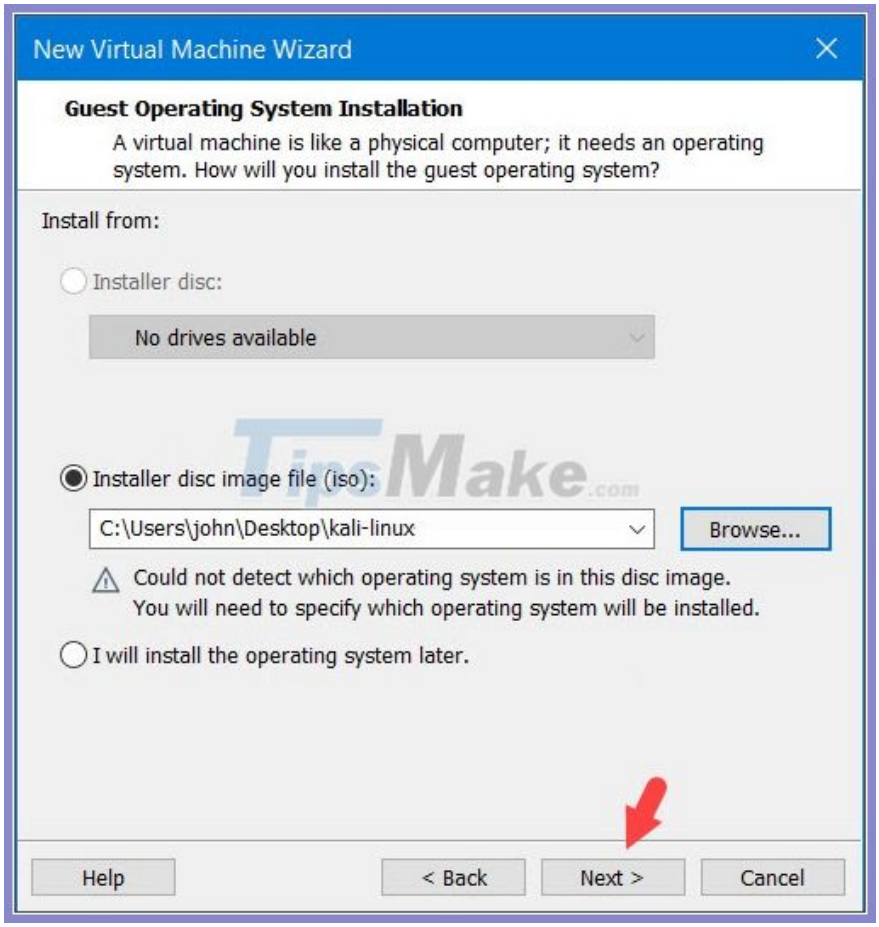
Step 3: You choose **Installed disc image file (1)** => **Browse (2)** .



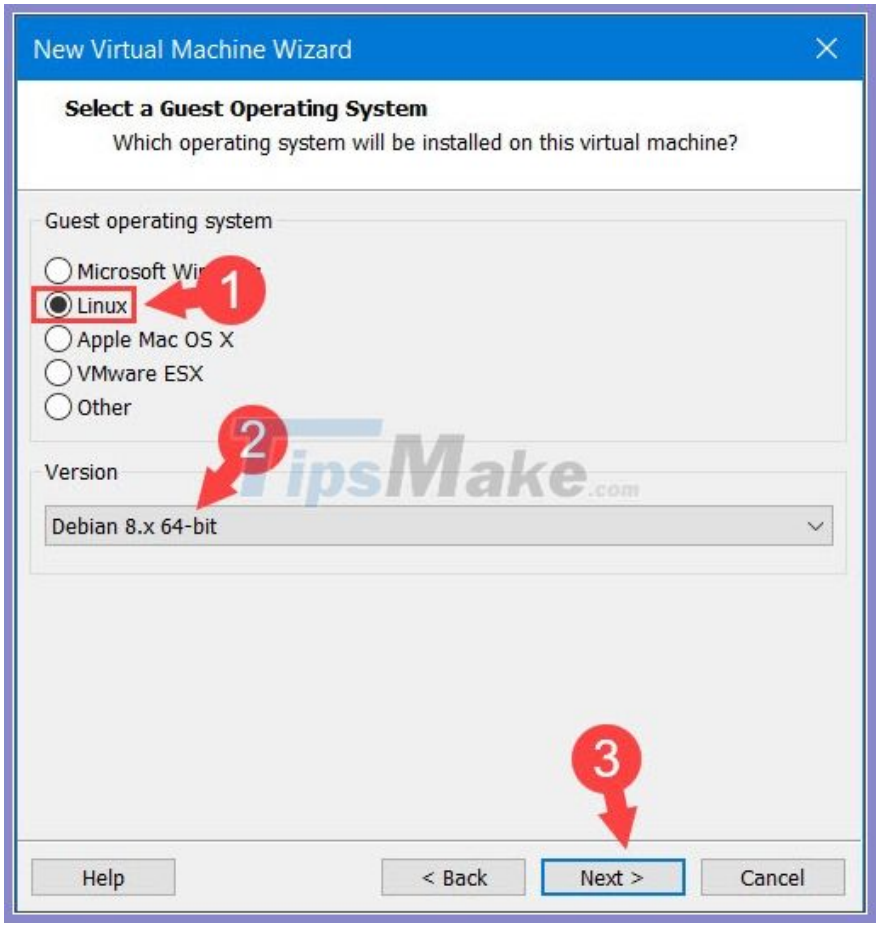
Next, you select the iso file **(3)** => **Open (4)** .



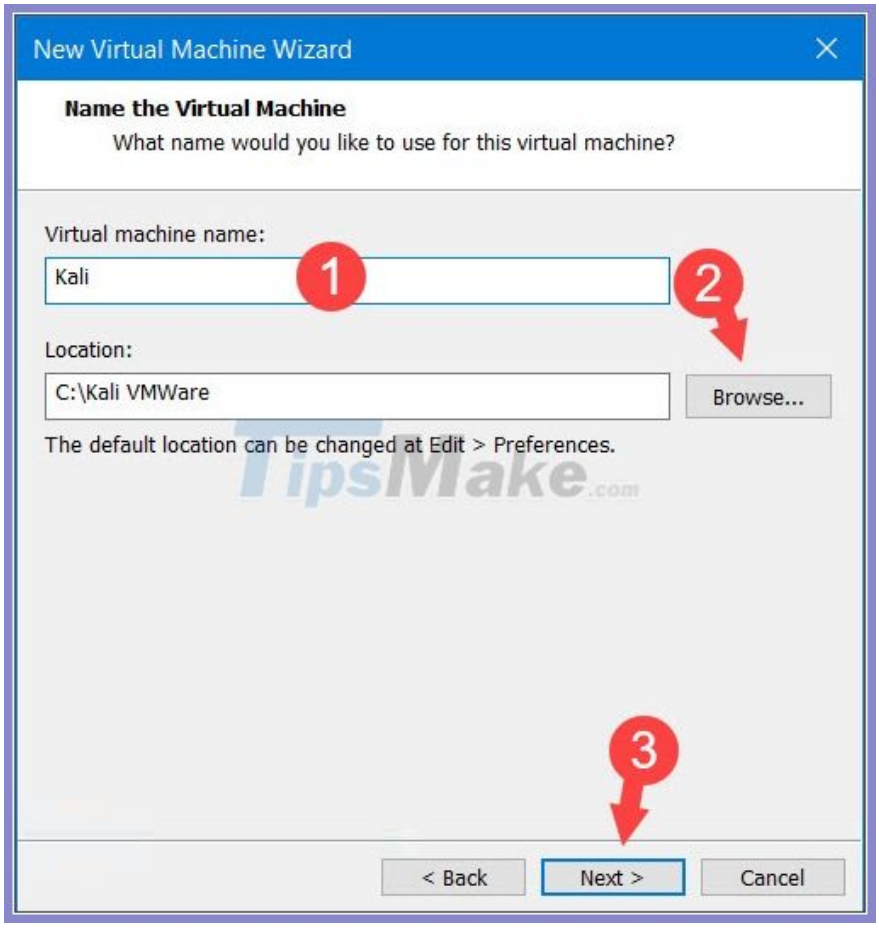
Click **Next** to continue.



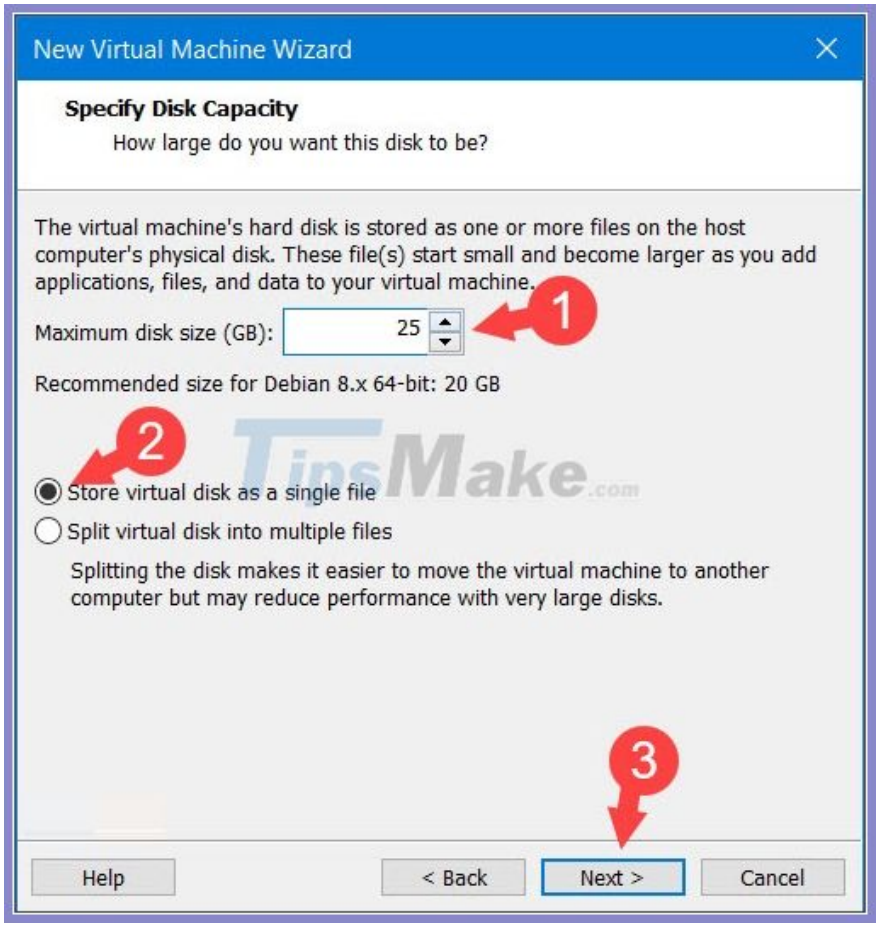
Step 4: Choose **Linux (1)** => **Debian 8.x 64-bit (2)** => **Next (3)** .



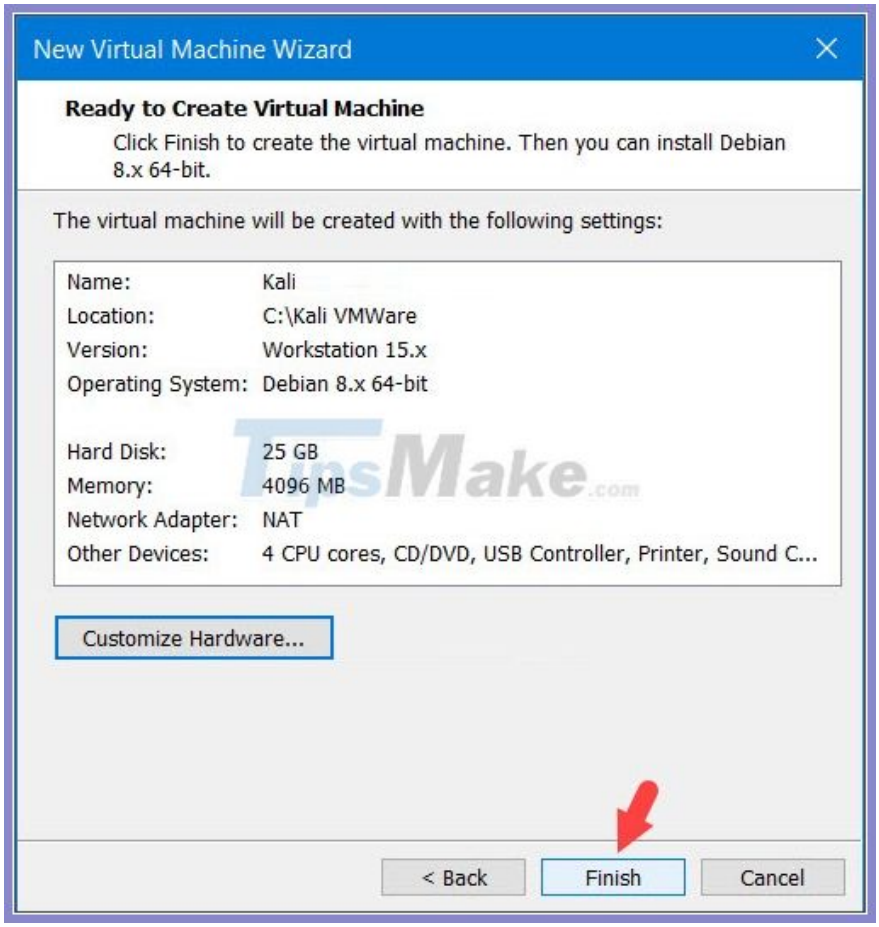
Step 5: You name the virtual machine **(1)** => **Browse . (2)** to choose where to save the virtual machine after the installation. Next, you click **Next (3)** to continue.



Step 6: You set the disk space **(1)** at least 20GB. Next, you click on **Store virtual disk as a single file (2)** => **Next (3)** .

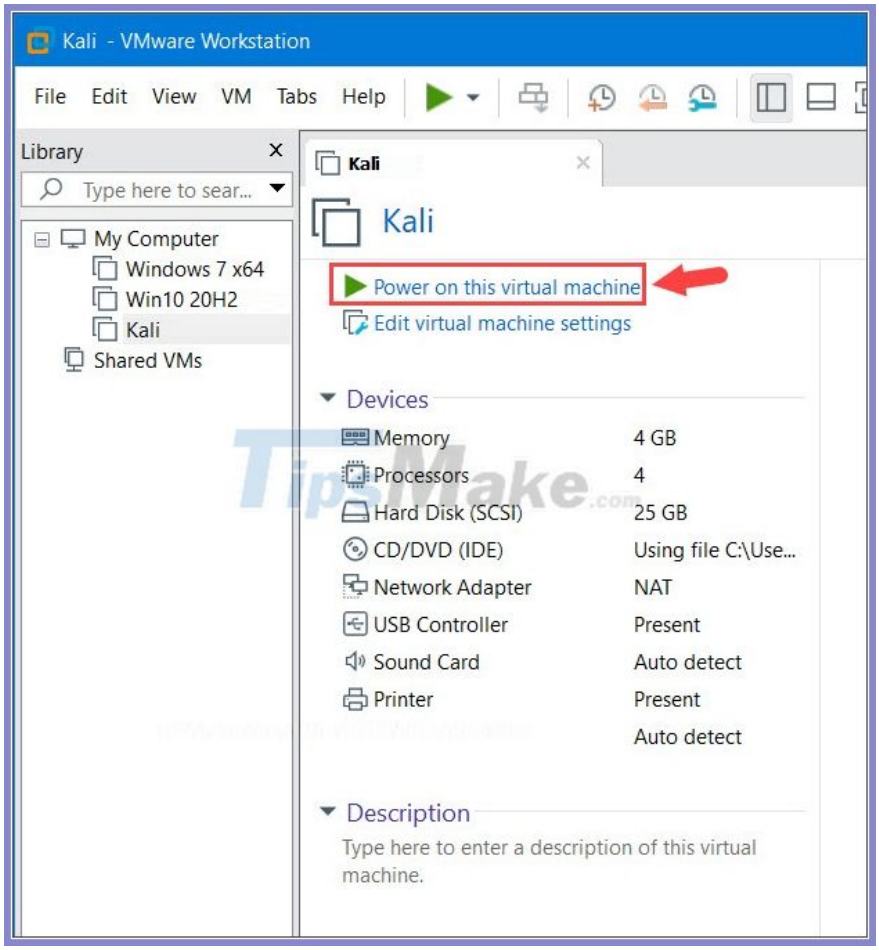


Click **Finish** to complete.



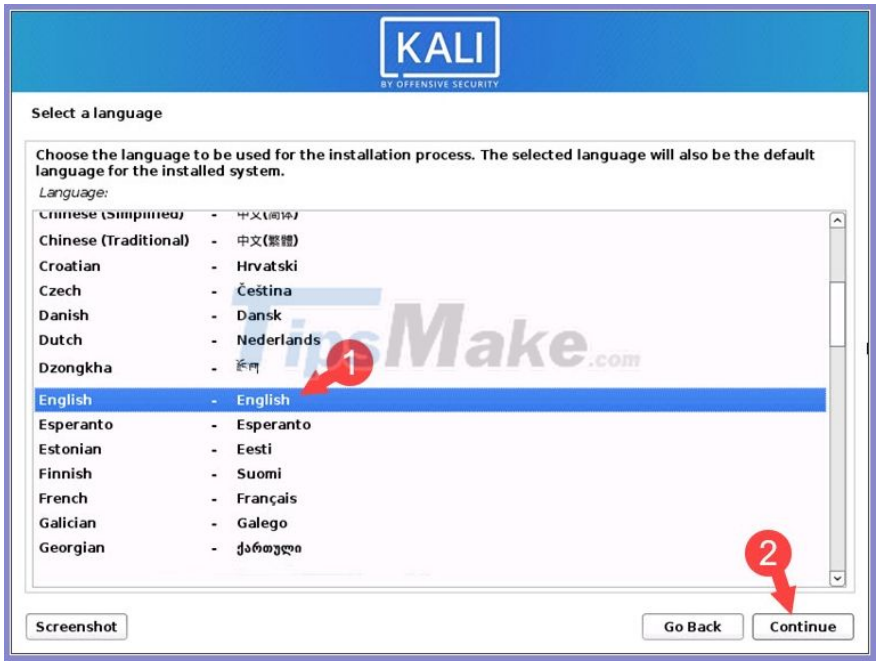
2.2. Install Kali Linux

Step 1: Click on the **Kali Linux** virtual machine you just set up and select **Power on this virtual machine** .

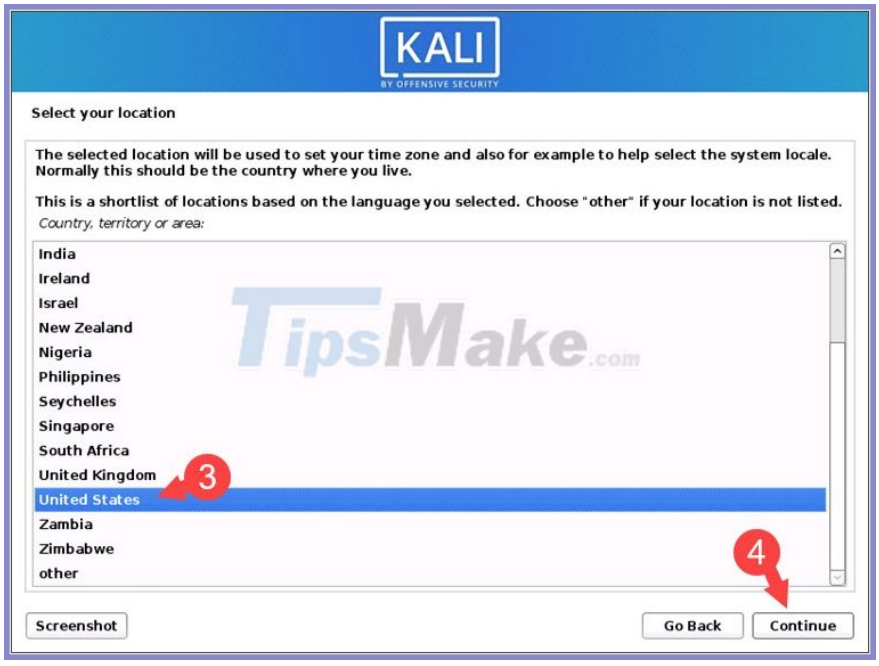


On the Boot menu, click **Graphical install** .

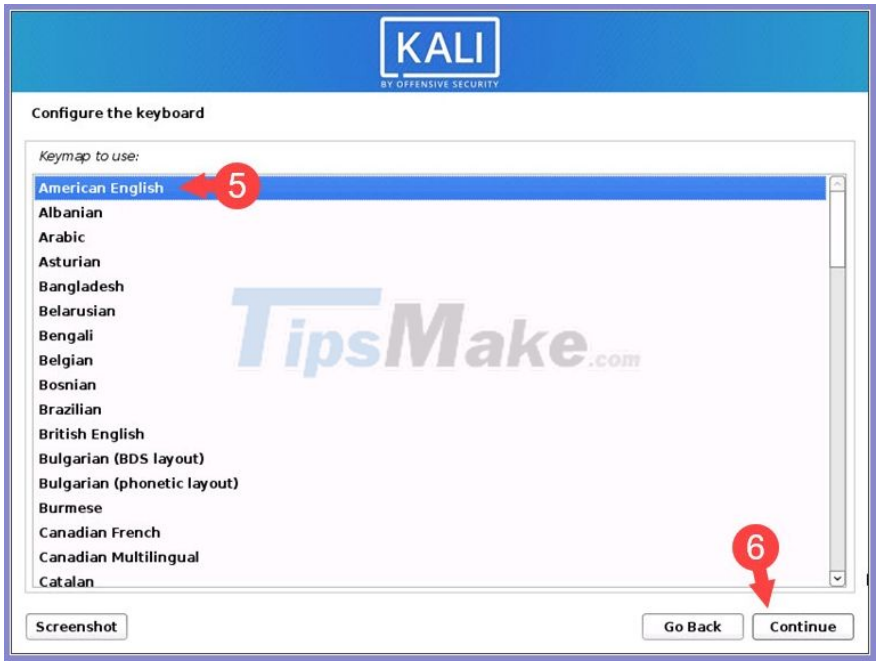
Step 2: Click on **English (1)** to select English language => **Continue (2)** .



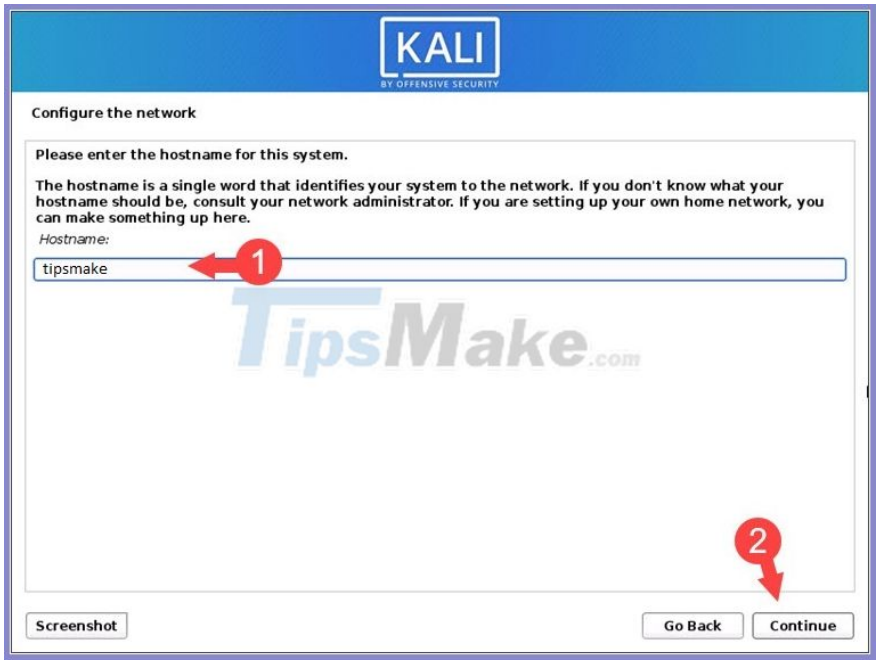
Next, you select the area as **United States (3)** => **Continue (4)** .



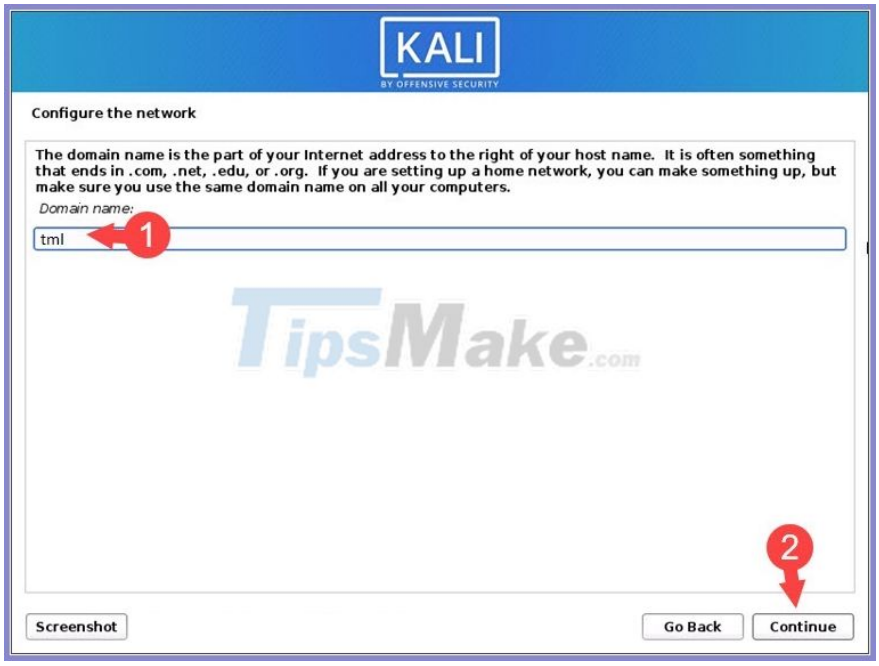
Select the keyboard language as **American English (5)** => **Continue (6)** .



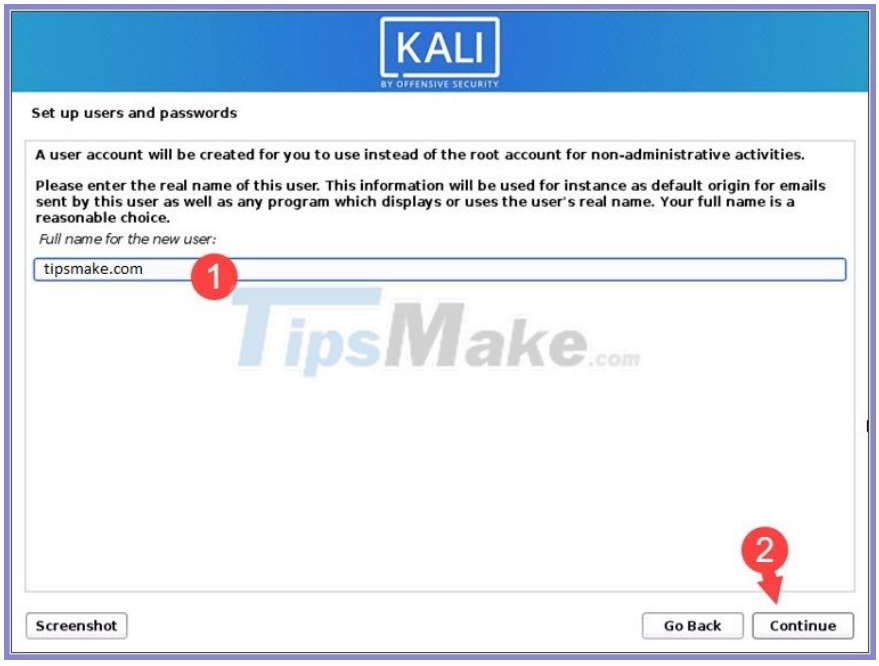
Step 3: You name the virtual network **(1)** => **Continue (2)** .



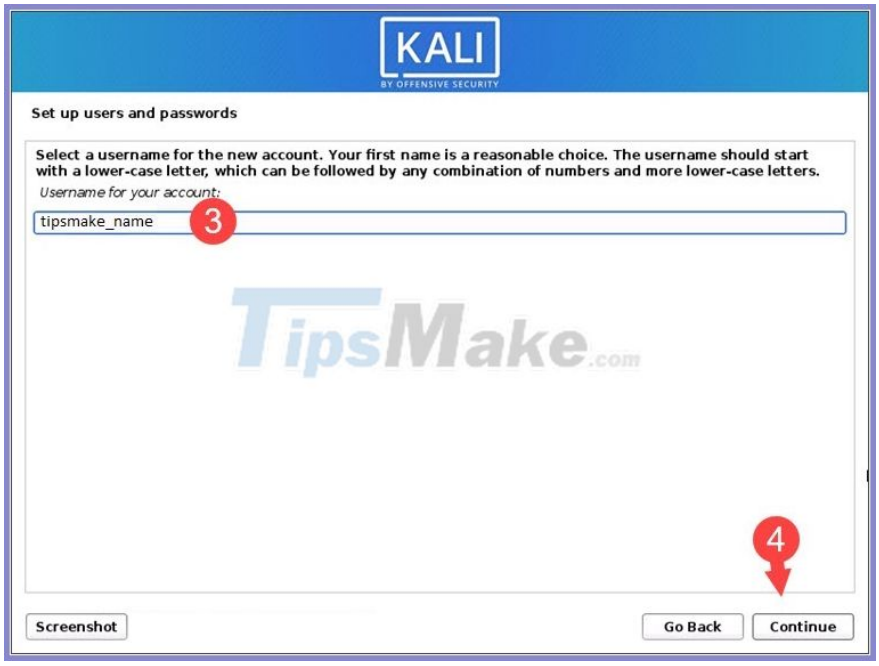
Step 4: Name the domain **(1)** => **Continue (2)** .



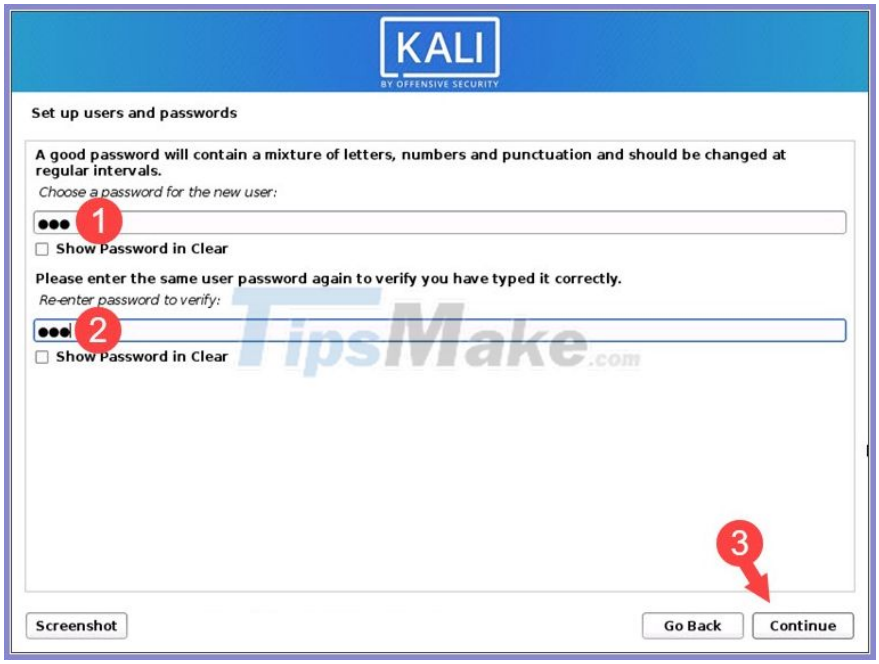
Step 5: Enter your name **(1)** => **Continue (2)** .



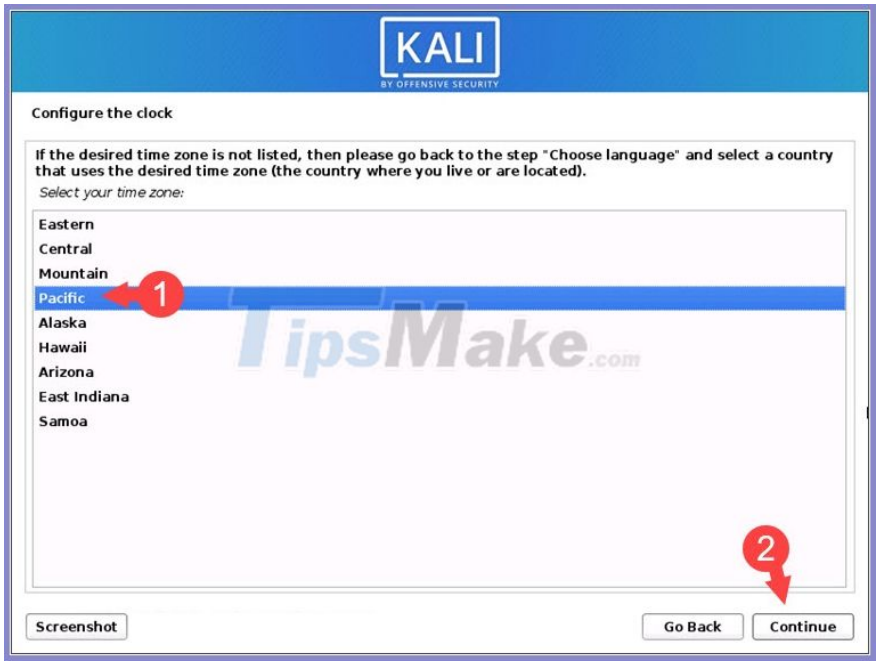
Name the **User (3)** => **Continue (4)** .



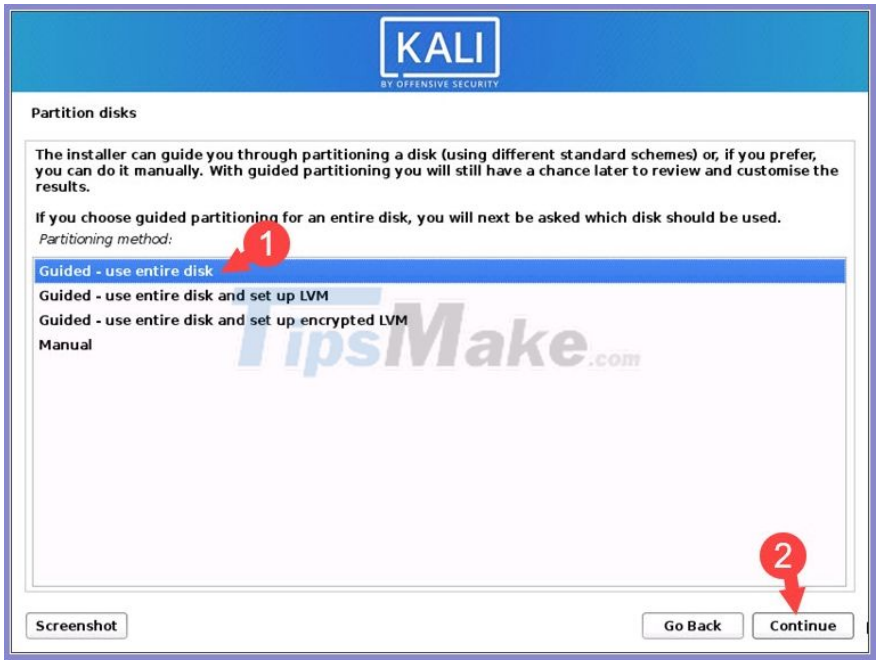
Step 6: Set the password **(1)** and re-enter the password **(2)** for the Kali virtual machine => **Continue (3)** .



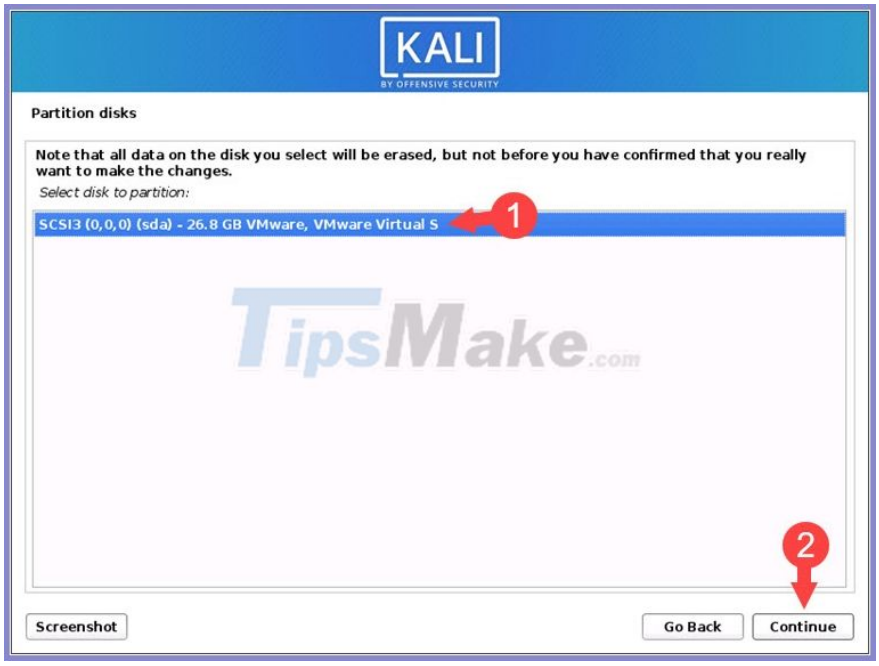
Step 7: You choose the time zone **Pacific (Pacific) (1)** => **Continue (2)** .



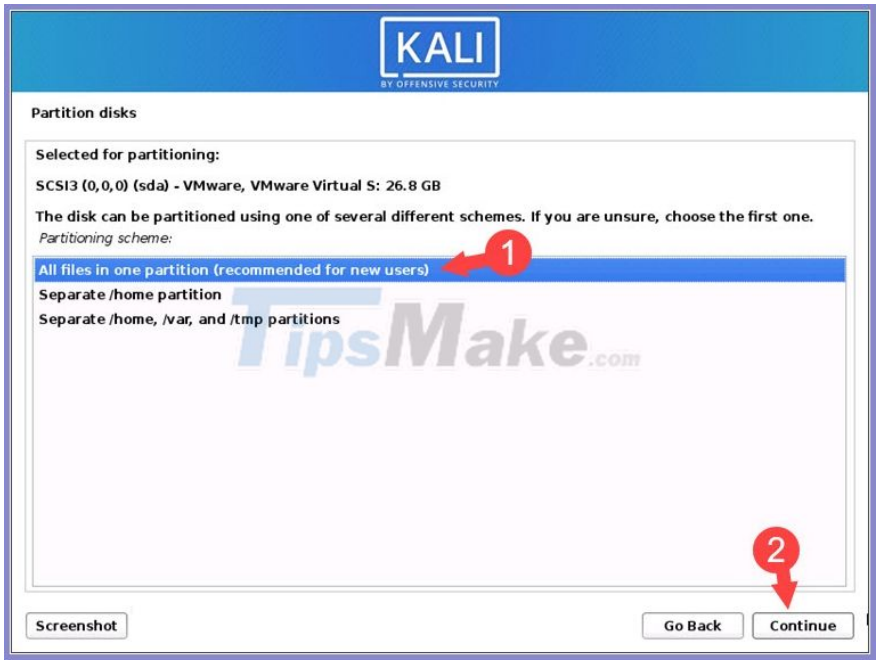
Step 8: Choose **Guided - use entire disk (1)** => **Continue (2)** .



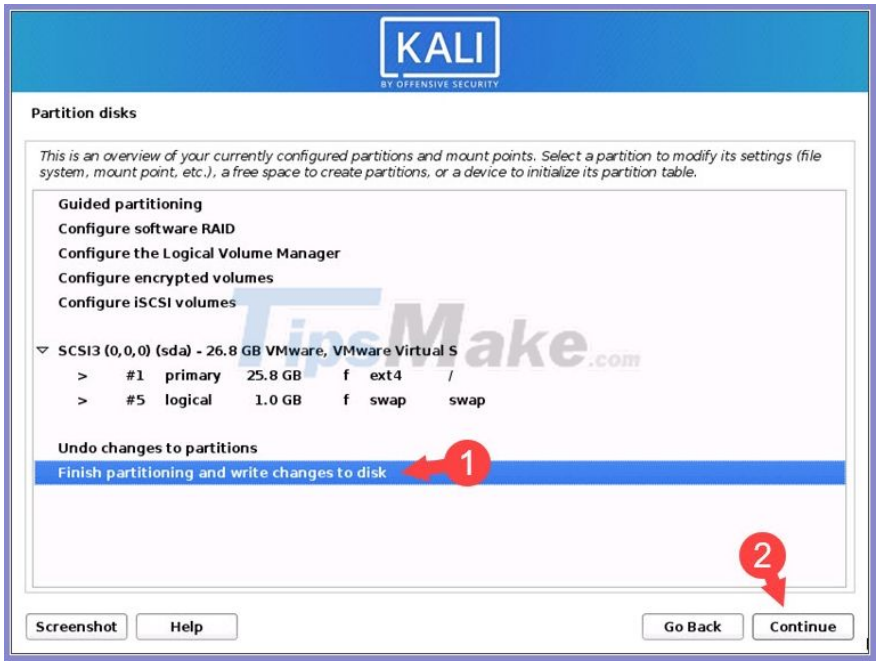
Step 9: Select virtual drive **(1)** to install => **Continue (2)** .



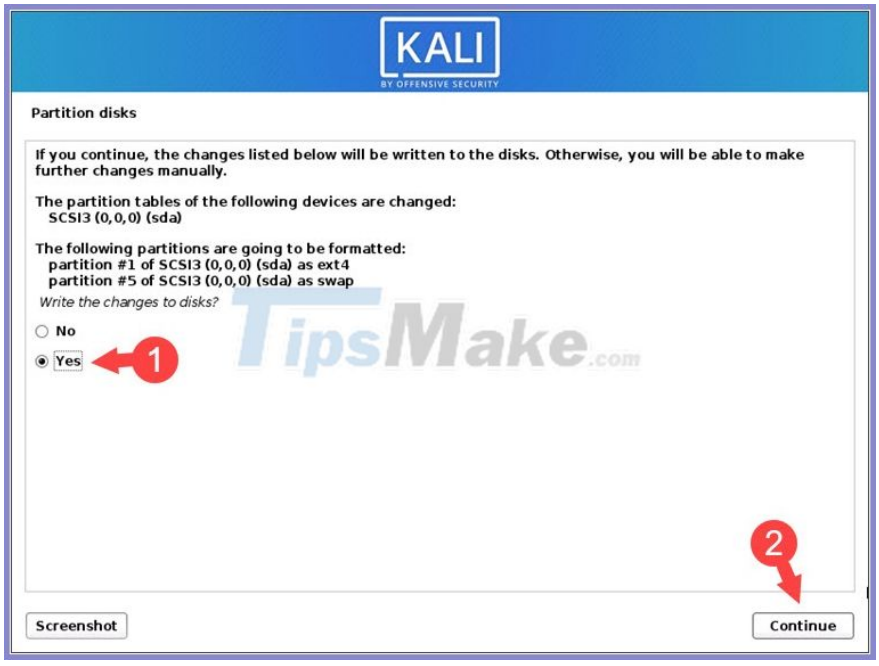
Step 10: Select **All files in one partition (recommended for new users) (1)** => **Continue (2)** .



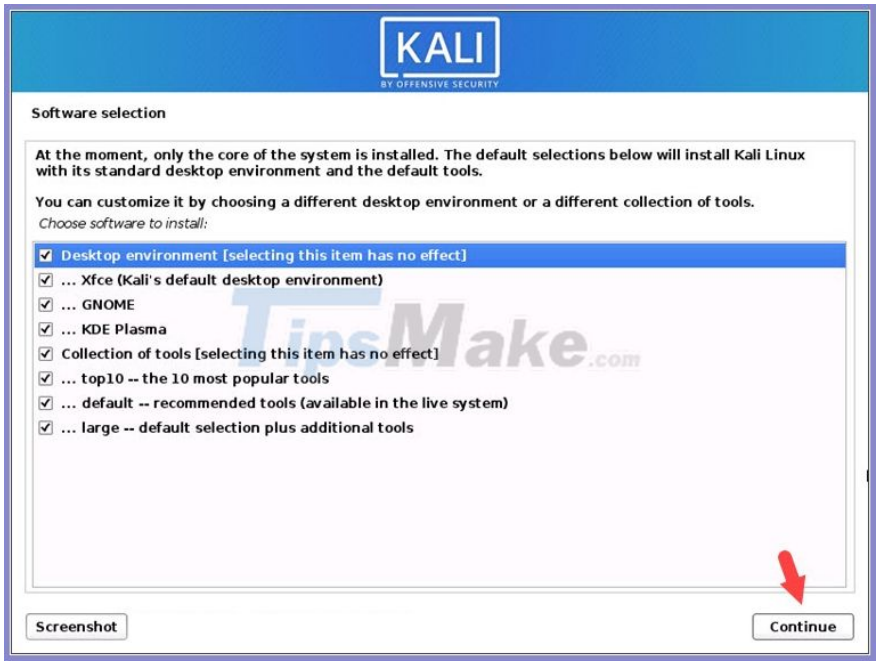
Step 11: Select **Finish partitioning and write changes to disk (1)** => **Continue (2)** .



Step 12: Select **Yes (1)** => **Continue (2)** .

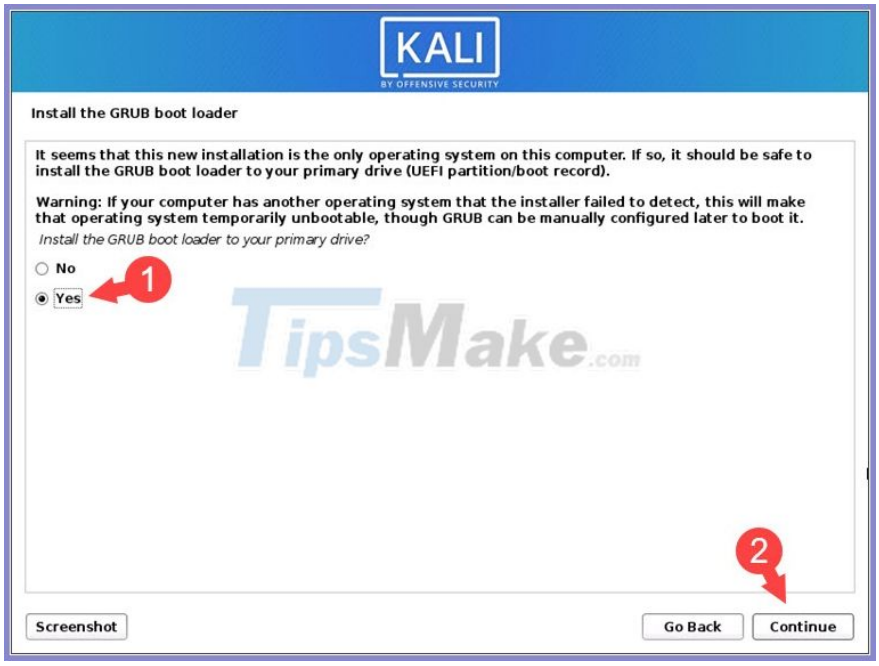


Step 13: You check all the necessary items and click **Continue** .

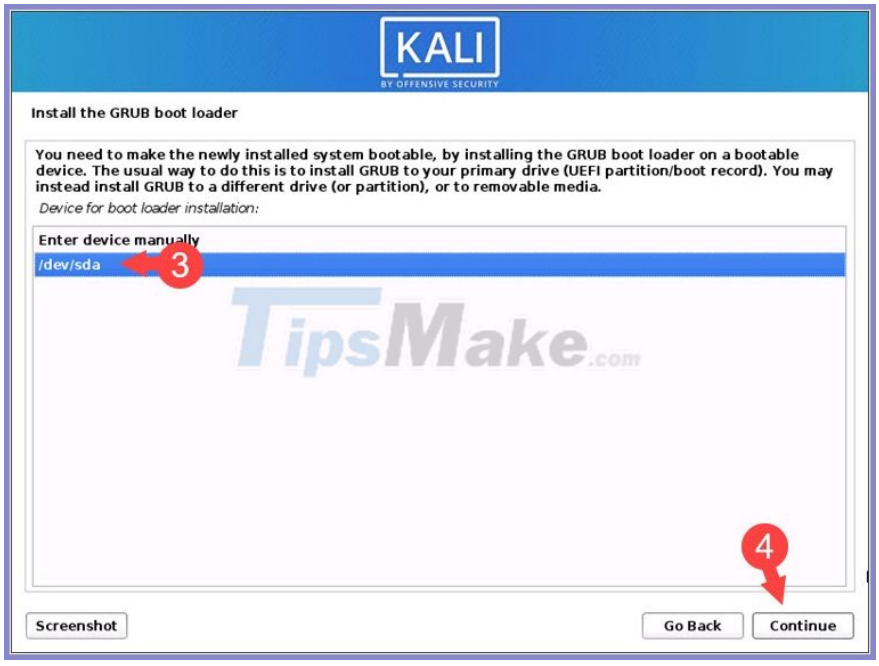


Step 14: Select the screen manager as **gdm3 (1)** => **Continue (2)** .

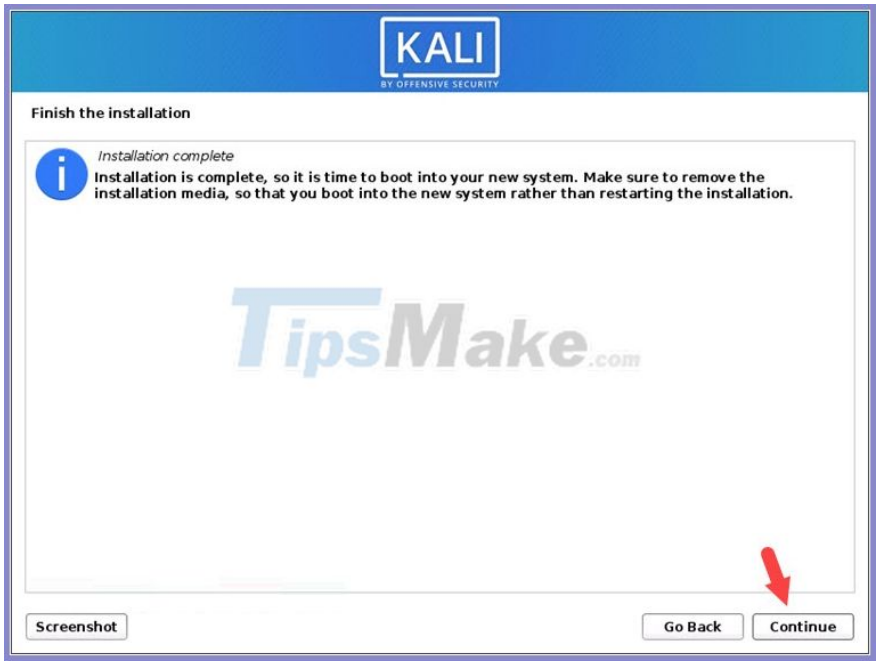
Step 15: Click **Yes (1)** to install **GRUB boot** => **Continue (2)** .



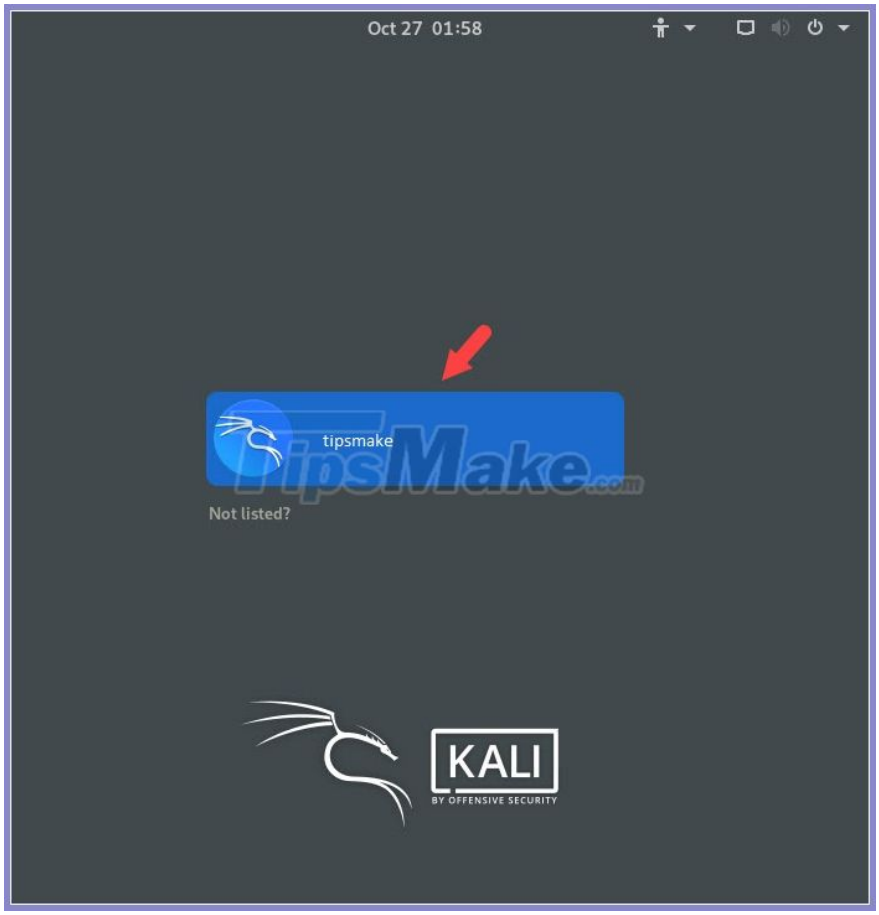
Next, you choose the drive **(3)** to install => **Continue (4)** .



At this step is finished, click **Continue** to complete.



Step 16: After restarting **Kali Linux** , click and login to your account.



The main interface of Kali Linux will be as shown below. Since this tool is developed on a Debian operating system, you will find Debian's wallpapers under Kali Linux.

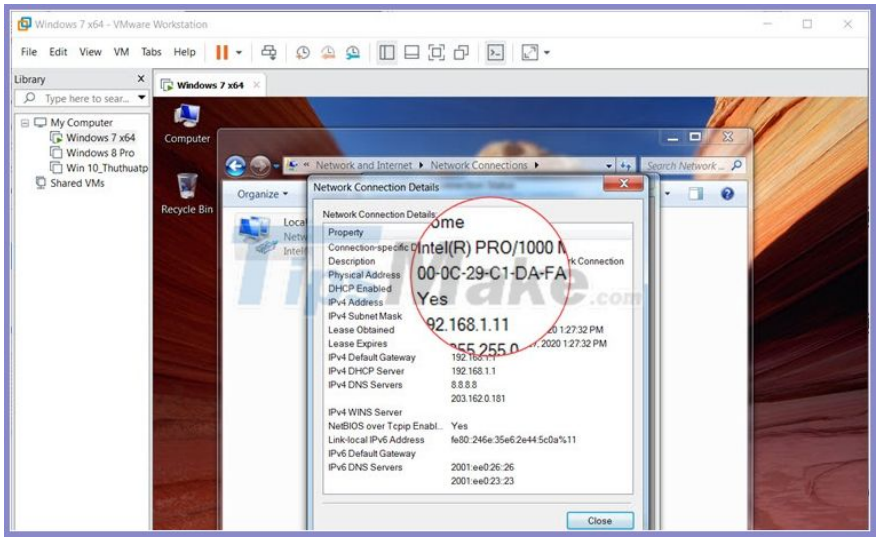
With full and detailed instructions on how to install Kali Linux on VMware, you can try to install and experience the tool for 'hacker' extremely unique and interesting.

3. How to change the MAC address of the VMware virtual machine

Change the MAC address on VMware virtual machines so you can access blocked websites or create some settings to improve security on virtual machines.

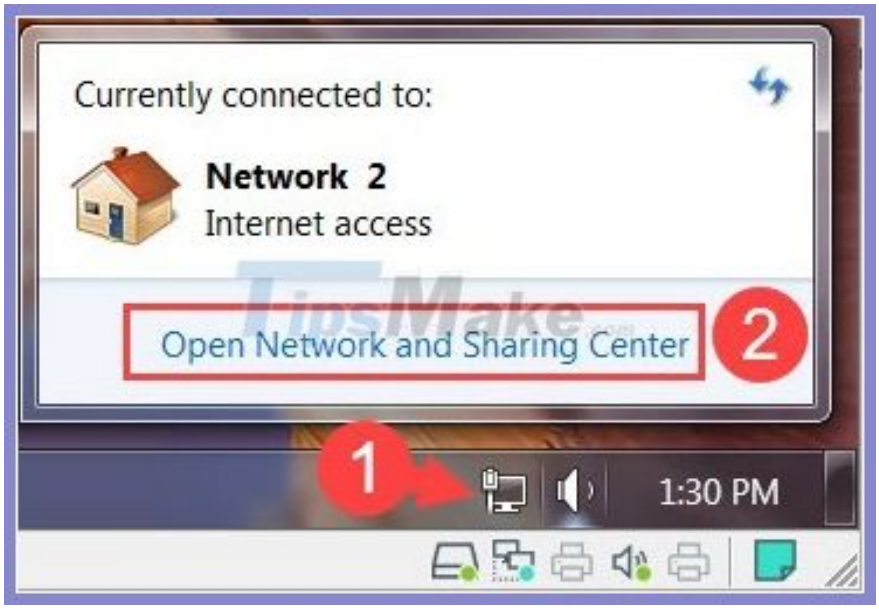
3.1. Change MAC address on Windows virtual machine

The MAC address on the virtual machine before changing is **00-0C-29-C1-DA-FA** .

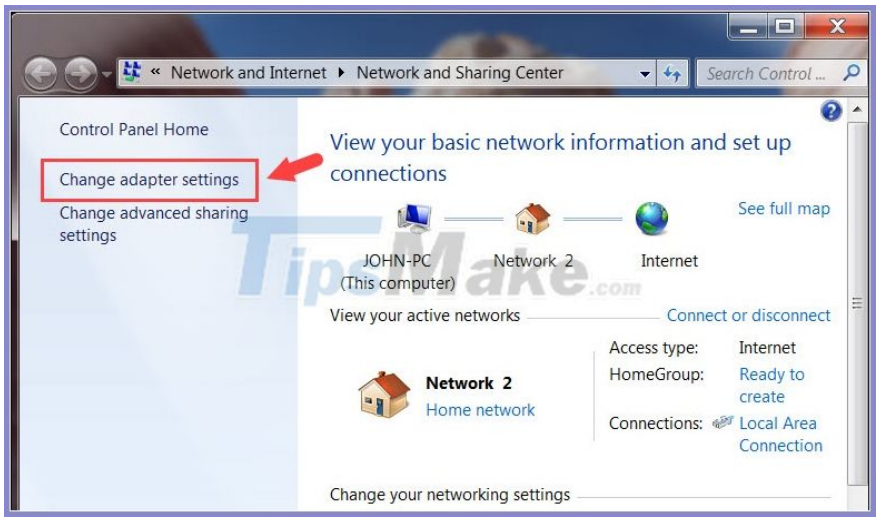


We will proceed as follows:

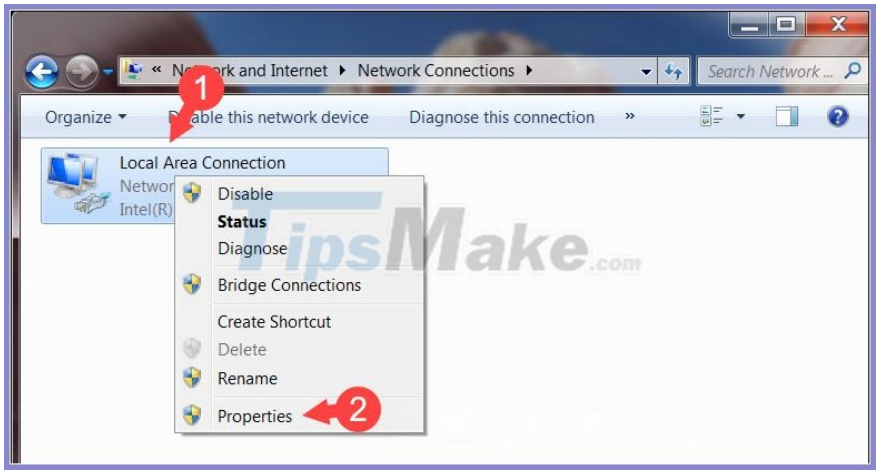
Step 1: Click on **Network (1)** => **Open Network and Sharing Center (2)** .



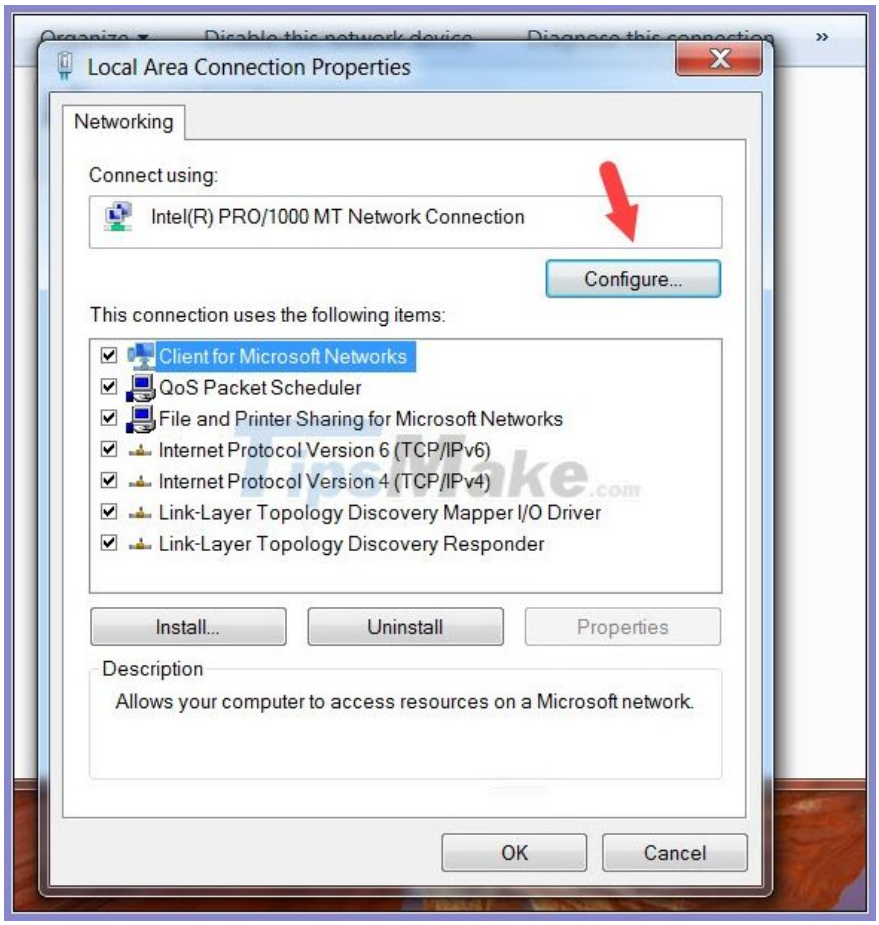
Next, click **Change Adapter settings** .



Step 2: Right-click on **Local Area Connection (1)** => **Properties (2)** .

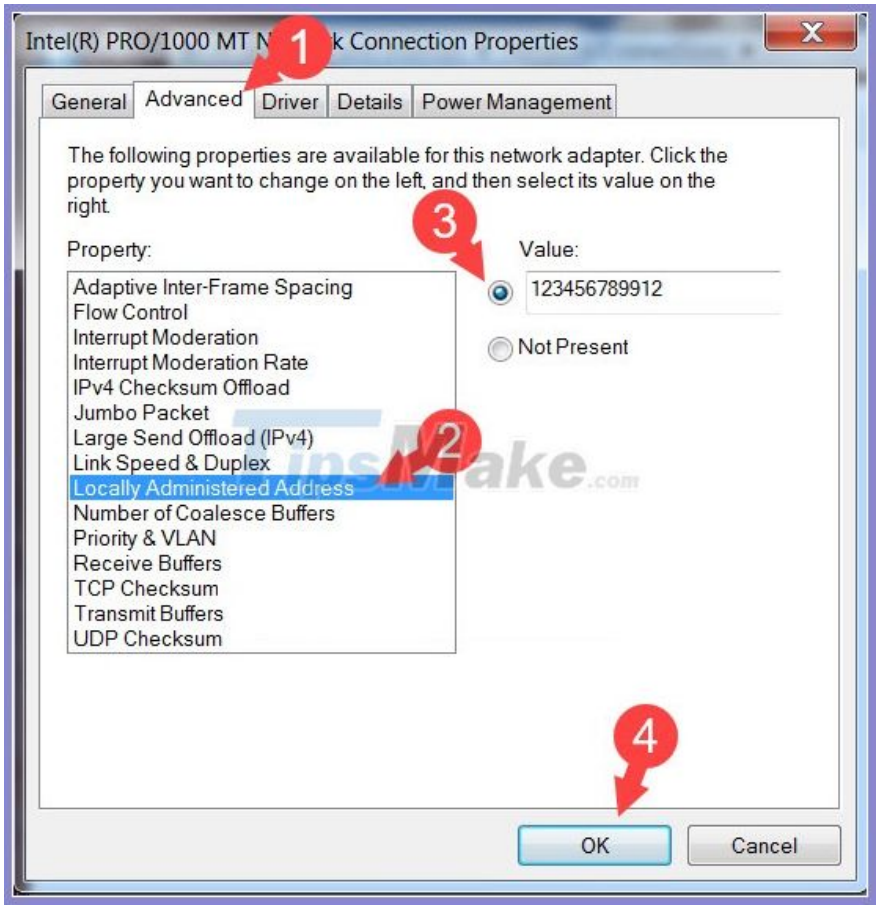


Next, click **Configure .**

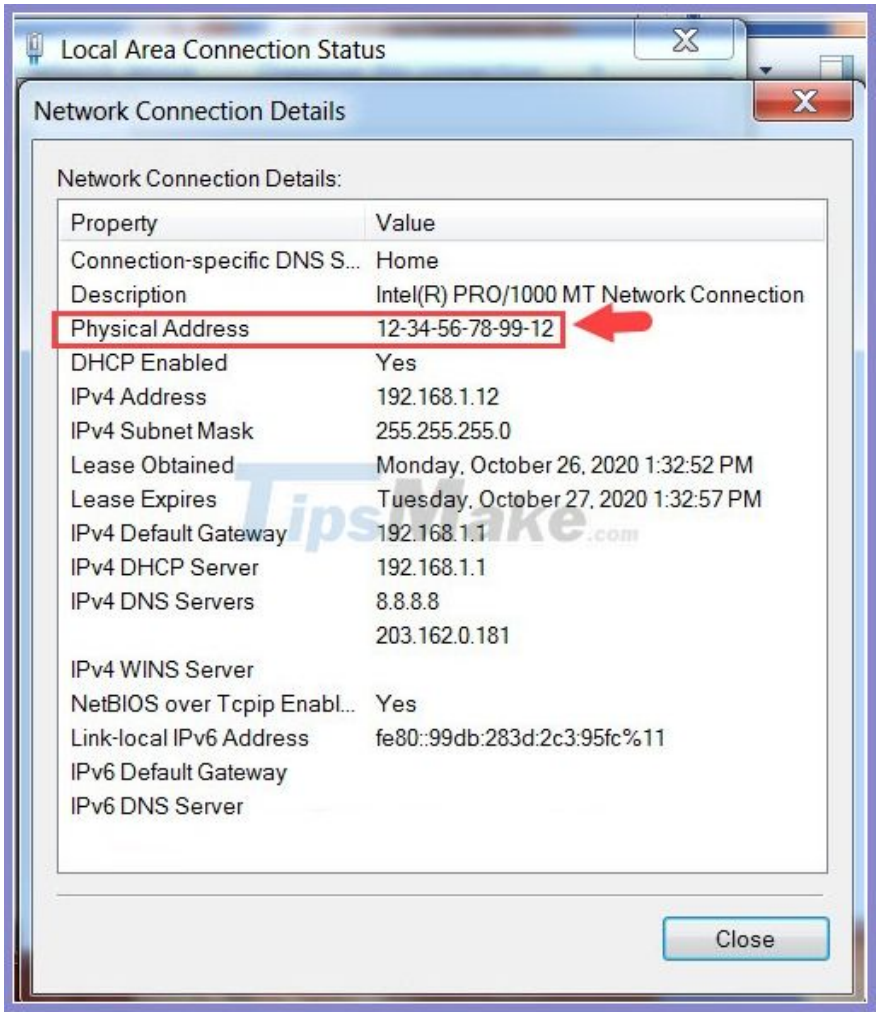


Step 3: Click on **Advanced (1)** => **Locally Administered Address (2)** => check **Value (3)** and enter any 12 characters => **OK (4)** .

Note: Some network cards integrated on different motherboards will display the name **Network Address** instead of **Locally Administered Address** .



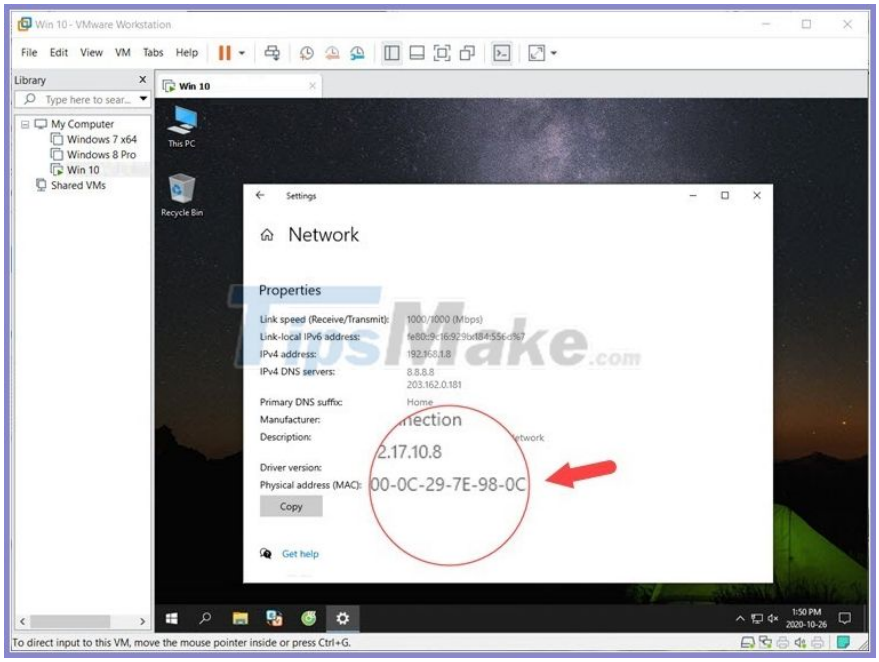
After entering, check if the MAC address has changed. If the new MAC address has changed like in the example below, it is successful.



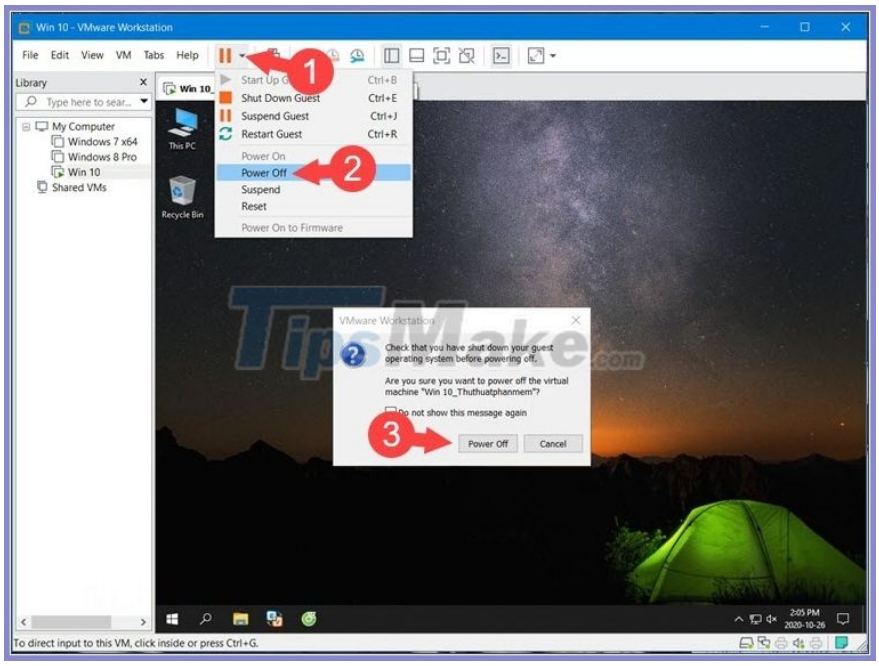
Alternatively, you can change the MAC address in Registry or use TMAC software.

3.2. Change MAC address using network settings in VMware

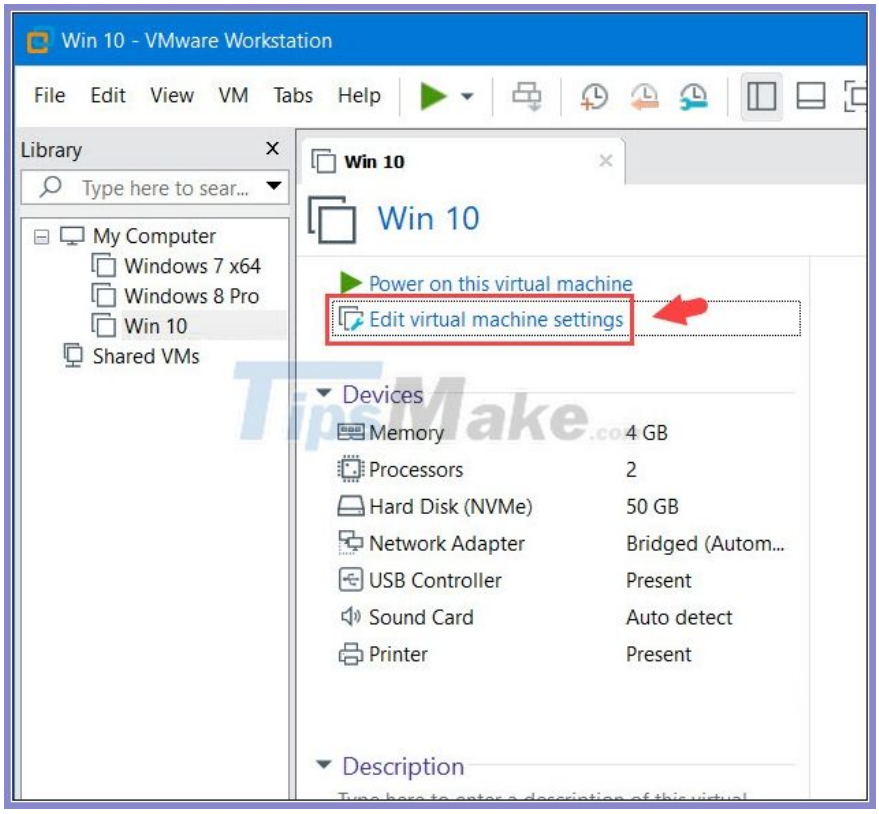
With this way, we can change the MAC address on VMware virtual machines, apply to virtual machines running Ubuntu, macOS, CentOS . As shown below, you can see that Windows 10 virtual machine has MAC address. is **00-0C-29-7E-98-0C** .



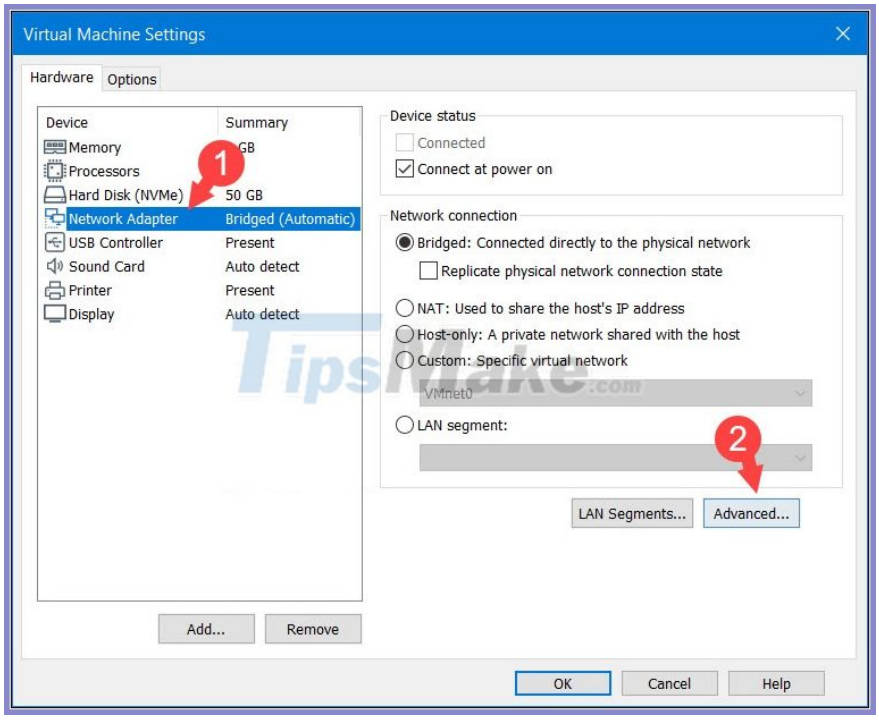
Step 1: You need to turn off the active virtual machine by pressing **Power (1)** => **Power Off (2)** => **Power Off (3)** .



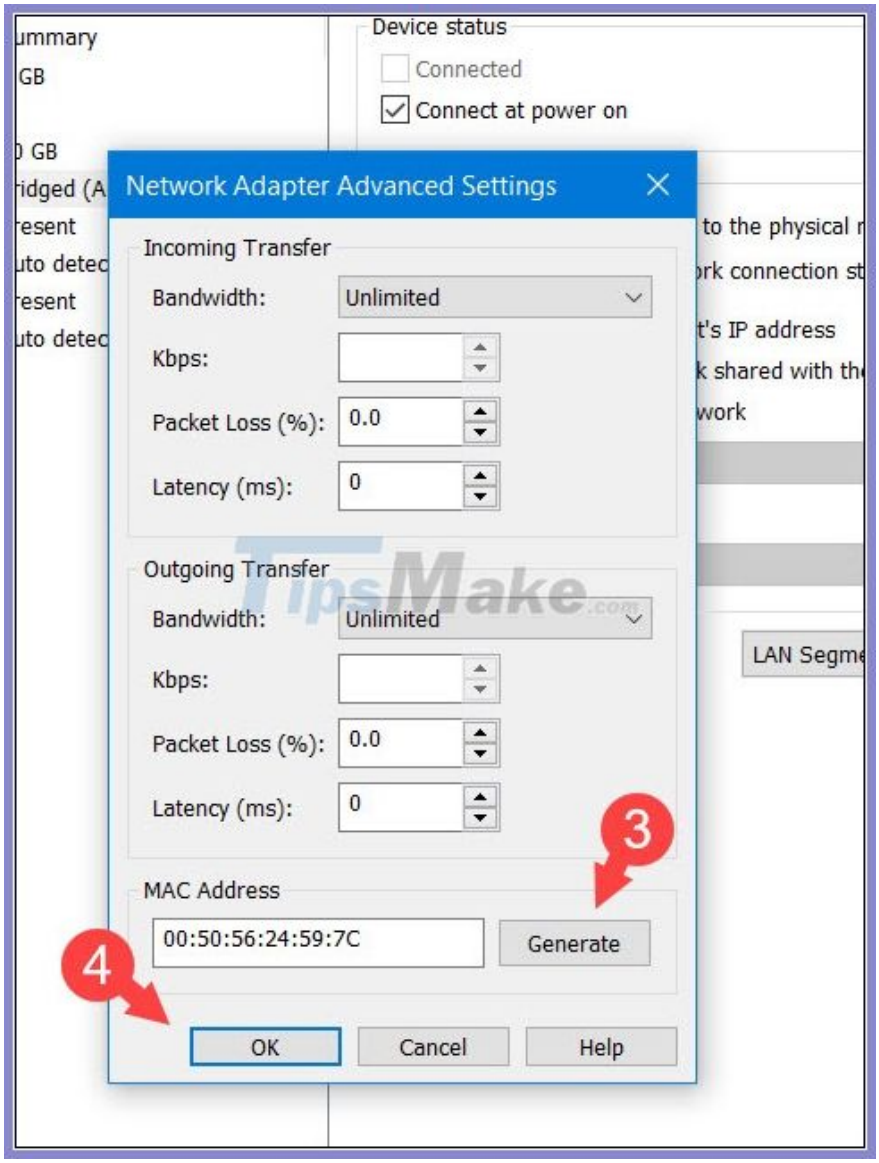
Next, click on **Edit virtual machine settings** after the virtual machine is turned off.



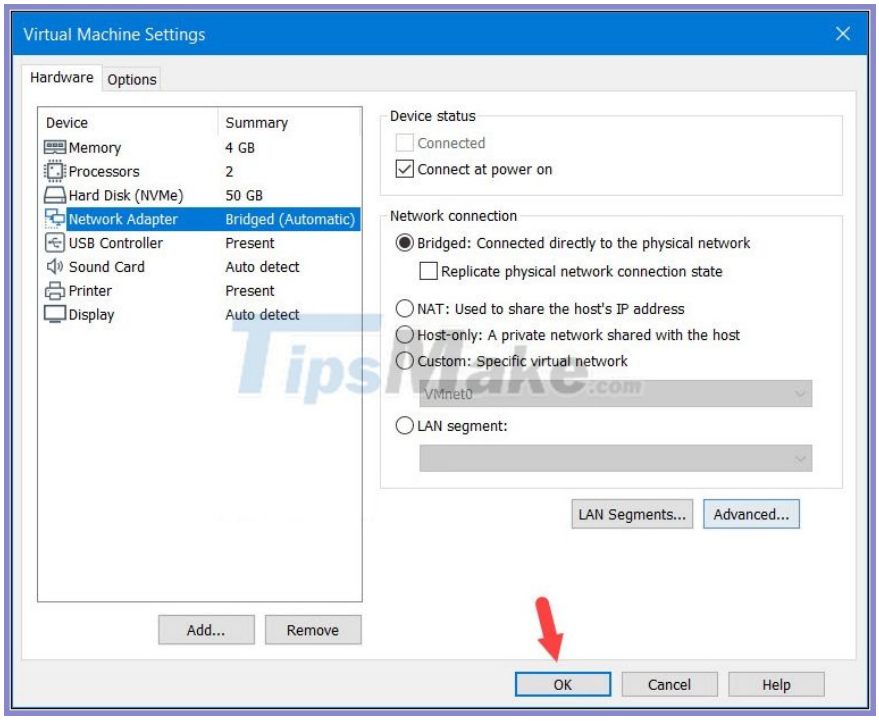
Step 2: Click on **Network Adapter (1)** => **Advanced… (2)** .



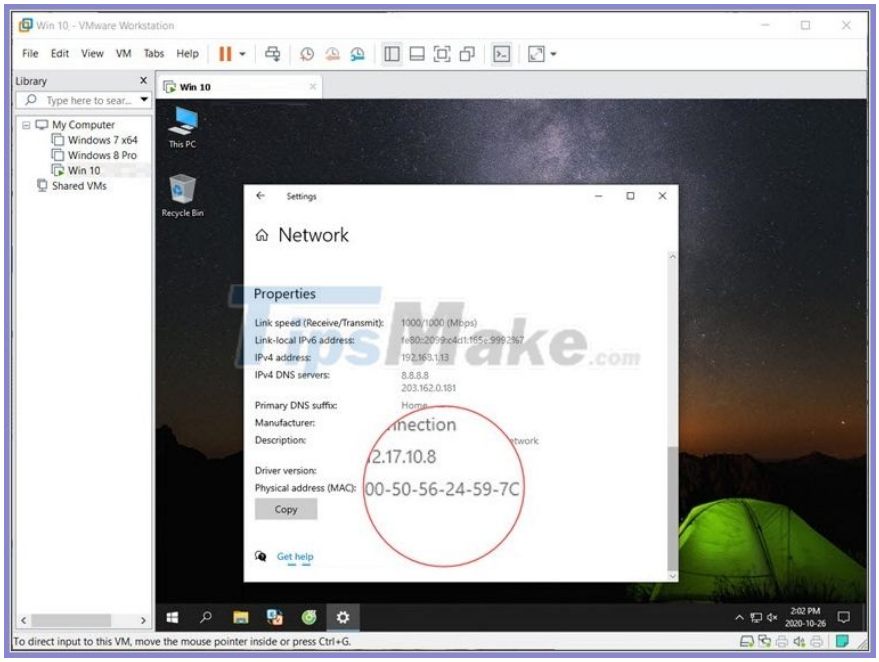
Next, press **Generate (3)** in the **MAC Address** => **OK (4)** .



Click **OK** to save and open the virtual machine to check.



After opening the virtual machine to check, you will see the MAC address has been changed as in the example below.



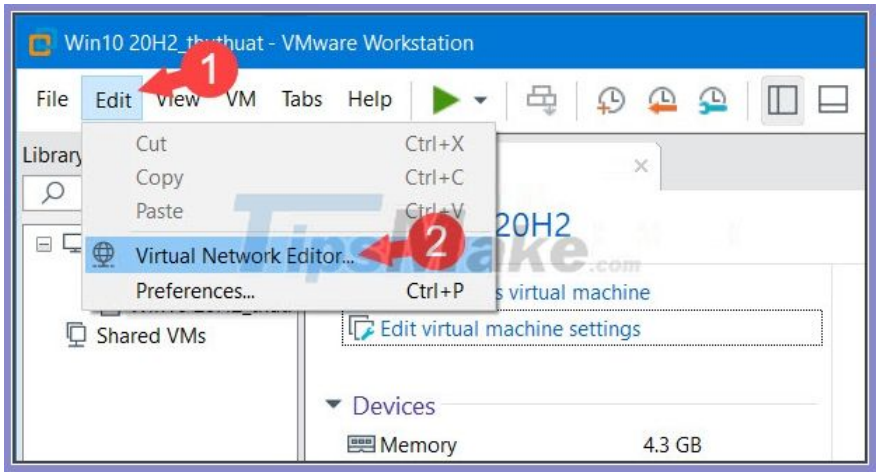
With this simple and quick guide, you can change the MAC address on the virtual machine for added security.

4. How to connect 2 virtual machines in VMware

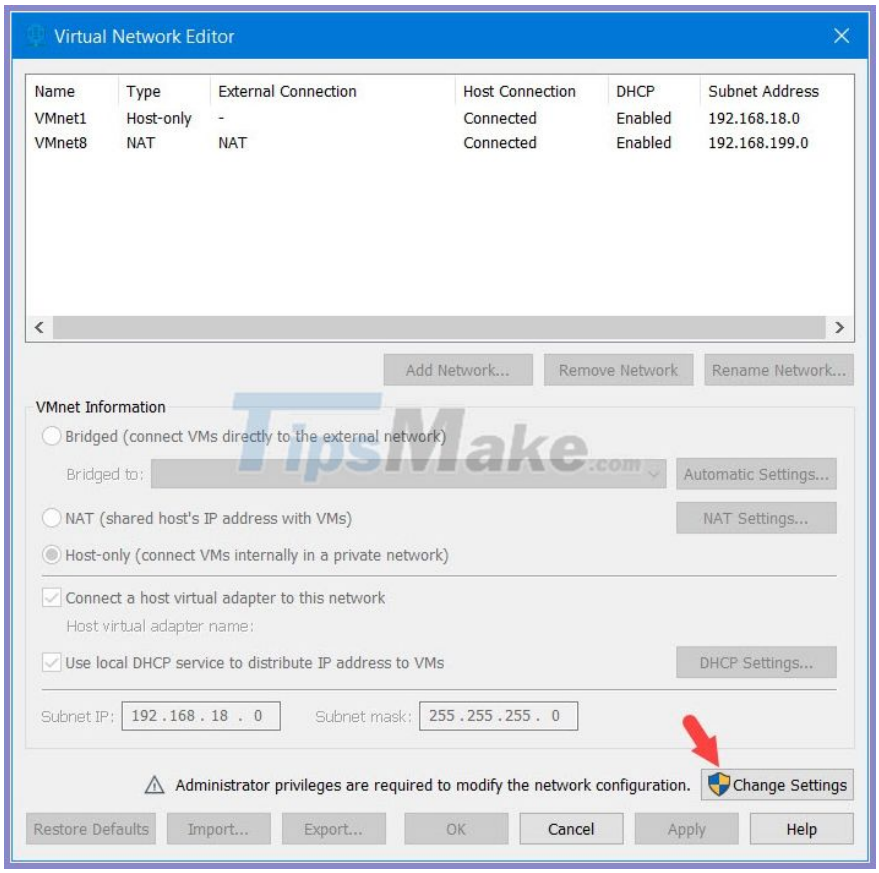
Connecting 2 virtual machines in VMware makes it convenient for you to exchange data and avoid data leakage, virus infection between virtual machine and real machine. Please follow the instructions below.

4.1. Set up virtual networks for virtual machines

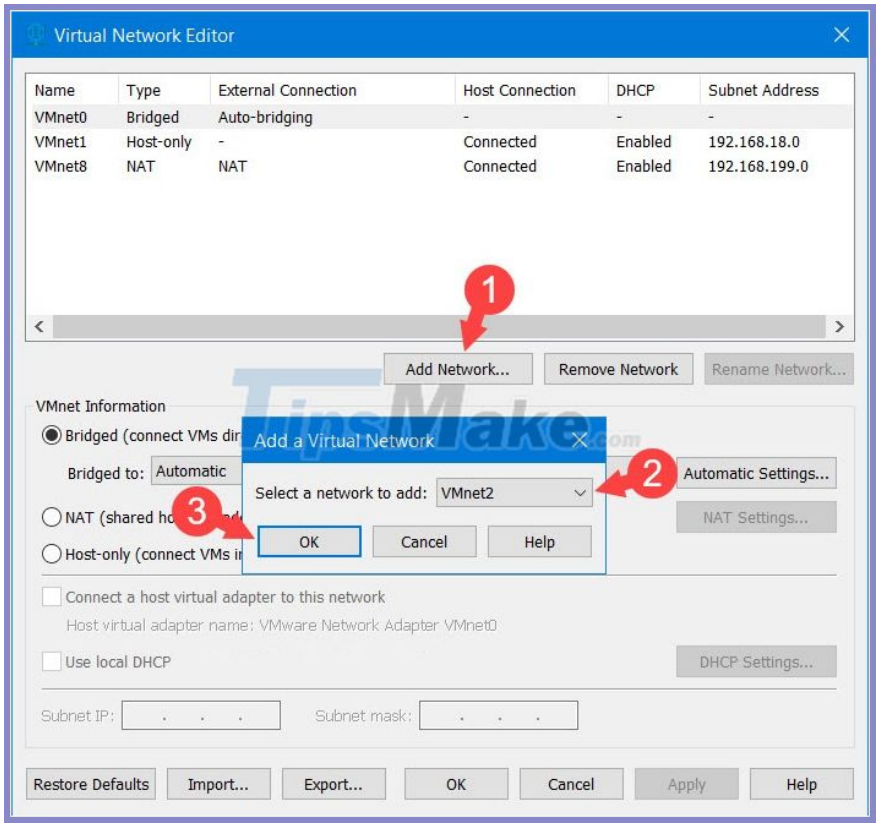
Step 1: Open VMware, click the **Edit** menu **(1)** => **Virtual Network Editor (2)** .



Next, you click on **Change Settings** to get the admin's editing rights.

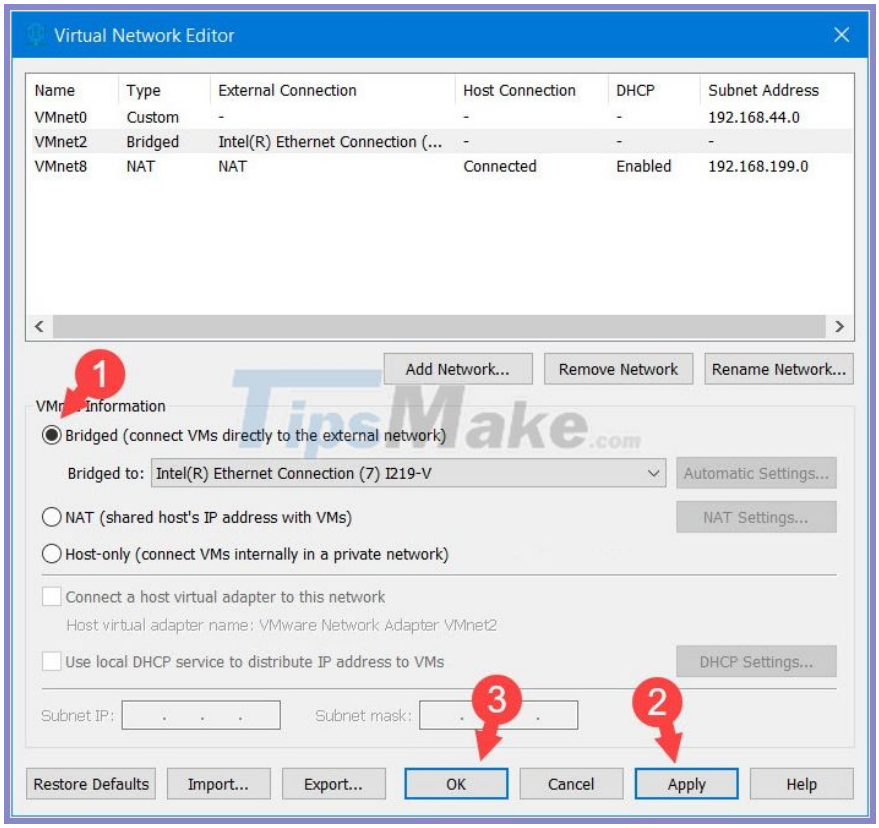


Step 2: Click **Add Network… (1)** . The bulletin board appears, choose **VMnet** virtual network **(2)** => **OK (3)** .



Step 3: Select **Bridged (1)** to provide Internet for the virtual network => **Apply (2)** => **OK (3)** .

Note: If you want the virtual machine network to connect to a private intranet, separate from your computer, choose **Host-only** instead of **Bridged** .

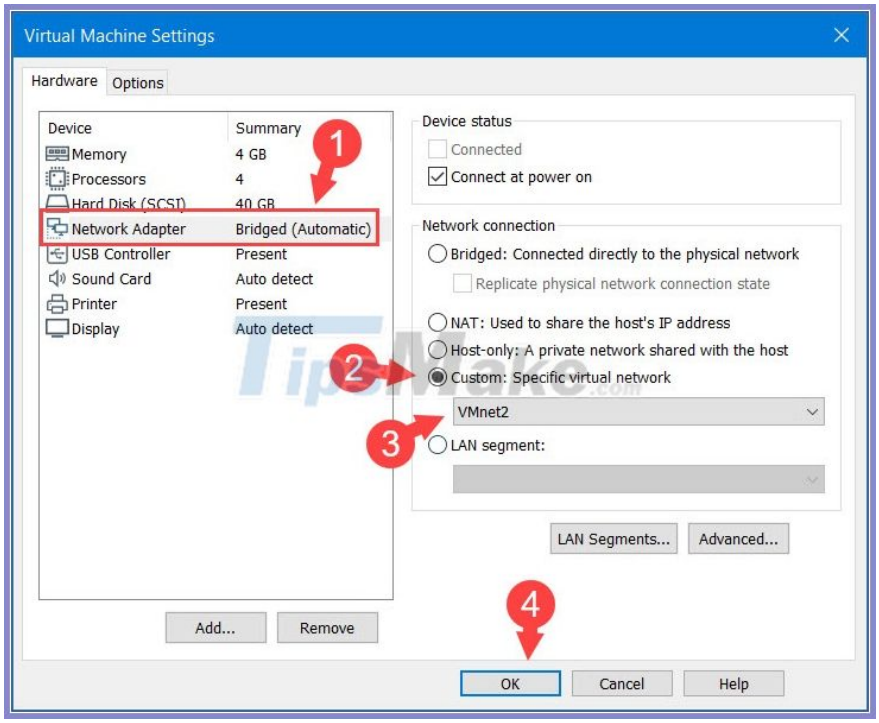


4.2. Virtual network configuration on virtual machine

After creating the virtual network, you can configure and connect to the network for virtual machines on the same network.

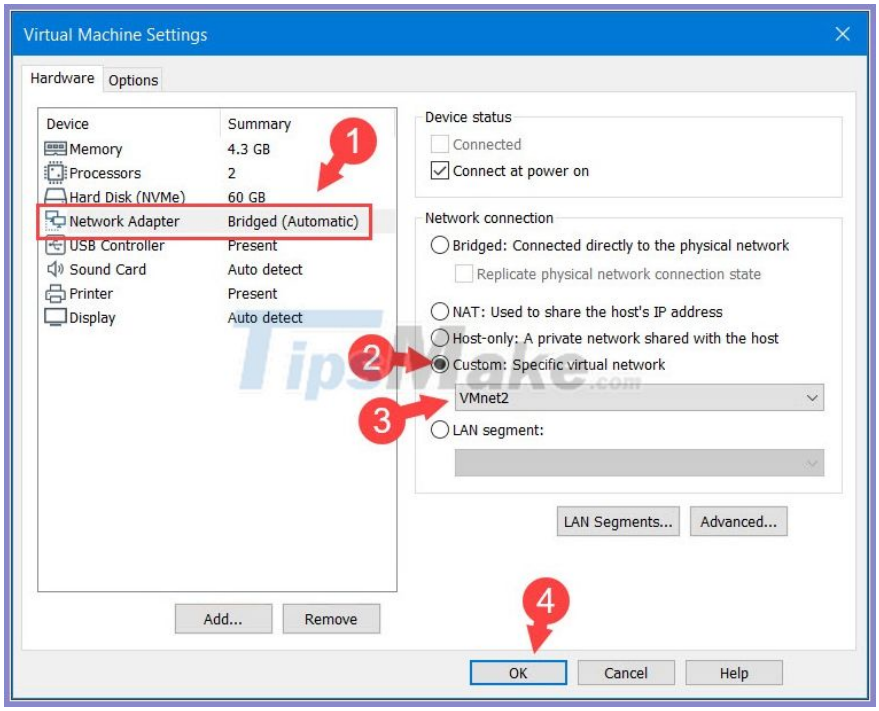
Step 1: Open the first virtual machine **(1)** => **Edit virtual machine settings (2)** .

Step 2: Click on **Network Adapter (1)** => **Custom (2)** => Select virtual network just created **(3)** => **OK (4)** .



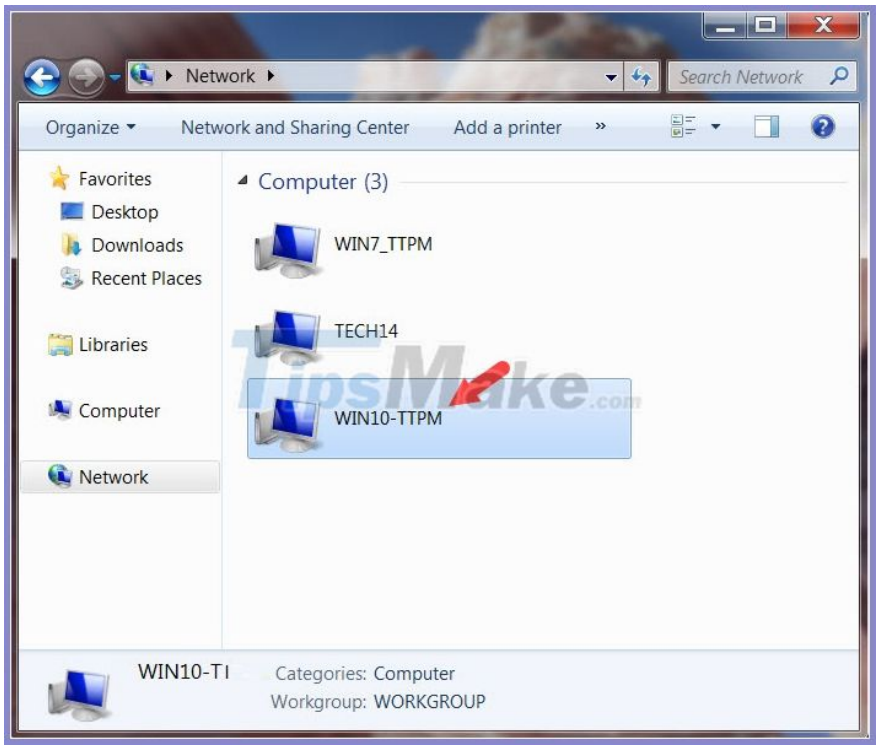
Step 3: Click the second virtual machine **(1)** => **Edit virtual machine settings (2)** .

Step 4: You do the same setup by clicking **Network Adapter (1)** => **Custom (2)** => Select virtual network just created **(3)** => **OK (4)** .

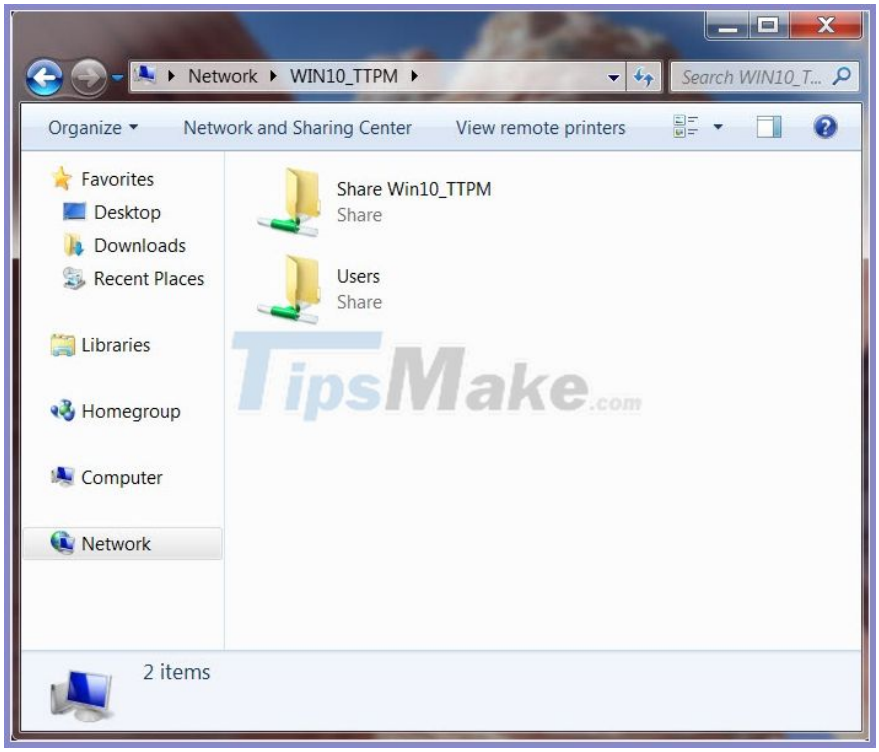


4.3. Check

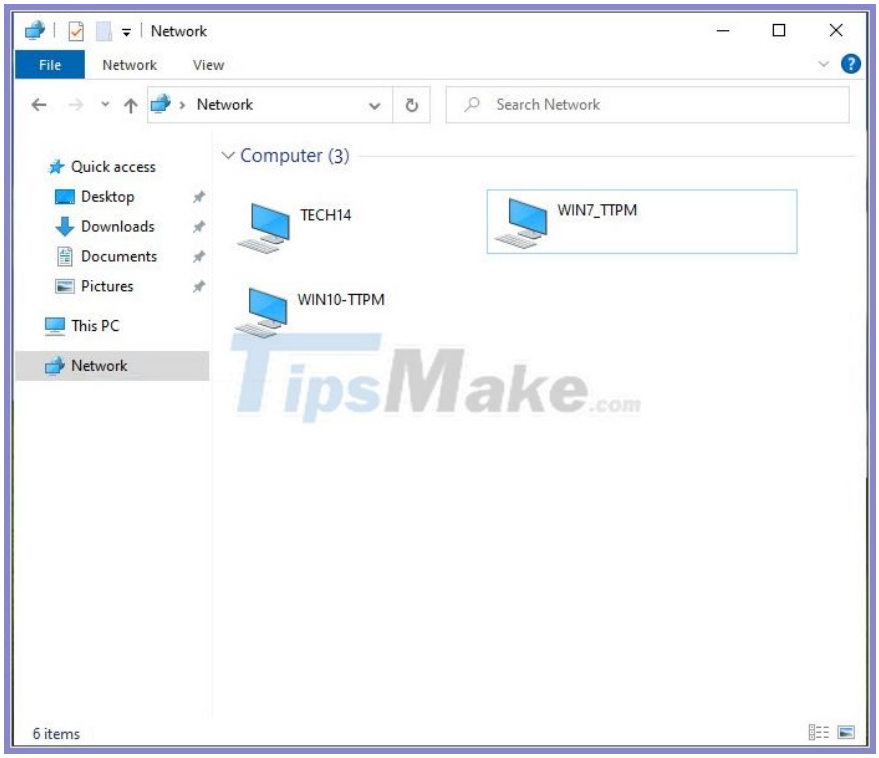
After the installation is complete, boot the virtual machine up. Then you turn on the **Sharing** feature to check. On my Windows 7 virtual machine will display 3 devices in the network.



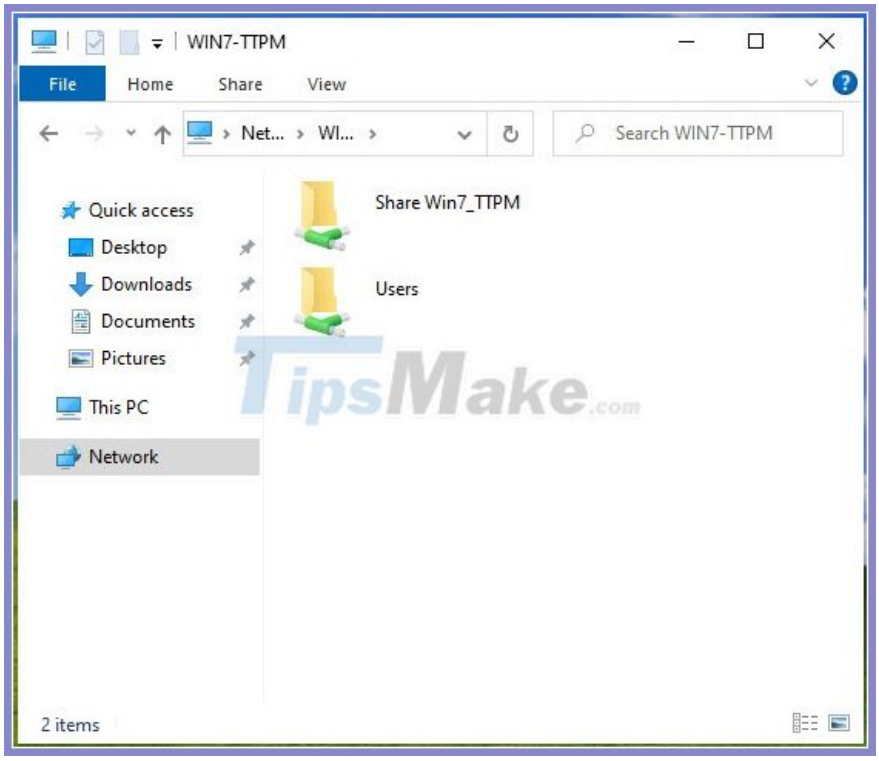
After clicking on the network and showing the shared folder is successful.



On the second virtual machine also shows 3 connected devices.



When you click on the network and the folders pop up are successful.



With the quick virtual machine connection tutorial, you can exchange data or use the virtual network system to do various network tests.

5. How to install Android on VMWare

Most of us used to emulate Android with Bluestack, Nox App Player . but you may not know how to install the Android operating system on a virtualized environment. With the following instructions, let's learn how to install Android on the famous virtualization tool VMware.

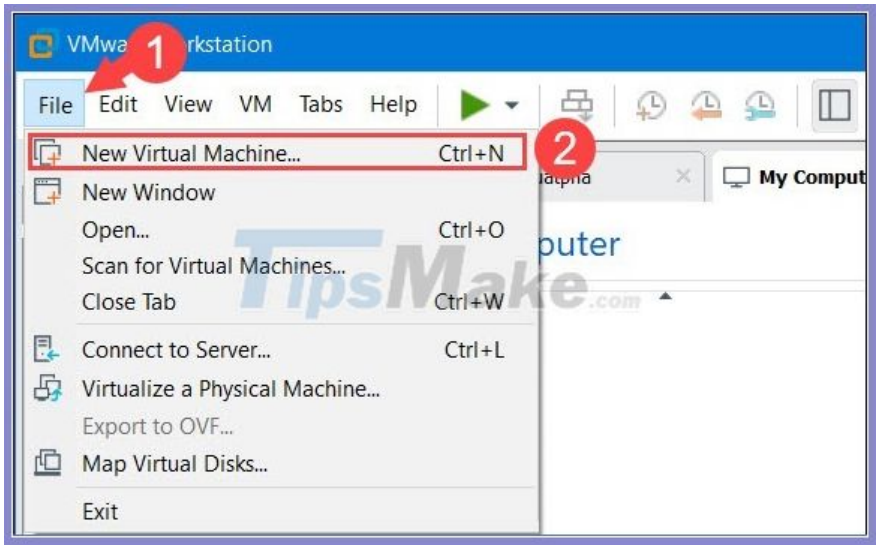
5.1. Prepare

- VMware Workstation software, you can download it at the following link here .

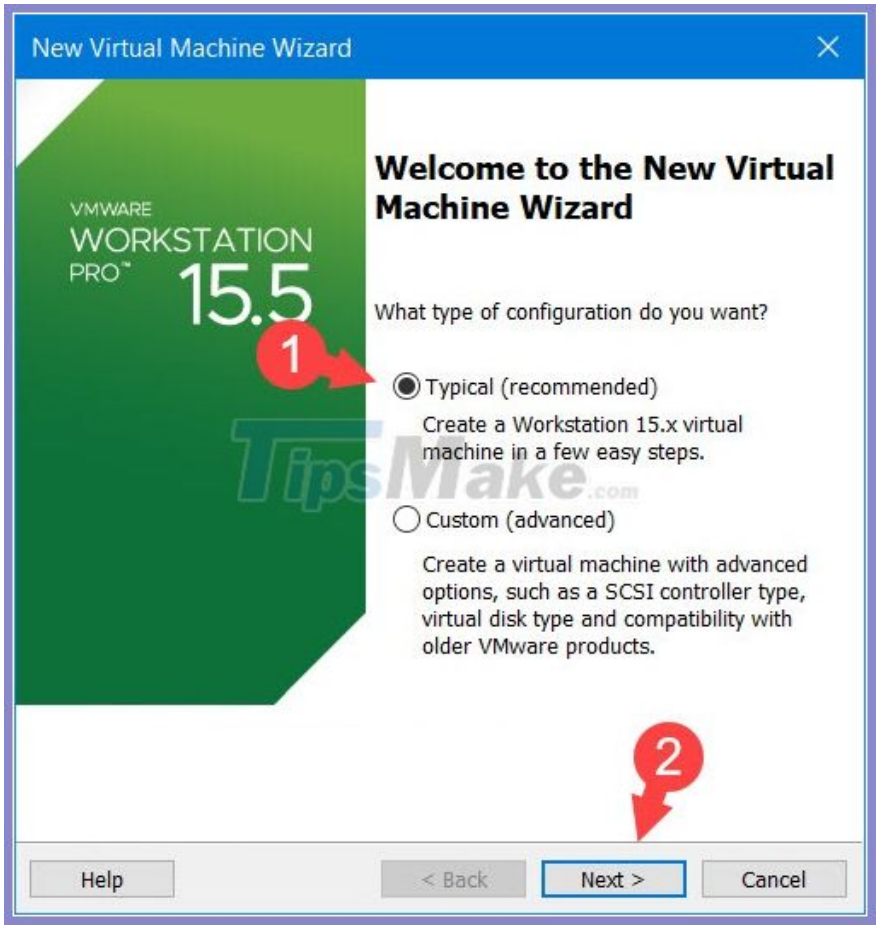
- Android x86 installer, download link here.

5.2. Setup on VMware

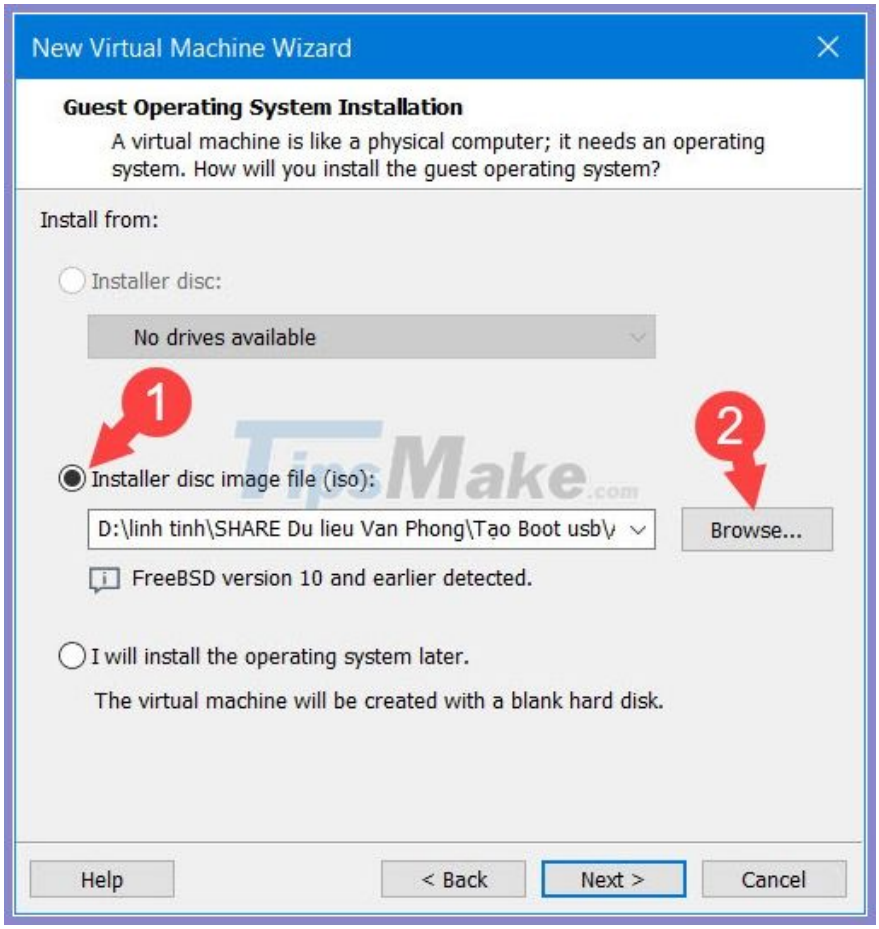
Step 1: Open VMware and go to **File** menu **(1)** => **New Virtual Machine… (2)** .



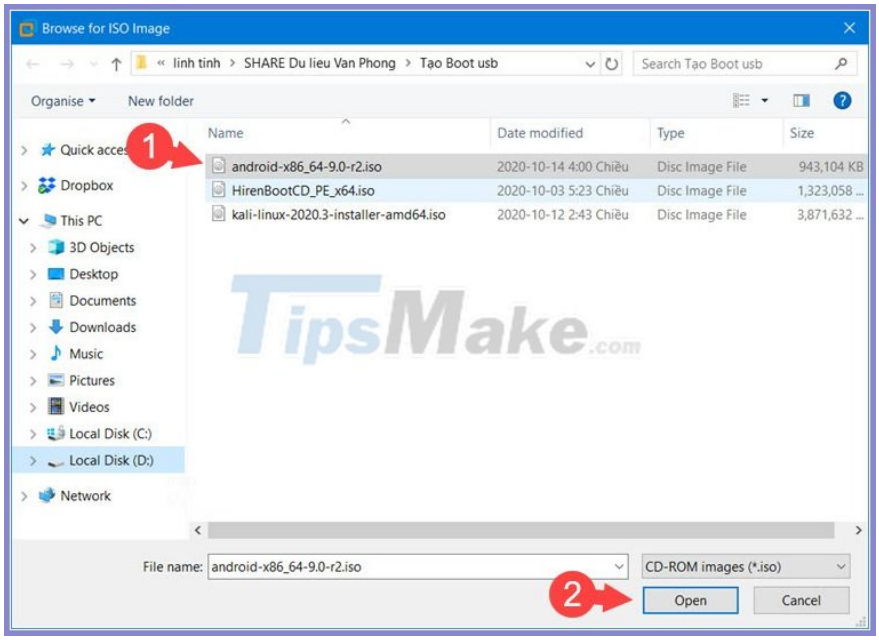
Step 2: You click on **Typical (1)** => **Next (2)** .



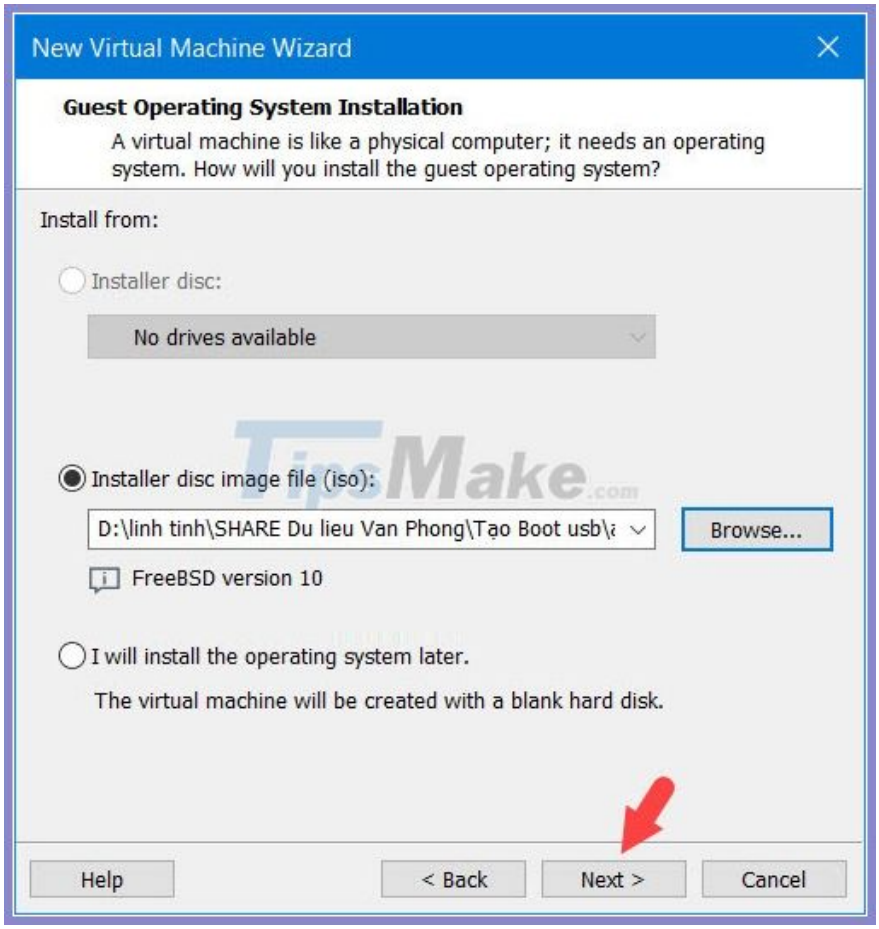
Step 3: Click on **Installer disc image file (iso) (1)** => **Browse . (2)** .



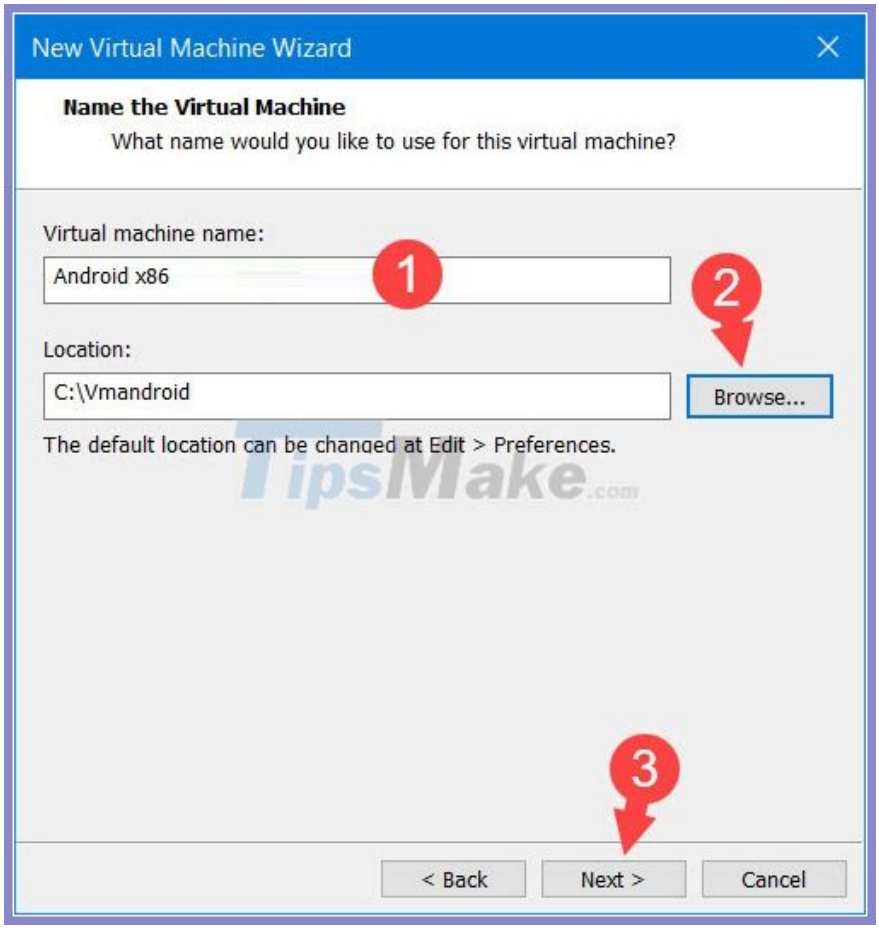
Step 4: Go to and click the downloaded android installation file **(1)** in the preparation => **Open (2)** .



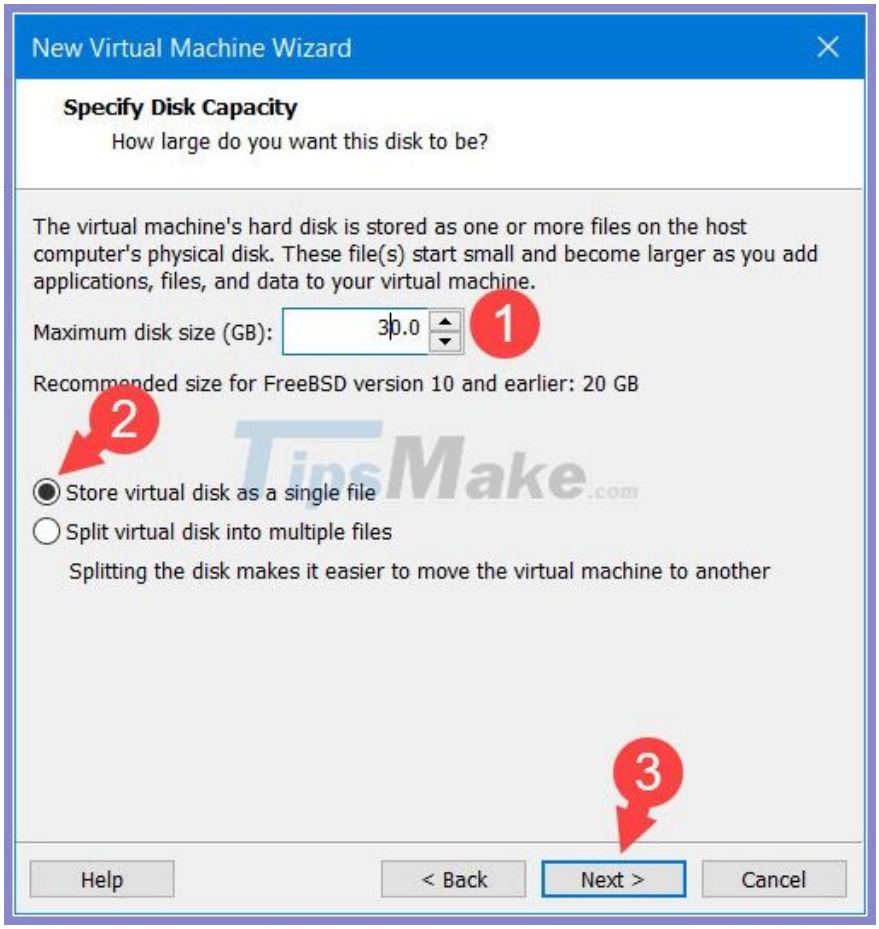
Then, click **Next** to continue.



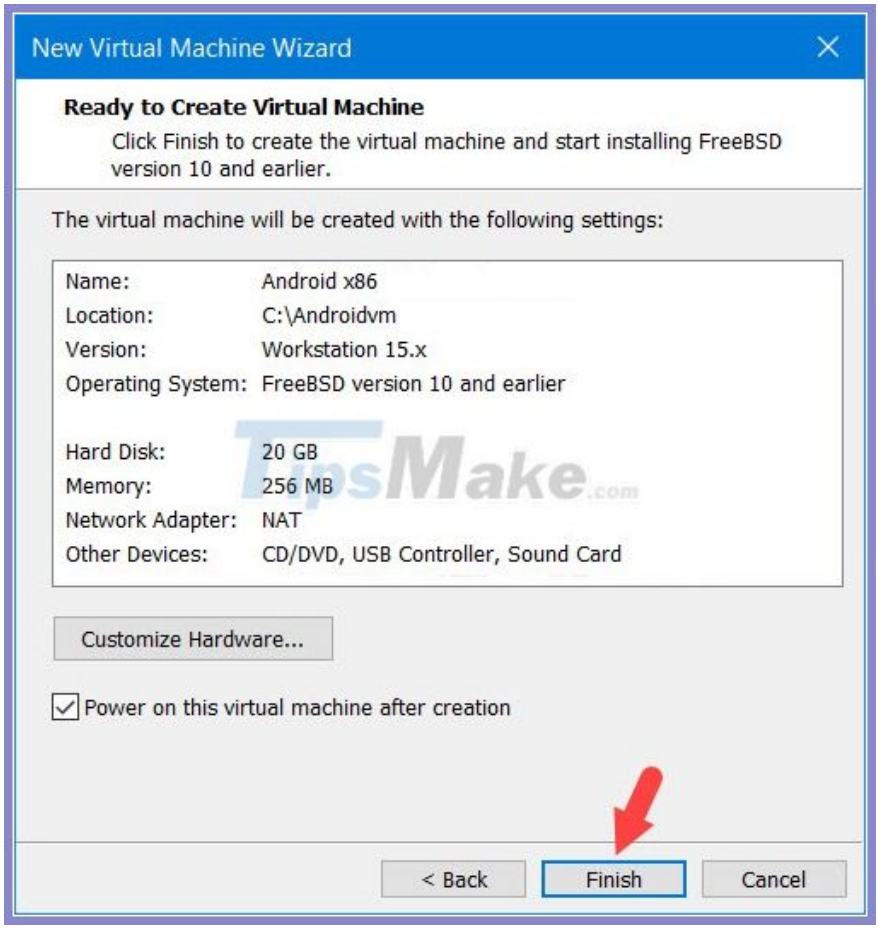
Step 5: You name the virtual machine **(1)** => click **Browse… (2)** to change the location to save the virtual machine after installation. Next, click **Next (3)** to continue.



Step 6: You change the hard drive space for the virtual machine **(1)** at least 20GB. Next, you click on **Store virtual disk as single file (2)** => **Next (3)** .

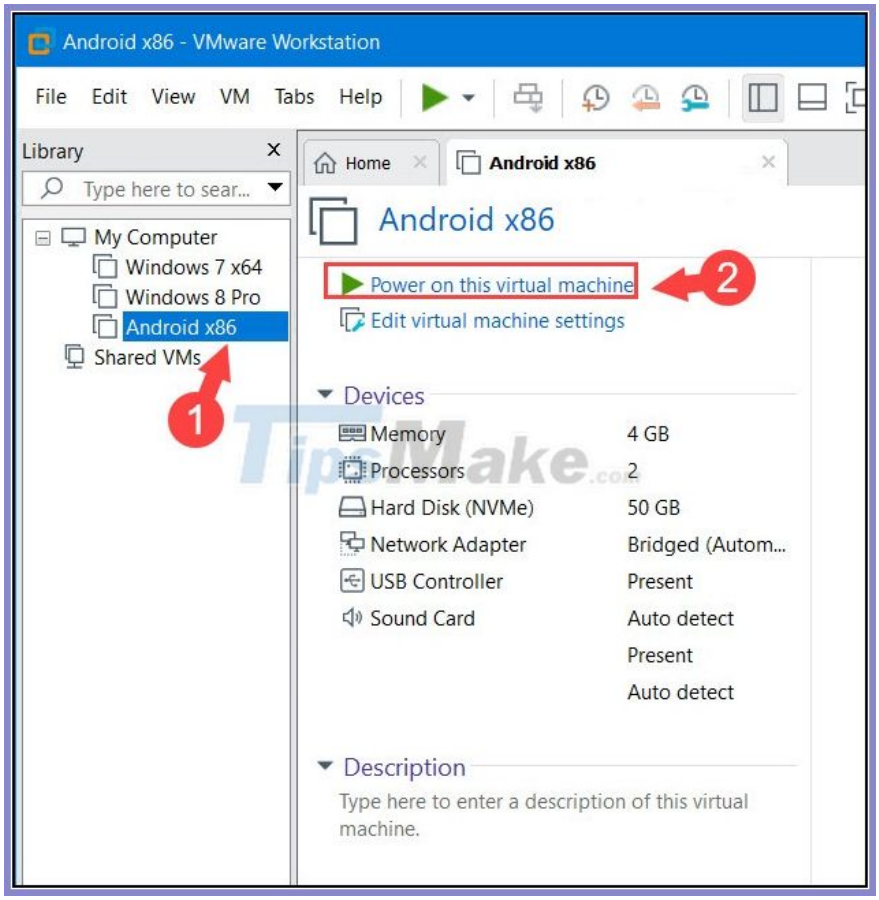


Step 7: Click **Finish** to complete.



5.3. Install Android on a virtual machine

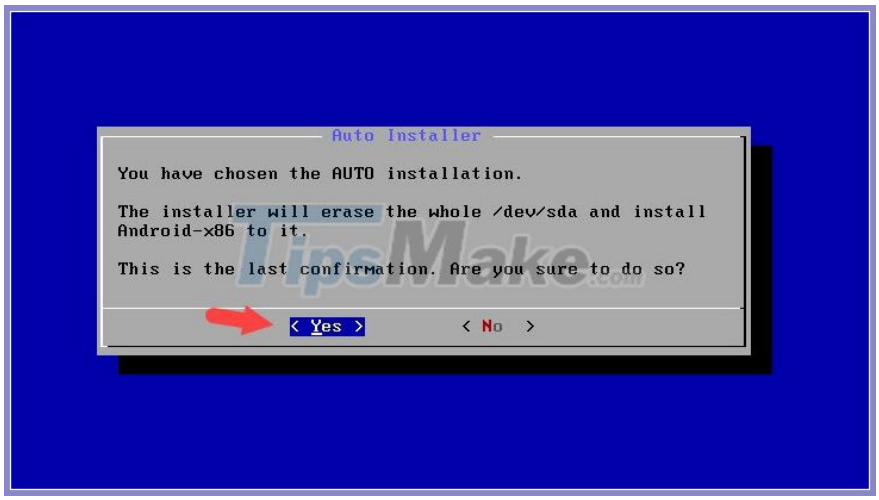
Step 1: Click on the **Android** virtual machine **(1)** => **Power on this virtual machine (2)** .



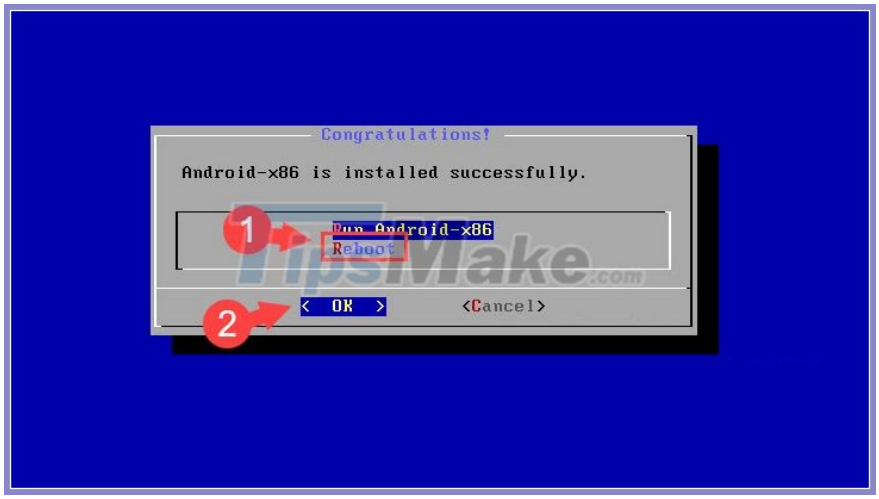
Step 2: Once opened, select the line **Advanced options .**

Select **Auto Installation - Auto Install to specified harddisk** .

Step 3: Click **Yes** to proceed to format the memory and install Android.

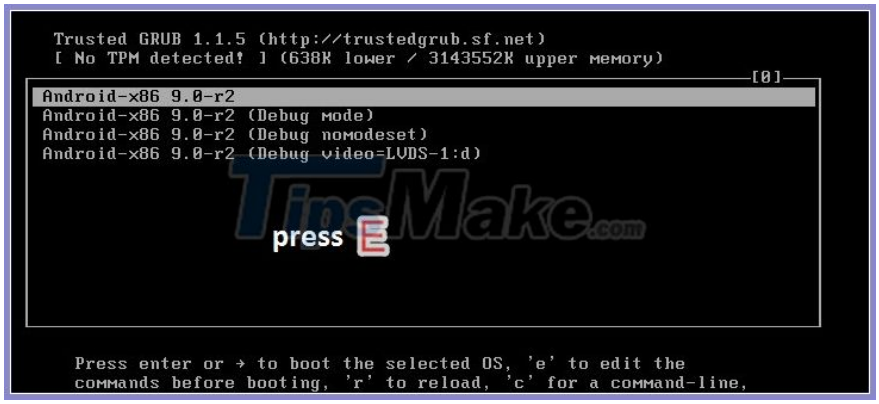


Step 4: Do not click **Run Android-x86** to avoid the black screen error. Instead, press **Reboot (1)** => **OK (2)** .

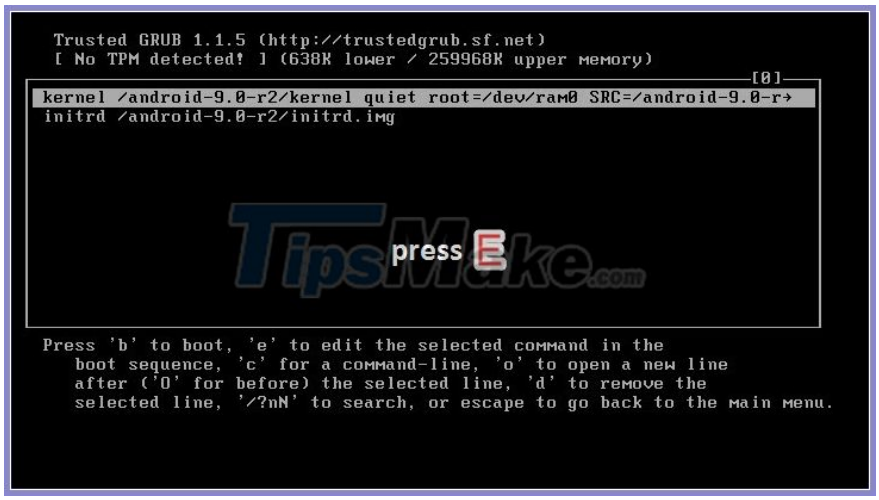


5.4. Boot setup and fix black screen error

Step 1: After rebooting and entering the boot menu, press **E** to edit the first boot menu.



Then, press the **E** key again to edit.



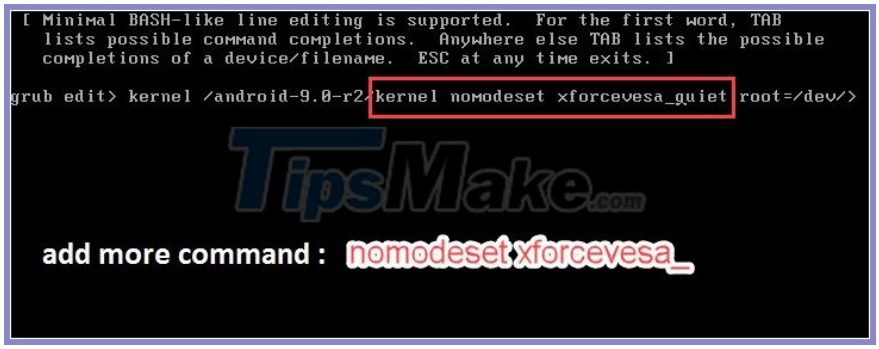
Step 2: You press the **?** arrow key on the keyboard to return.

After you return to the line of **quiet kernel** , insert the following command:

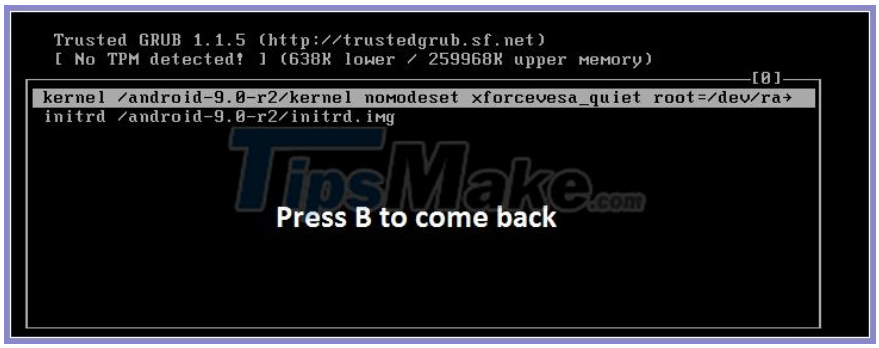
nomodeset xforcevesa_

After inserting the command line will be **nomodeset xforcevesa_quiet kernel** .

Then, press the **Enter** key to save the command line.

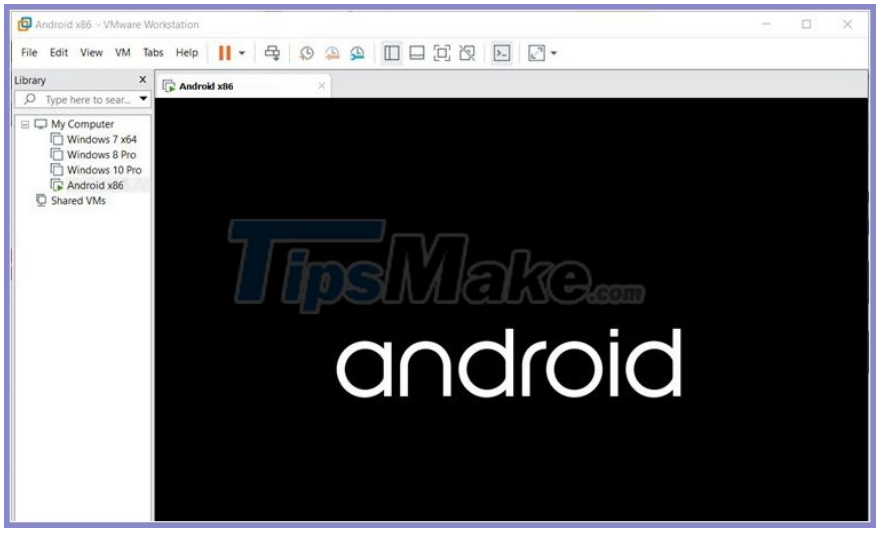


Step 3: Press **B** to return to the previous item.



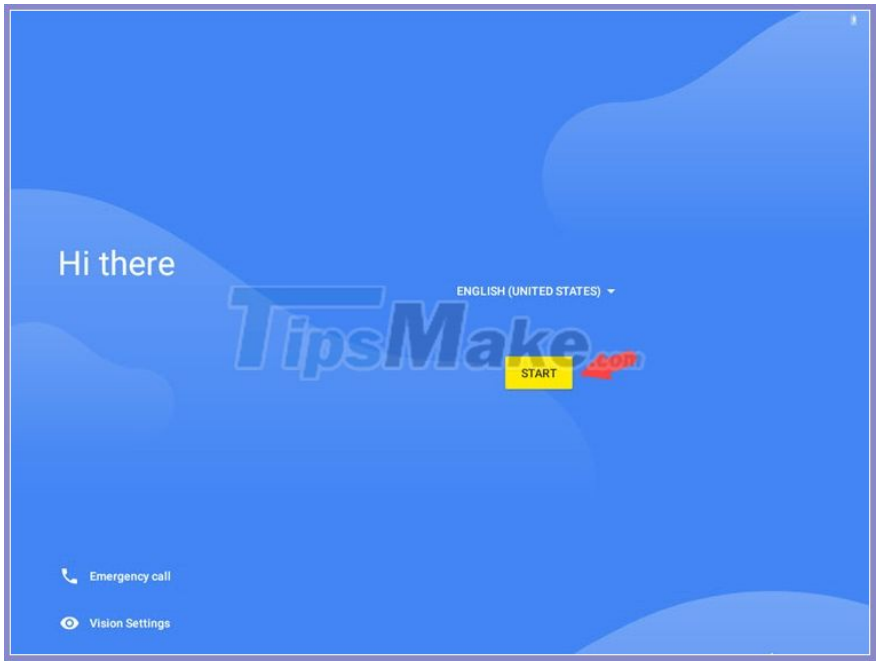
After returning to the previous item, the command line will run itself and you wait for the Android boot menu to appear successfully.

Note : If the Android boot menu runs too long then you should turn off the Android virtual machine and increase the minimum 2GB RAM, minimum 2-core CPU to boot and run Android stably.



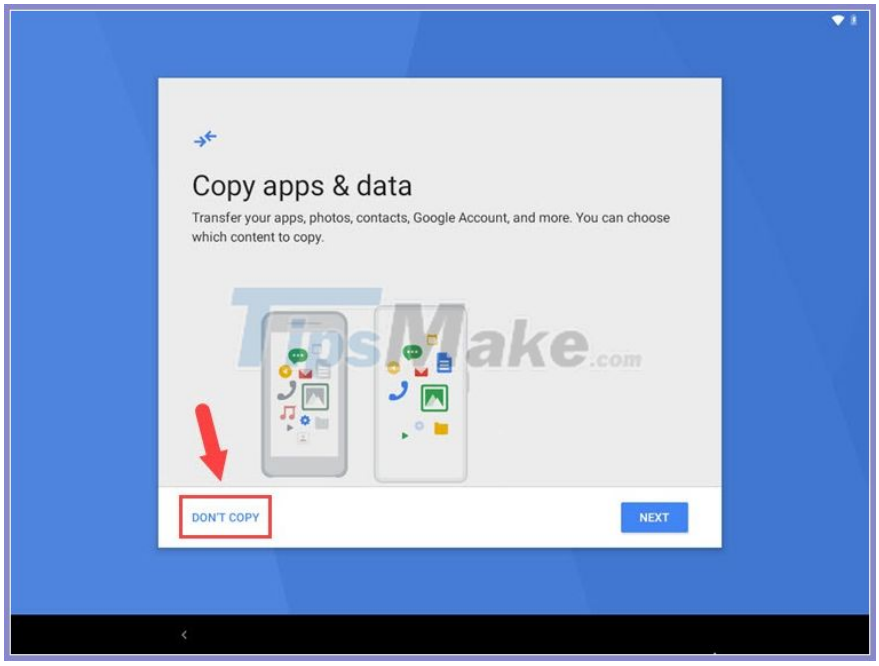
5.5. Setup settings in Android and check

Step 1: Once the Android screen ends, the Android setup begins. Click **Start** to get started.

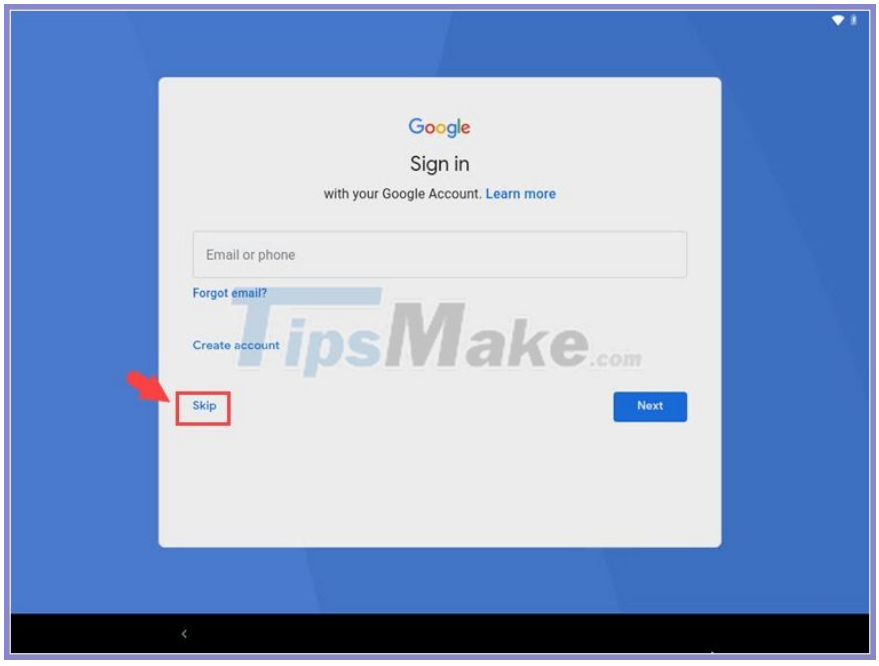


Step 2: Select **VirtWifi** network to connect.

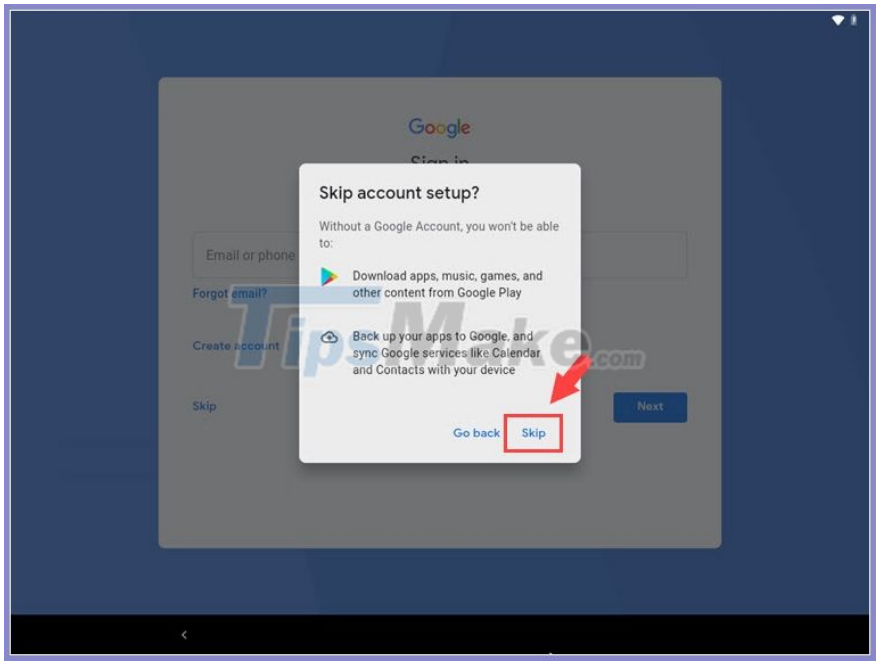
Step 3: Select **Don't copy** to not import data from Google account.



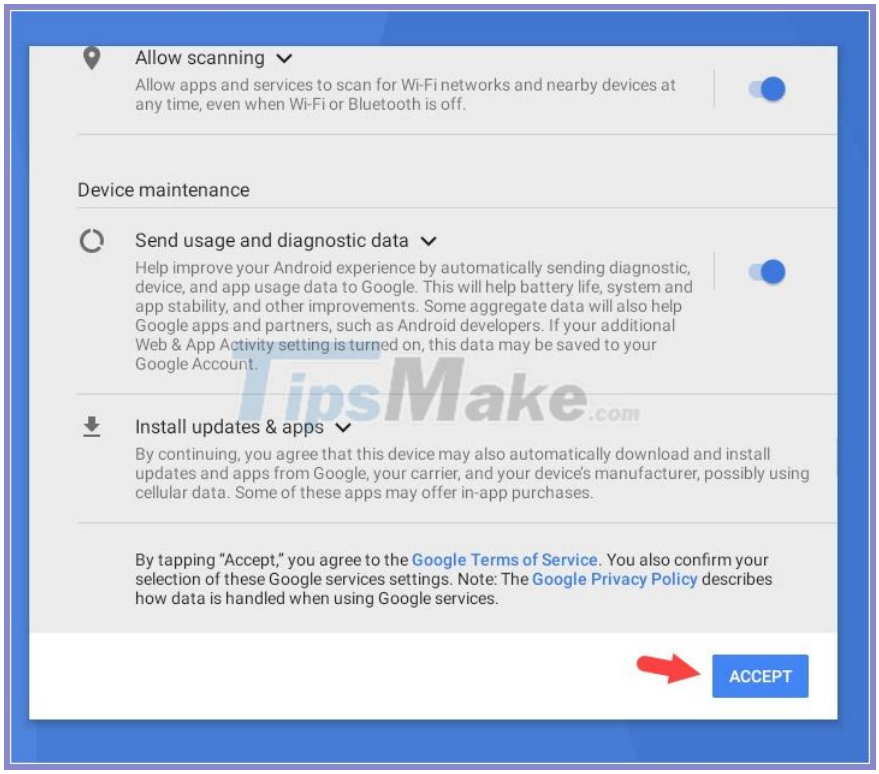
Step 4: You can enter your Google account to install the app, get data or skip it and log in later by clicking **Skip** .



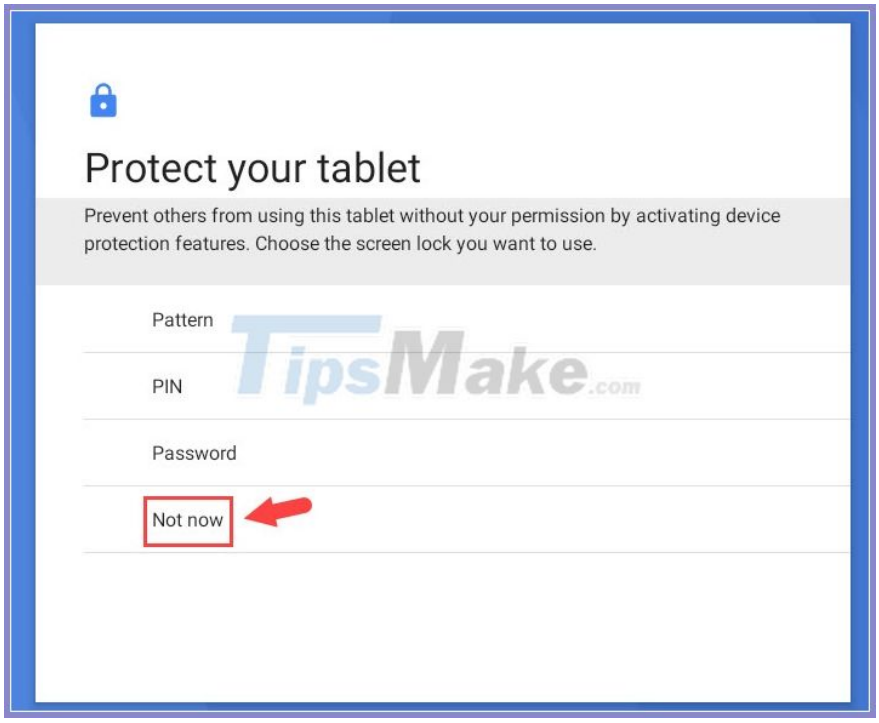
Next, click **Skip** to continue.



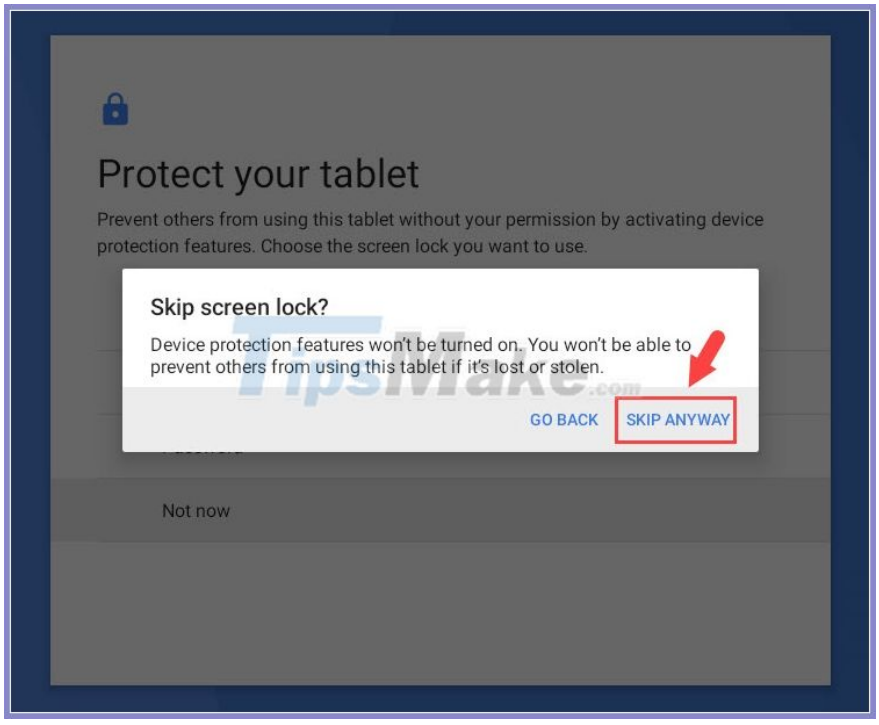
Step 5: Click **Accept** to agree to the terms of Google.



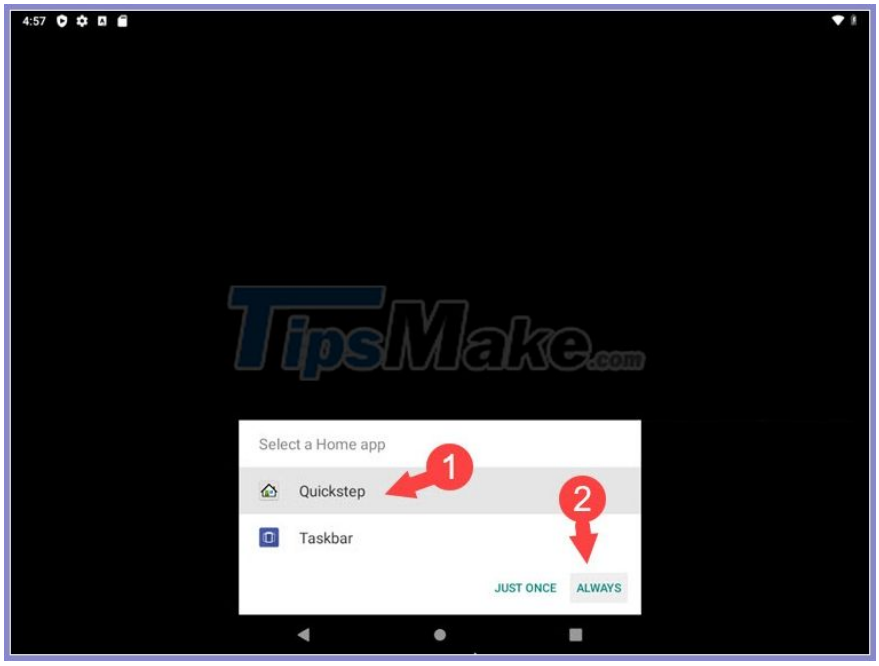
Step 6: Click **Not now** to skip creating a lock screen password.



Select **Skip anyway** to confirm.



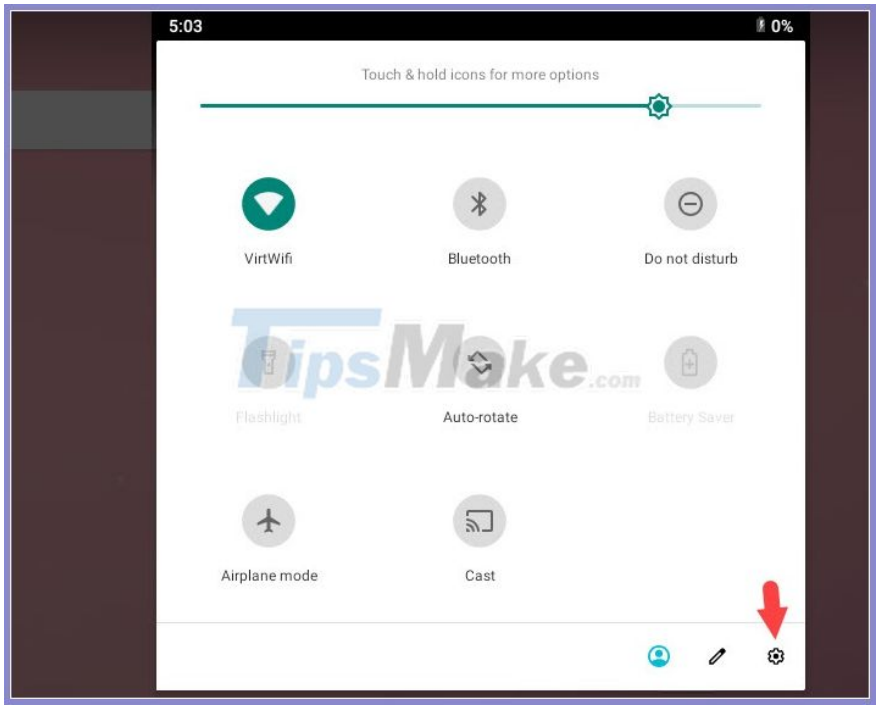
Step 7: Finally, Android has been set up and is waiting for you to use. In this step requires you to choose the Launcher to use, you choose **Quickstep (1)** => **Always (2)** .



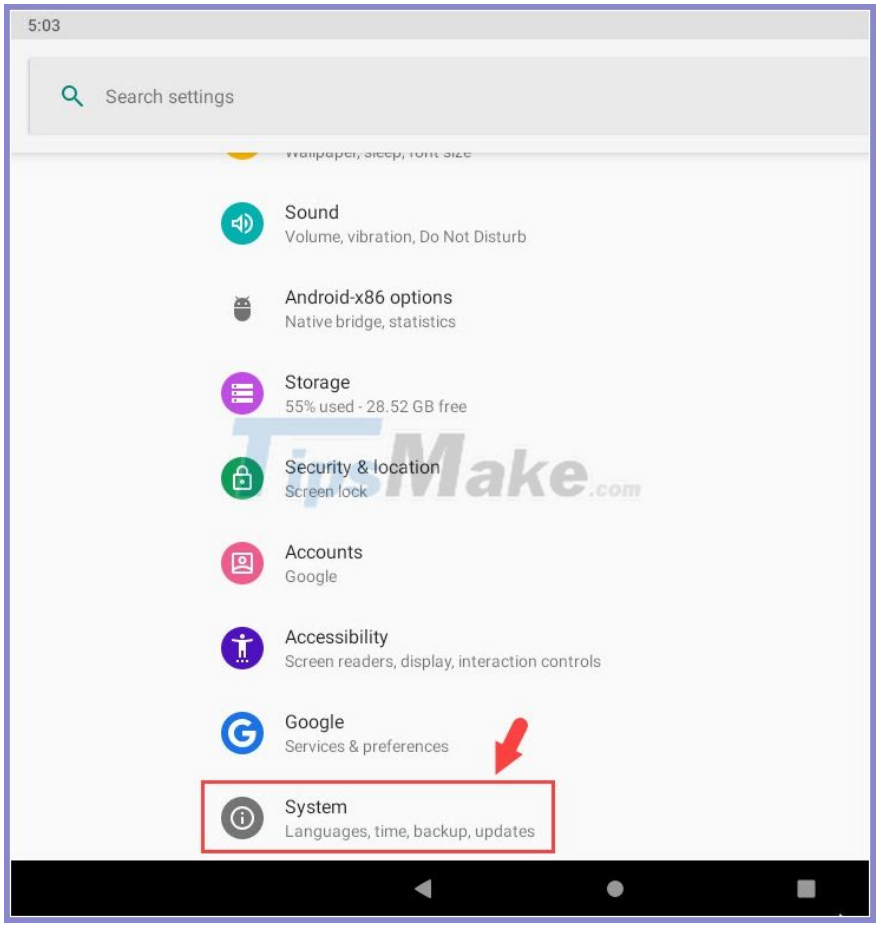
And the interface of the Android operating system on a virtual machine as shown below with Play Store for you to download the application.

Step 8: To check the Android version, drag the mouse down from the top of the screen to open the Action Center and click on the - to expand.

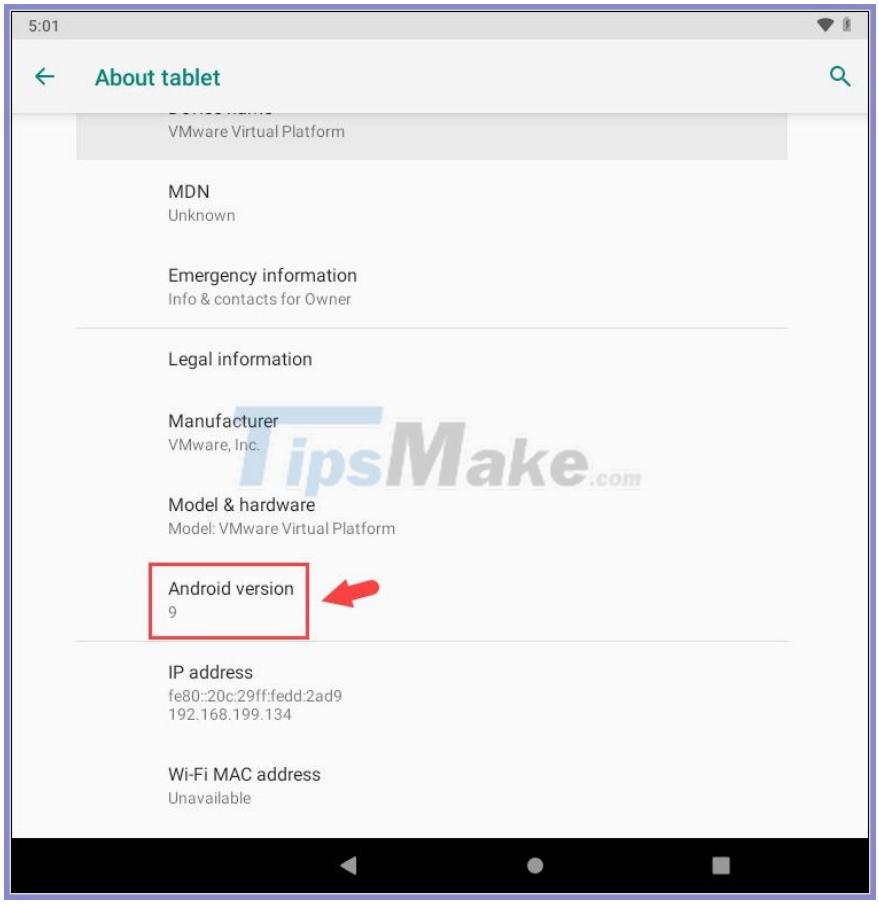
Next, you click on the **Settings** icon .



Step 9: In the settings, scroll down and find the System item.



Here, you can see what is your current **Android version** in the **Android version** section . In the article below, the current Android version is **Android 9** .



Due to running on the architecture of Intel and AMD chips, not ARM architecture, some software and games will crash when installing applications. However, this is also a good way to use the Android operating system and make good use of the hardware on your computer.

Good luck!

You finished reading the article "**Top 5 tips for installing and using VMware virtual machine**" edited by the **TipsMake** team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.