

Installing VirtualBox on Ubuntu 22.04 and Creating a Debian 12 Virtual Machine

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1 Step 1: Install VirtualBox

Before installation, update the package repository with the following command:

```
sudo apt update
```

Next, download and install VirtualBox by running:

```
sudo apt install virtualbox
```

```
(base) tazmeen@froz:~$ sudo apt update
[sudo] password for tazmeen:
Hit:1 https://packages.microsoft.com/repos/code stable InRelease
Hit:2 https://dl.google.com/linux/chrome/deb stable InRelease
Hit:3 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:4 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Hit:5 https://ppa.launchpadcontent.net/deadsnakes/ppa/ubuntu jammy InRelease
Hit:6 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:7 http://archive.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Fetched 257 kB in 4s (73.0 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
64 packages can be upgraded. Run 'apt list --upgradable' to see them.
(base) tazmeen@froz:~$ sudo apt install virtualbox
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libwp6-1.0-1 libwp6backend-fdo-1.0-1
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  cpp-12 dctrl-tools dkms gcc-12 libasan8 libdouble-conversion3 libgcc-12-dev
  libgsoap-2.8.117 liblzfr1 libmd4c0 libpcre2-16-0 libqt5core5a libqt5dbus5
  libqt5gui5 libqt5network5 libqt5opengl5 libqt5printsupport5 libqt5svg5
  libqt5widgets5 libqt5xml5 libstdc++11 libstdc++12 libtsan2 libxcb-xinerama0
  libxcb-xinput0 qt5-gtk-platformtheme qttranslations5-l10n virtualbox-dkms
  virtualbox-qt
Suggested packages:
  gcc-12-doc debconf debconf-utils gcc-12-multilib gcc-12-doc
  qt5-image-formats-plugins qtwayland5 vde2 virtualbox-guest-additions-iso
The following NEW packages will be installed:
  cpp-12 dctrl-tools dkms gcc-12 libasan8 libdouble-conversion3 libgcc-12-dev
  libgsoap-2.8.117 liblzfr1 libmd4c0 libpcre2-16-0 libqt5core5a libqt5dbus5
  libqt5gui5 libqt5network5 libqt5opengl5 libqt5printsupport5 libqt5svg5
  libqt5widgets5 libqt5xml5 libstdc++11 libstdc++12 libtsan2 libxcb-xinerama0
  libxcb-xinput0 qt5-gtk-platformtheme qttranslations5-l10n virtualbox
  virtualbox-dkms virtualbox-qt
0 upgraded, 29 newly installed, 0 to remove and 64 not upgraded.
Need to get 99.0 MB of archives.
After this operation, 368 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 cpp-12 amd64 12.3.0-1ubuntu1-22.04 [10.8 MB]
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libasan8 amd64 12.3.0-1ubuntu1-22.04 [2,442 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libtsan2 amd64 12.3.0-1ubuntu1-22.04 [2,477 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libgcc-12-dev amd64 12.3.0-1ubuntu1-22.04 [2,618 kB]
```

2 Step 2: Install the VirtualBox Extension Pack

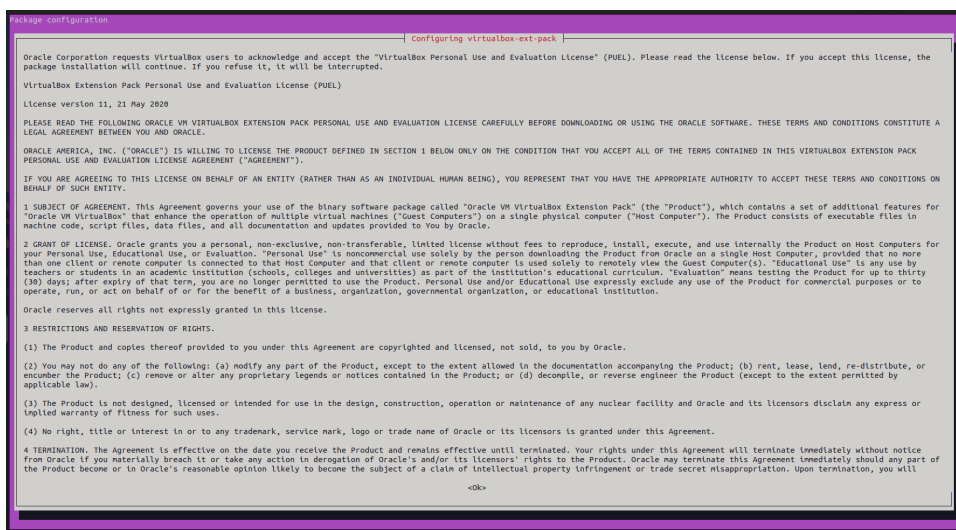
The Extension Pack provides additional features and support for USB 2.0 and USB 3.0 devices. To install the VirtualBox Extension Pack, take the following steps:

1. Run the command:

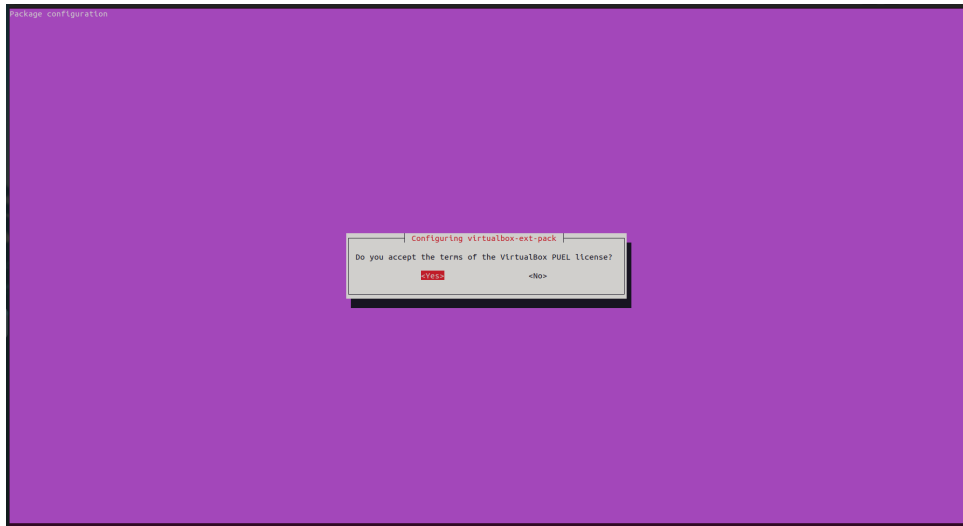
```
sudo apt install virtualbox-ext-pack
```

```
(base) ~mmmmmmmm:~$ sudo apt install virtualbox-ext-pack
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libgaze-1.0-1 libgazebackend-fdo-1.0-1
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
  virtualbox-ext-pack
0 upgraded, 1 newly installed, 0 to remove and 64 not upgraded.
Need to get 10.7 kB of archives.
After this operation 115 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 virtualbox-ext-pack all 6.1.50-1-ubuntu1.22.04.1 [10.7 kB]
Fetched 10.7 kB in 1s (12.0 kB/s)
Preconfiguring packages...
Selecting previously unselected package virtualbox-ext-pack.
(Reading database ... 21602 files and directories currently installed.)
Preparing to unpack .../VirtualBox-ext-pack_6.1.50-1-ubuntu1.22.04.1_all.deb ...
License has already been accepted.
Unpacking virtualbox-ext-pack (6.1.50-1-ubuntu1.22.04.1) ...
Setting up virtualbox-ext-pack (6.1.50-1-ubuntu1.22.04.1) ...
```

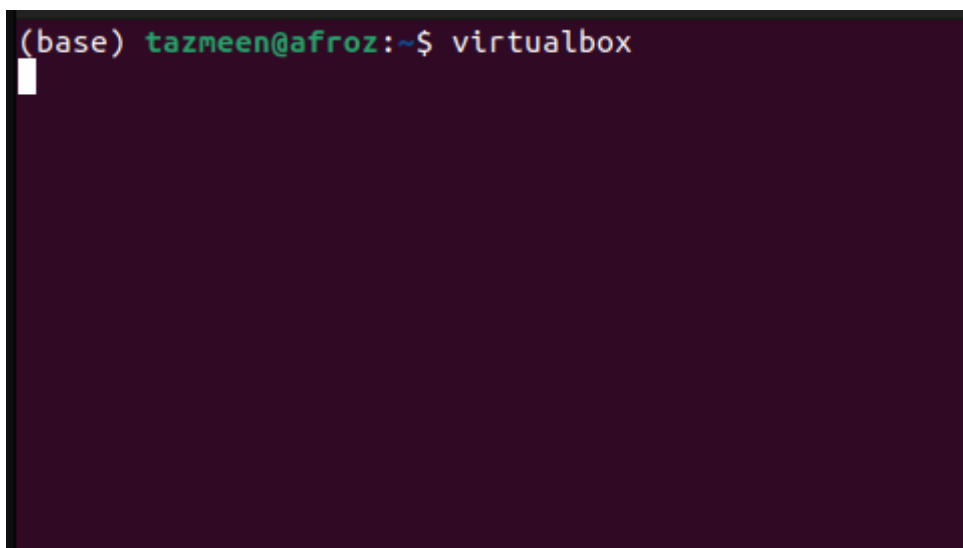
2. Read the VirtualBox Extension Pack Personal Use and Evaluation License (PUEL) and select <Ok> to confirm.



3. Accept the VirtualBox PUEL license terms by selecting <Yes> and hitting Enter.



Once the installation is completed, VirtualBox is ready to run. Start it by executing:
`virtualbox`



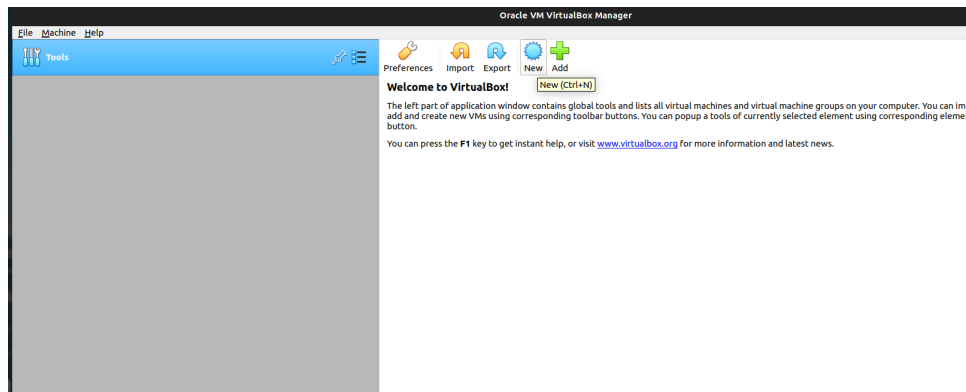
The command has no output but starts VirtualBox.

3 Step 3: Download the Debian ISO file

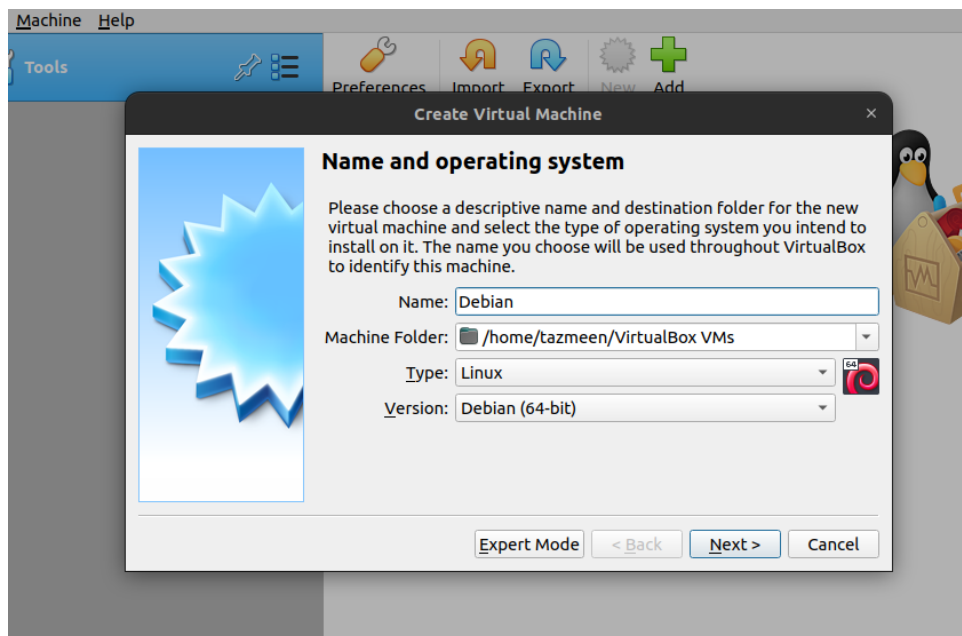
Download the Debian ISO file from the official website of Debian: <https://cdimage.debian.org/debian-cd/current/amd64/iso-dvd/>. Wait for the download to finish.

4 Step 4: Create a Debian 12 Virtual Machine

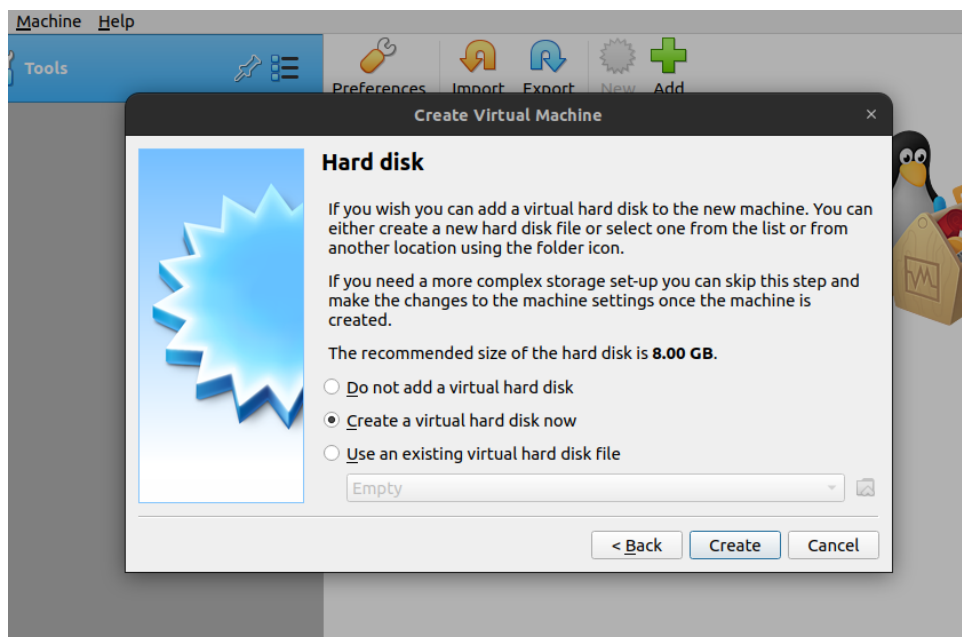
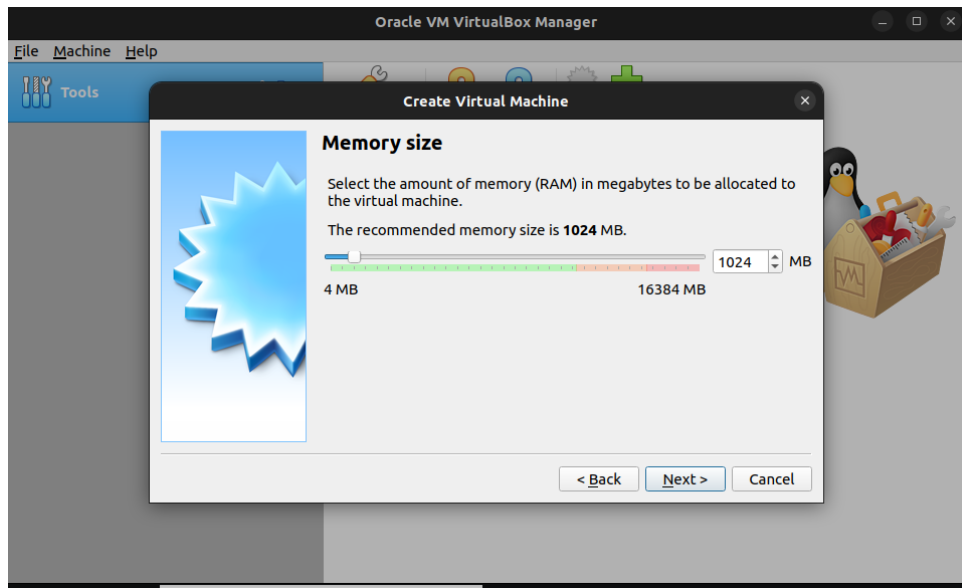
The first step towards Debian 12 installation is to create a new machine on VirtualBox. Start by clicking on the **New** option:



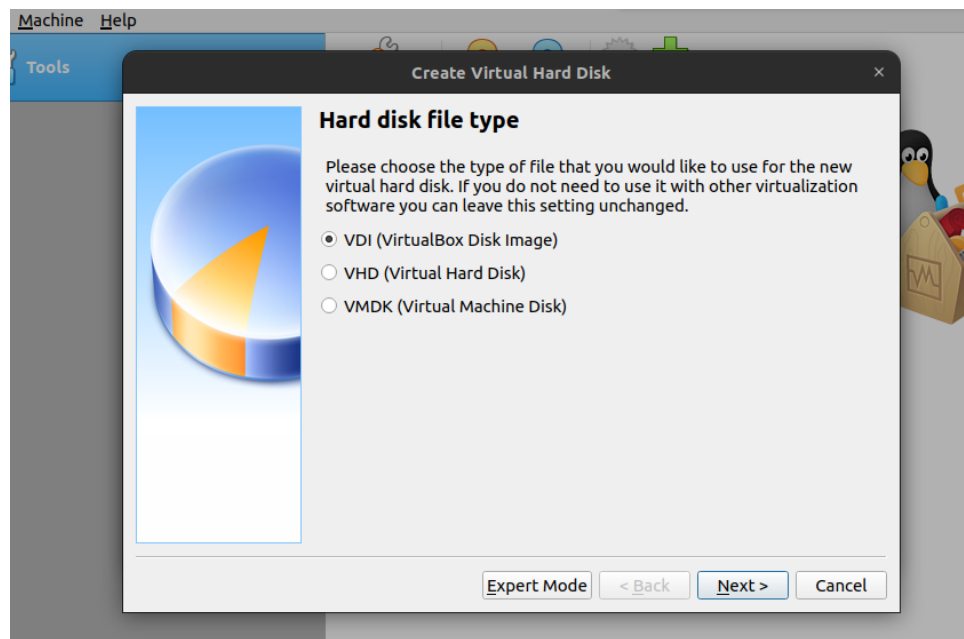
Now, enter the virtual machine name, set the location of the folder, and select the type and version of the Linux operating system. You can link the ISO file path now or later:



Allocate the required memory and click **Next**:



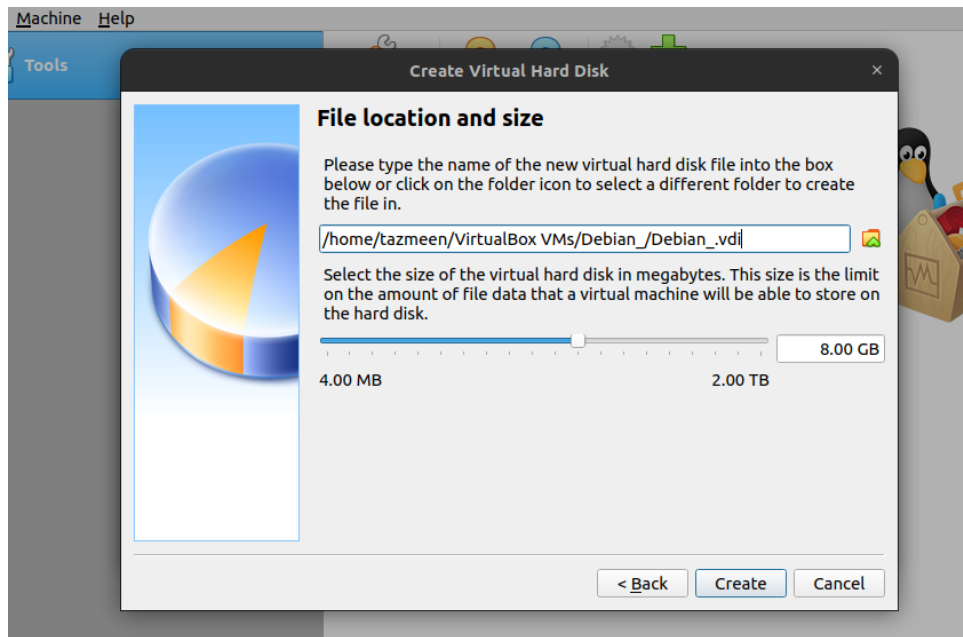
Select the hard disk file type and click **Next**:



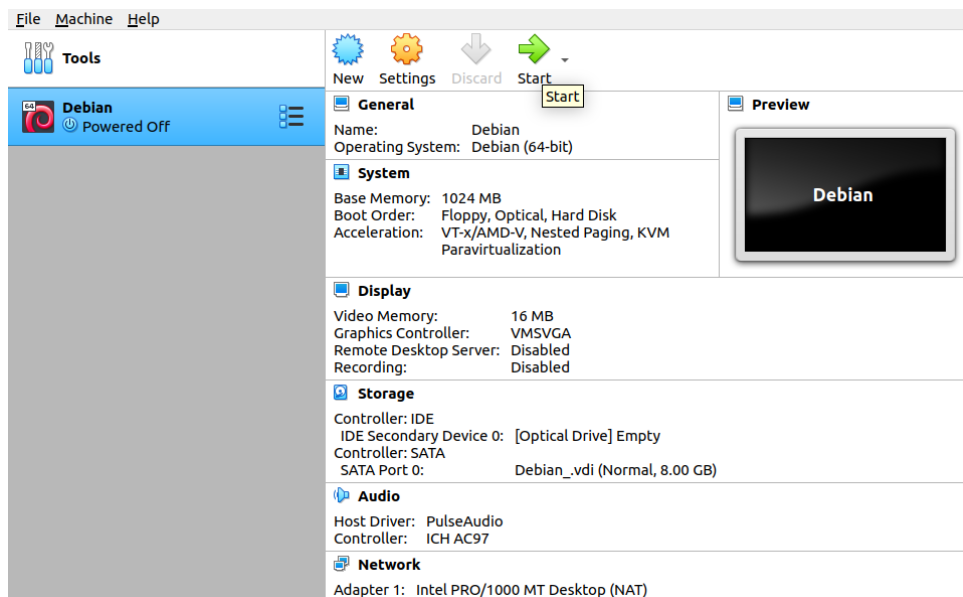
Choose if the hard disk is dynamically or fixed sized, then click **Next**:



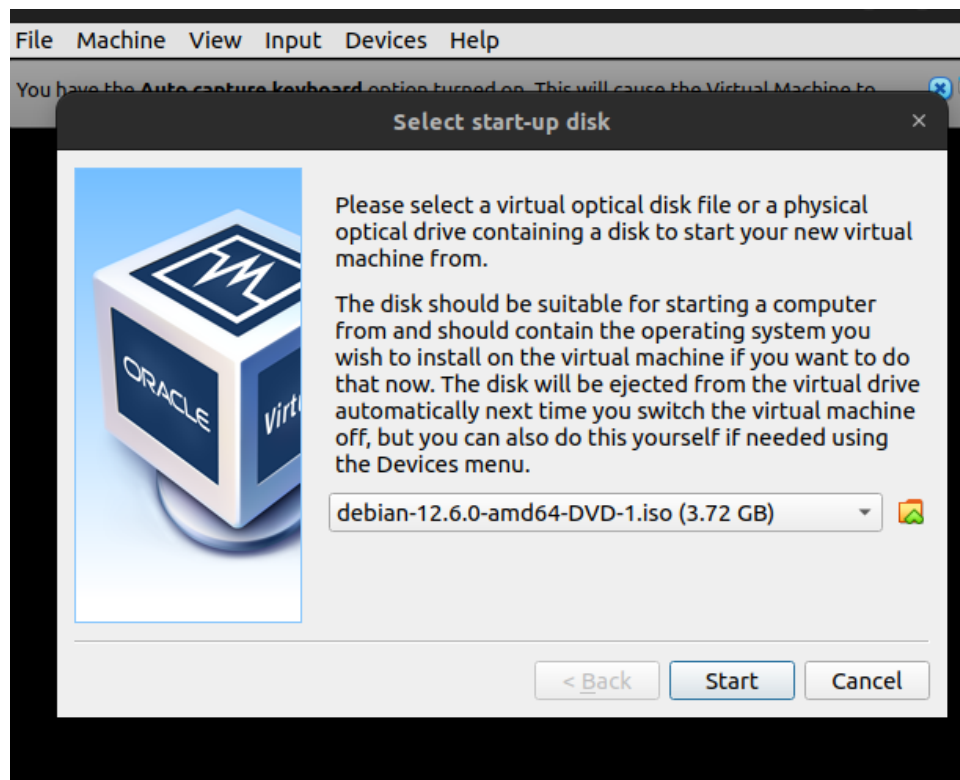
Allocate the required size of the disk and click **Create**:



Validate details and click **Start** to proceed with the installation:



Locate the Debian ISO file downloaded in the previous step:



Click **Start** to begin the Debian installation.

