How to Properly Install a Windows 11 Virtual Machine on KVM

July 24, 2024 · By Madhu Desai in Virtualization, Windows · 66 comments

If you want to run Microsoft Windows 11 as a guest virtual machine on KVM, you must take some extra steps to ensure it runs smoothly. So, in this tutorial, I'll show you how to properly install a Windows 11 virtual machine on KVM.

> If you're interested in dual booting Windows 11 with Ubuntu on your current hardware, check out my other blog, 'How to Properly Dual-

> boot Windows 11 and Ubuntu'.

Before you begin, make sure you have met the following requirements:

1. You have installed the KVM hypervisor on your computer. If not, see my other guide, 'How Do I Properly Install KVM on Linux'.
2. You have installed or downloaded the `virtio` drivers for Windows guests on your host system. If not, see the section 'Install VirtIO Drivers for Windows Guests'.
3. You downloaded the official Windows 11 installation ISO image. You can get the ISO from the 'Download Windows 11' page.

So let's get started.

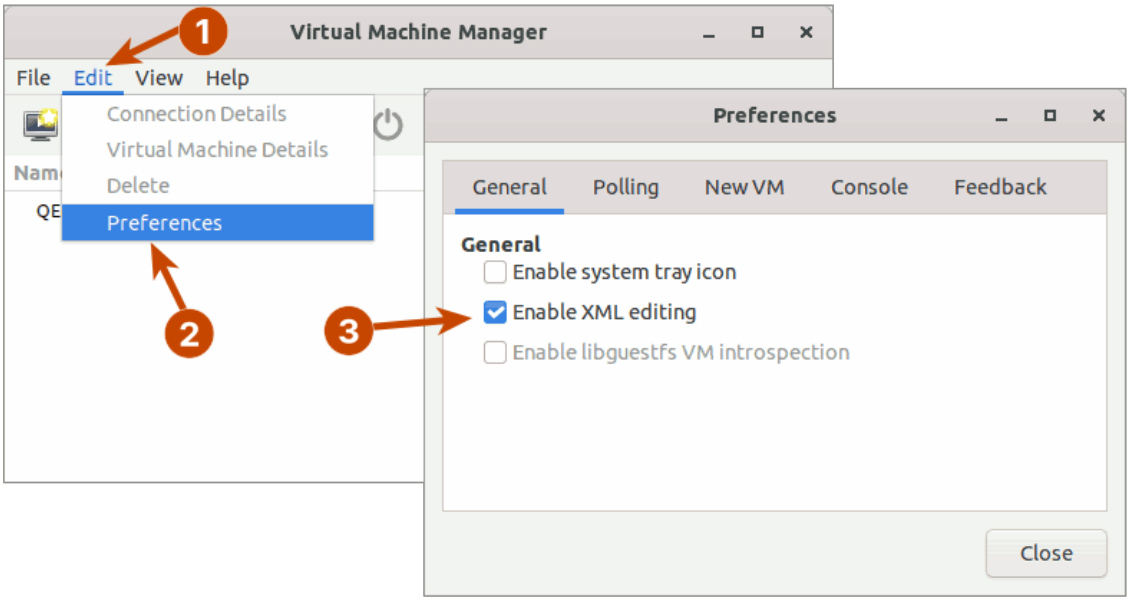
Table of Contents

1. Configure Windows 11 Virtual Hardware

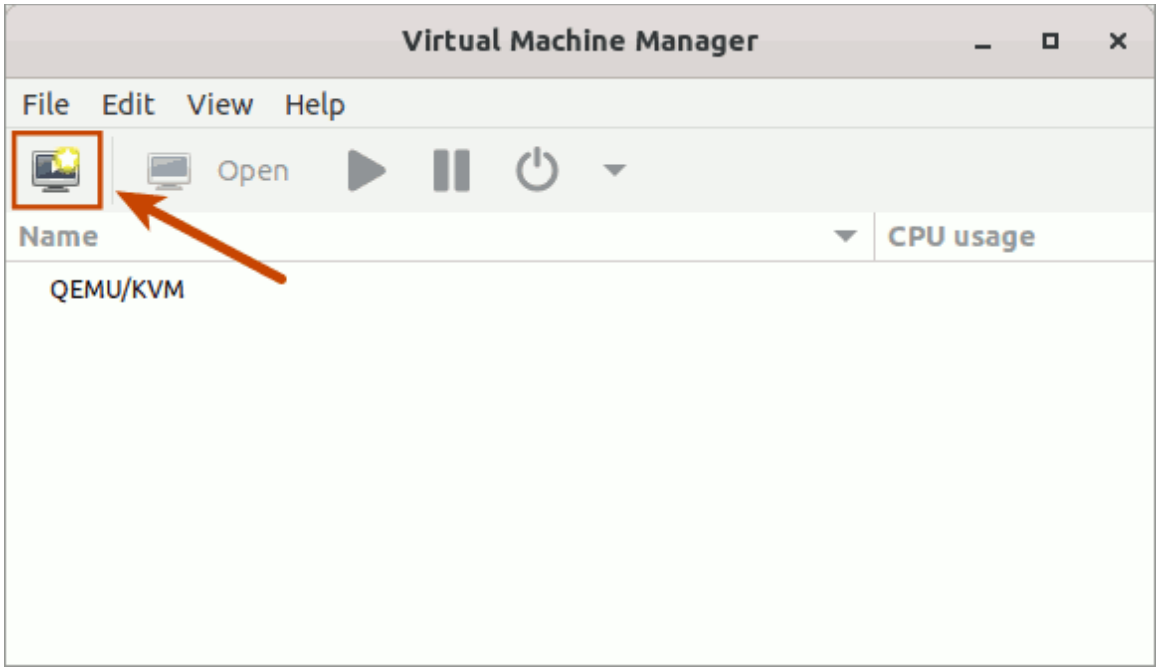
Start the Virtual Machine Manager application.

Before you begin creating a Windows 11 guest virtual machine, you must first enable XML editing because you will need to add the Hyper-V XML component later in this section.

Go to Edit > Preferences and Enable XML editing.



After that, click the computer icon in the upper left corner.



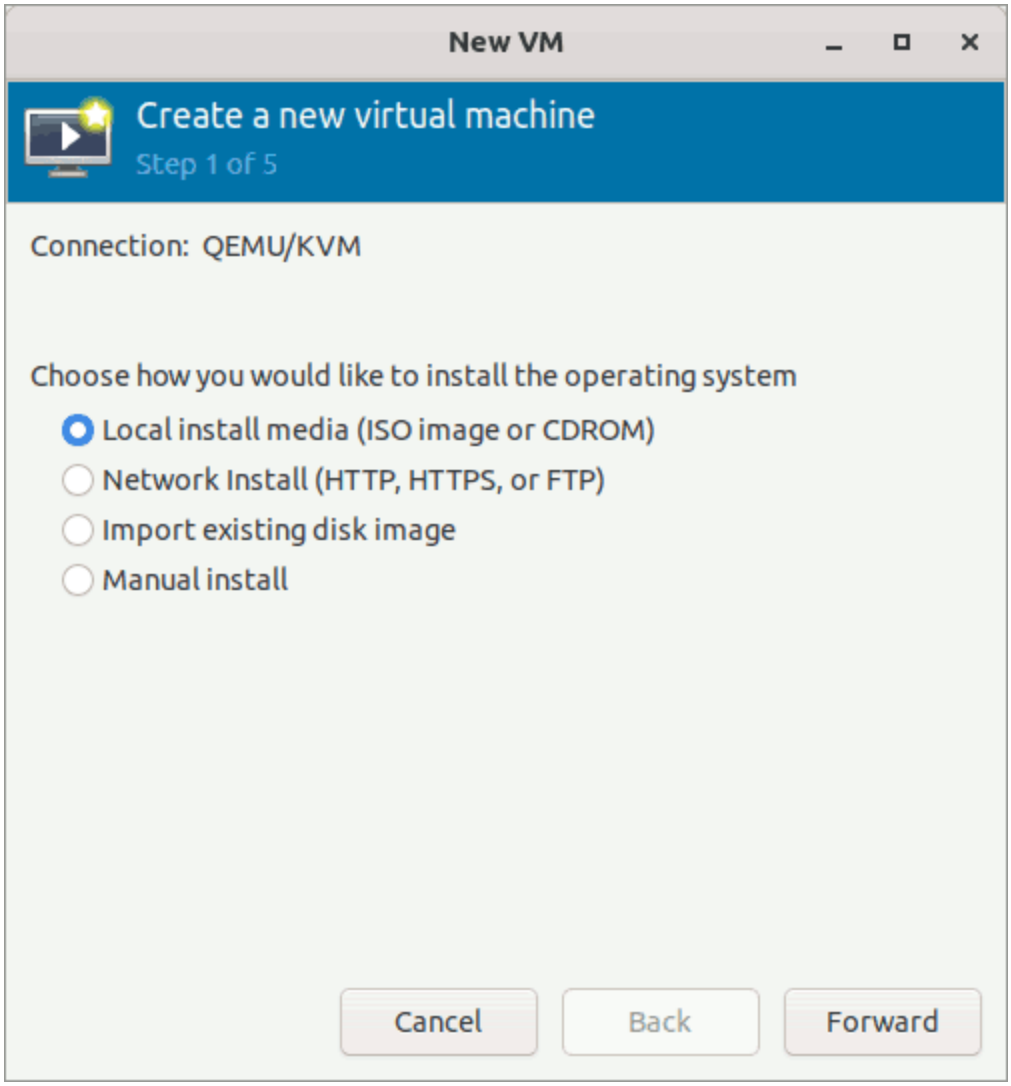
This will launch a wizard that will guide you through the process of creating a new virtual machine in five easy steps.

1.1. Configure Default Virtual Hardware Using the Wizard

The Virtual Machine Manager wizard lets you quickly create a guest virtual machine with the default settings. Once that's done, you can make additional changes to the settings to ensure that the Windows 11 virtual machine runs smoothly.

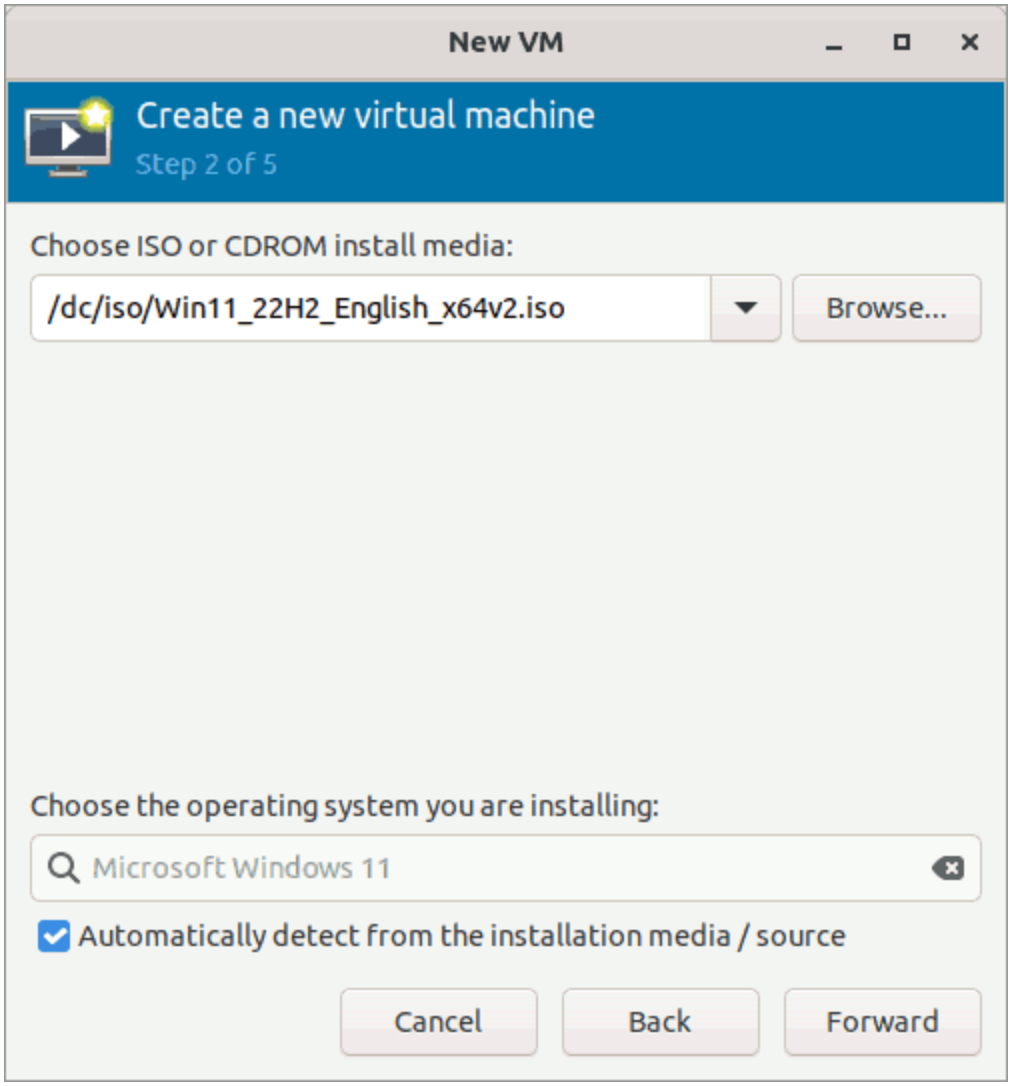
STEP 1: Choose how you would like to install the operating system.

As you are installing Windows 11 from an ISO image, choose the first option. Then click the Forward button.



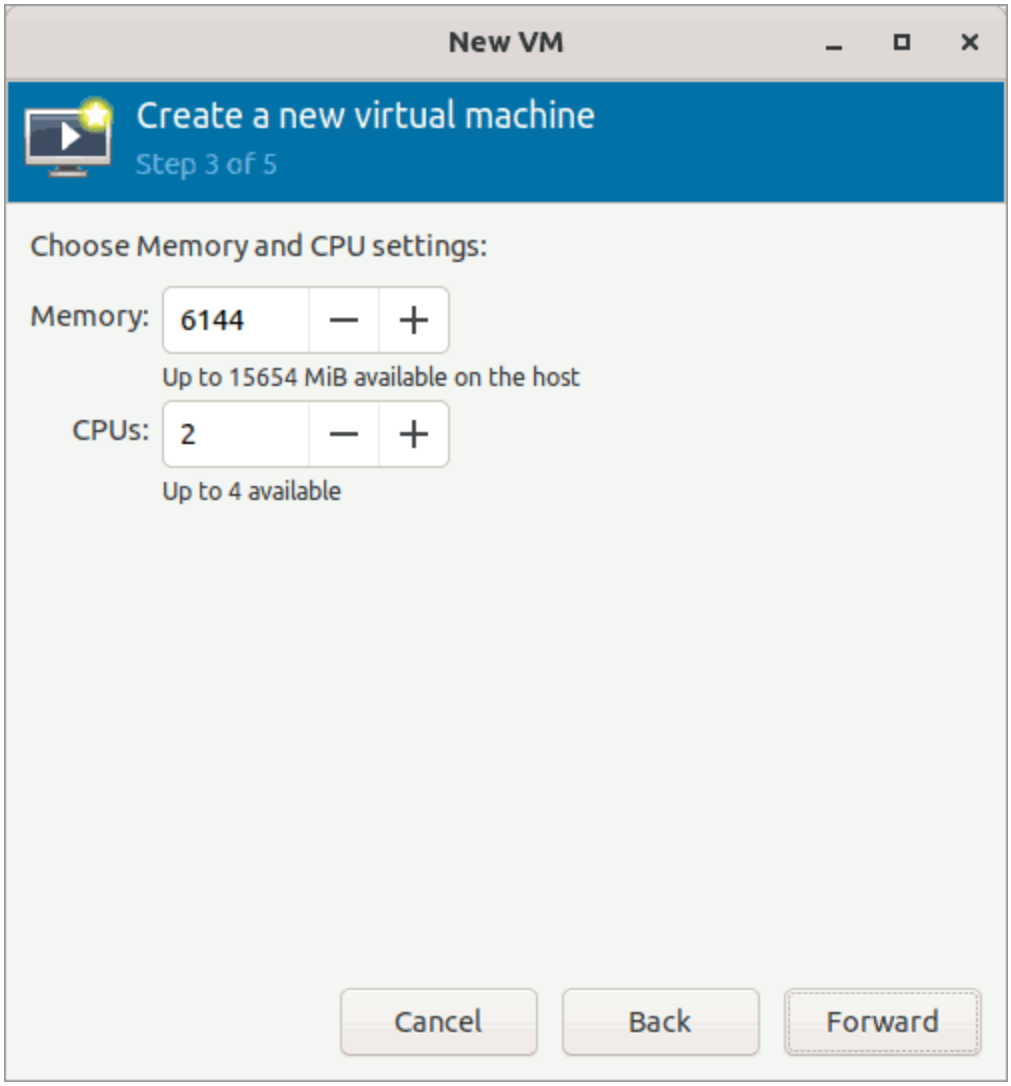
STEP 2: Choose ISO installation media.

Provide the location of the Windows 11 ISO installer image. Then click the Forward button.



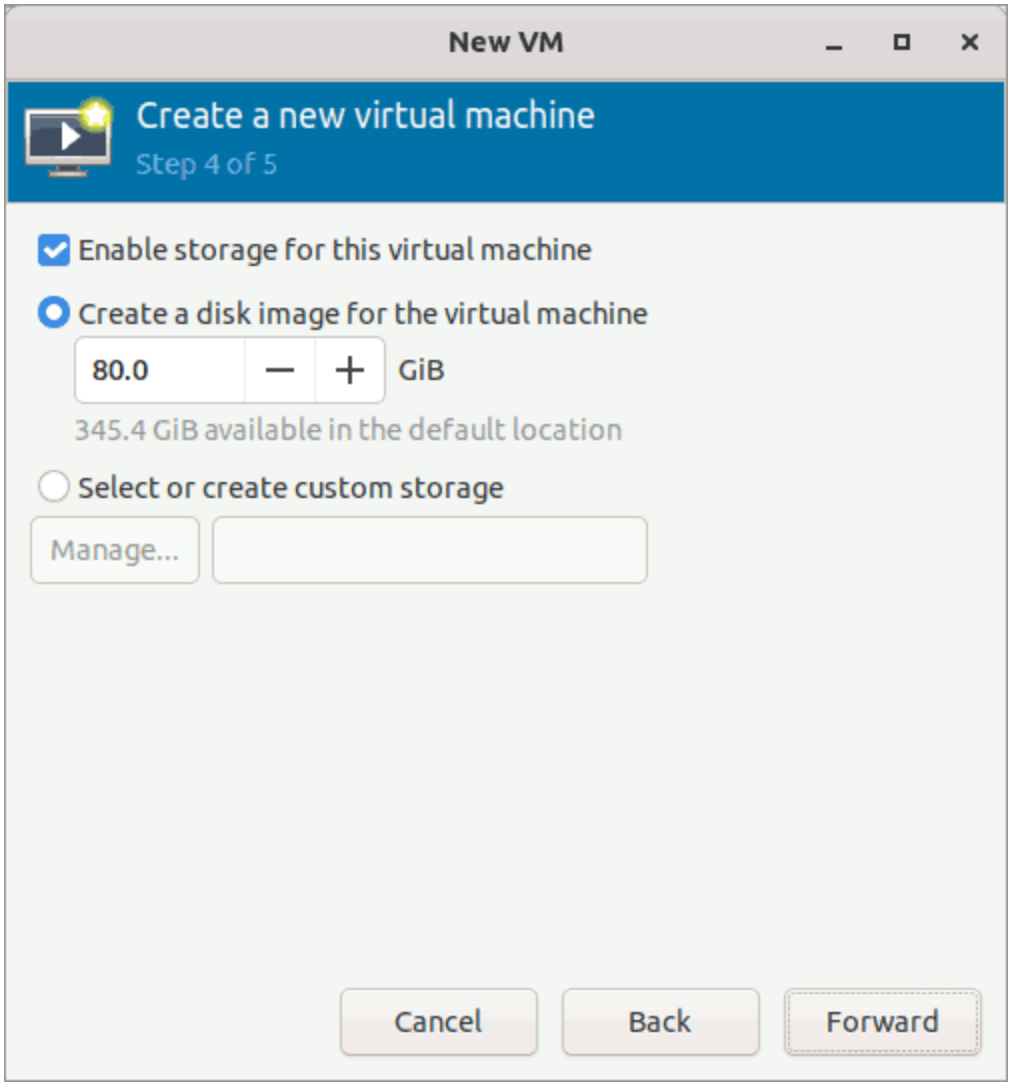
STEP 3: Choose Memory and CPU settings.

Set the amount of host memory and virtual CPUs that will be assigned to the guest virtual machine. I'll set the guest memory to 6 GiB and the virtual CPUs to 2. You can, however, change this based on your RAM and CPU availability. Click the Forward button to continue.



STEP 4: Enable storage for this virtual machine.

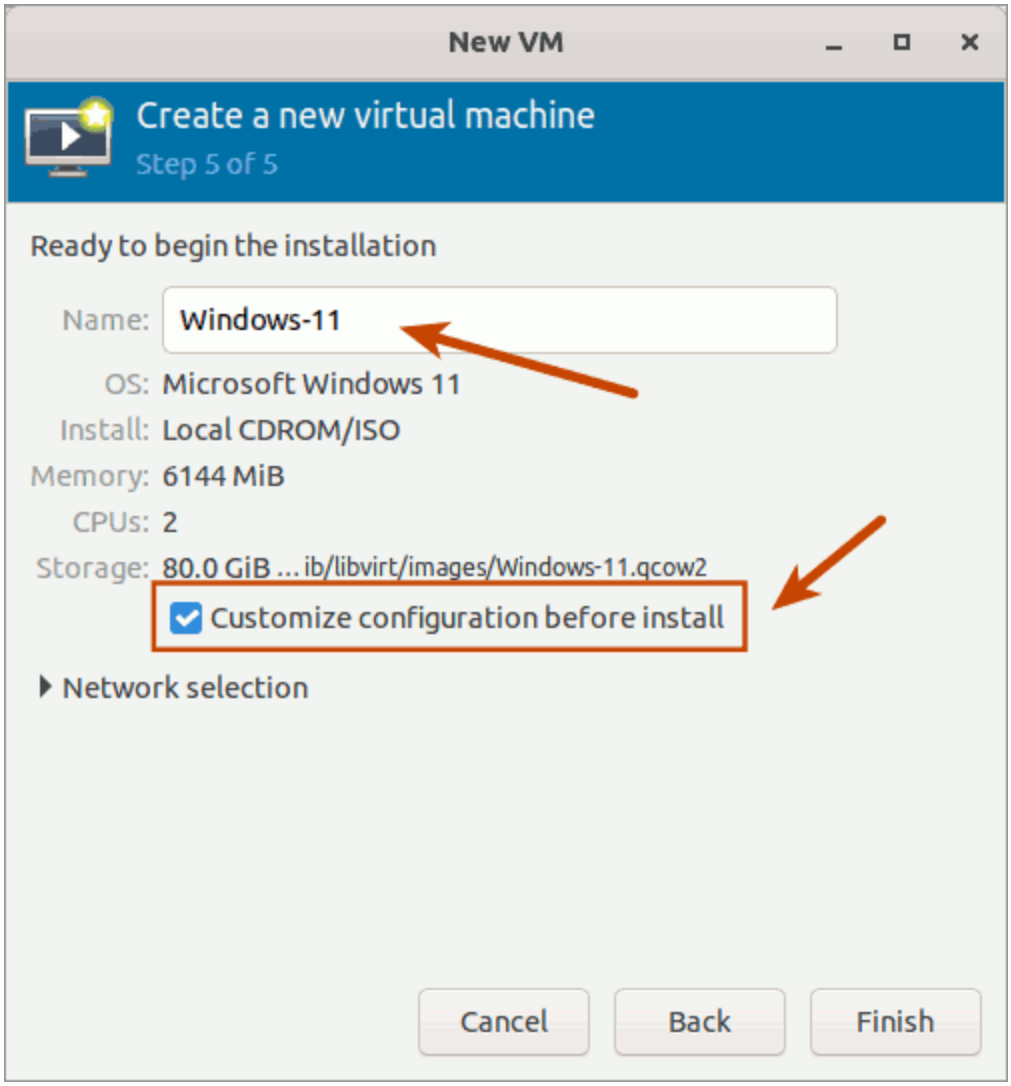
Set the disk image size for the virtual machine. The disk image that is created will be of the type QCOW2, which is a copy-on-write format. The QCOW2's initial file size will be smaller, and it will only grow as more data is added. So I'll set the disk image size to 80 GiB, but you can change it to suit your needs. To install Windows 11, you need to have a disk space of 64 GiB or greater.



STEP 5: Set the name of the virtual machine.

This is the final configuration screen of the Virtual Machine Creation Wizard. Give the guest virtual machine a name. I'll set it to 'Windows-11', but you can change it to anything you want.

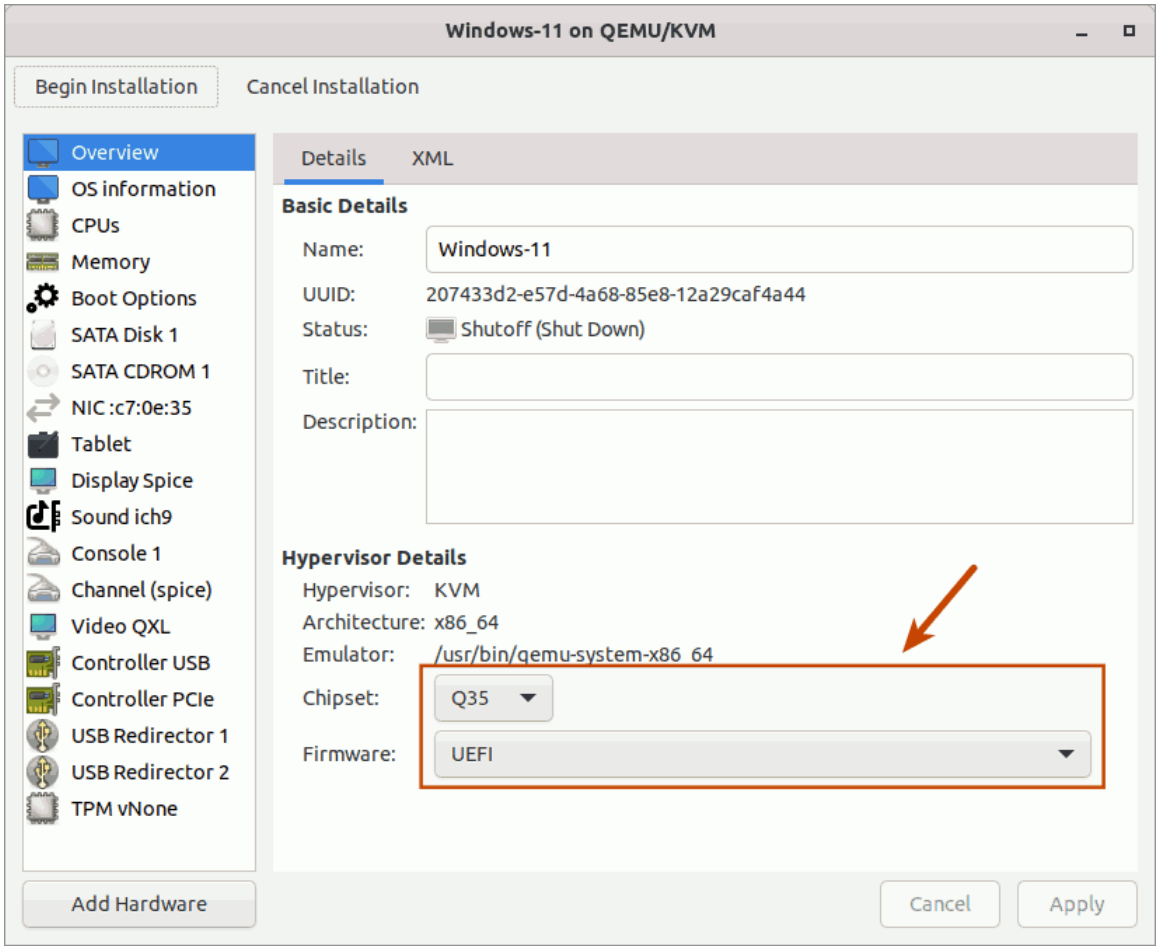
Also, ensure that the 'Customize configuration before install' checkbox is selected. Click the Finish button to finish the wizard and proceed to the advanced options.



You will now be in the advanced options window.

1.2. Configure Chipset and Firmware

In the Overview section, make sure the chipset is set to Q35 and the firmware is set to UEFI.



The Q35 chipset natively supports PCIe and provides improved PCI-E pass-through support.

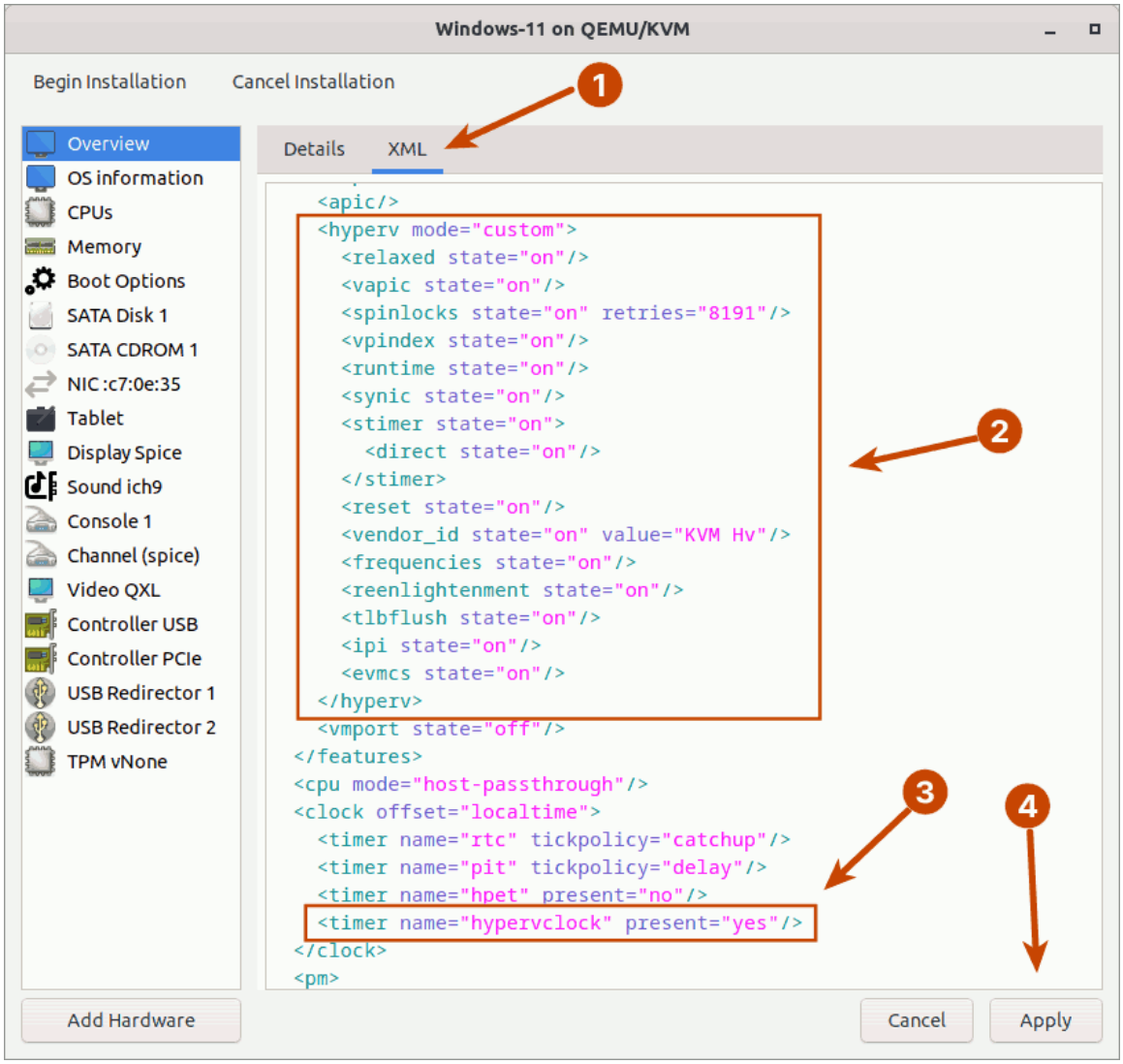
The UEFI firmware option, on the other hand, enables Secure Boot, which is required for Windows 11. When using the UEFI firmware, you can take internal snapshots while the guest is shut down but not while it is running.

1.3. Enable Hyper-V Enlightenments

Hyper-V Enlightenments allow KVM to emulate the Microsoft Hyper-V hypervisor. This improves the performance of the Windows 11 virtual machine.

For more information, check out the pages 'Hyper-V Enlightenments' and 'Hypervisor Features'.

Click the XML tab and add or replace the highlighted XML in the `<hyperv>` and `<timer>` in `<clock>` sections.



> **Note:** If you have an AMD processor, you cannot use the '`hv-evmcs`' feature. This VMCS feature is only available for Intel platforms.
>
> You must remove the line '`<evmcs state="on"/>`' from the following XML. I've highlighted it in bold.
>
> Thanks to Benjamin Poirier for suggesting this.

The XML for `<hyperv>` is:

```
<hyperv mode="custom">
  <relaxed state="on"/>
  <vapic state="on"/>
  <spinlocks state="on" retries="8191"/>
  <vpindex state="on"/>
```

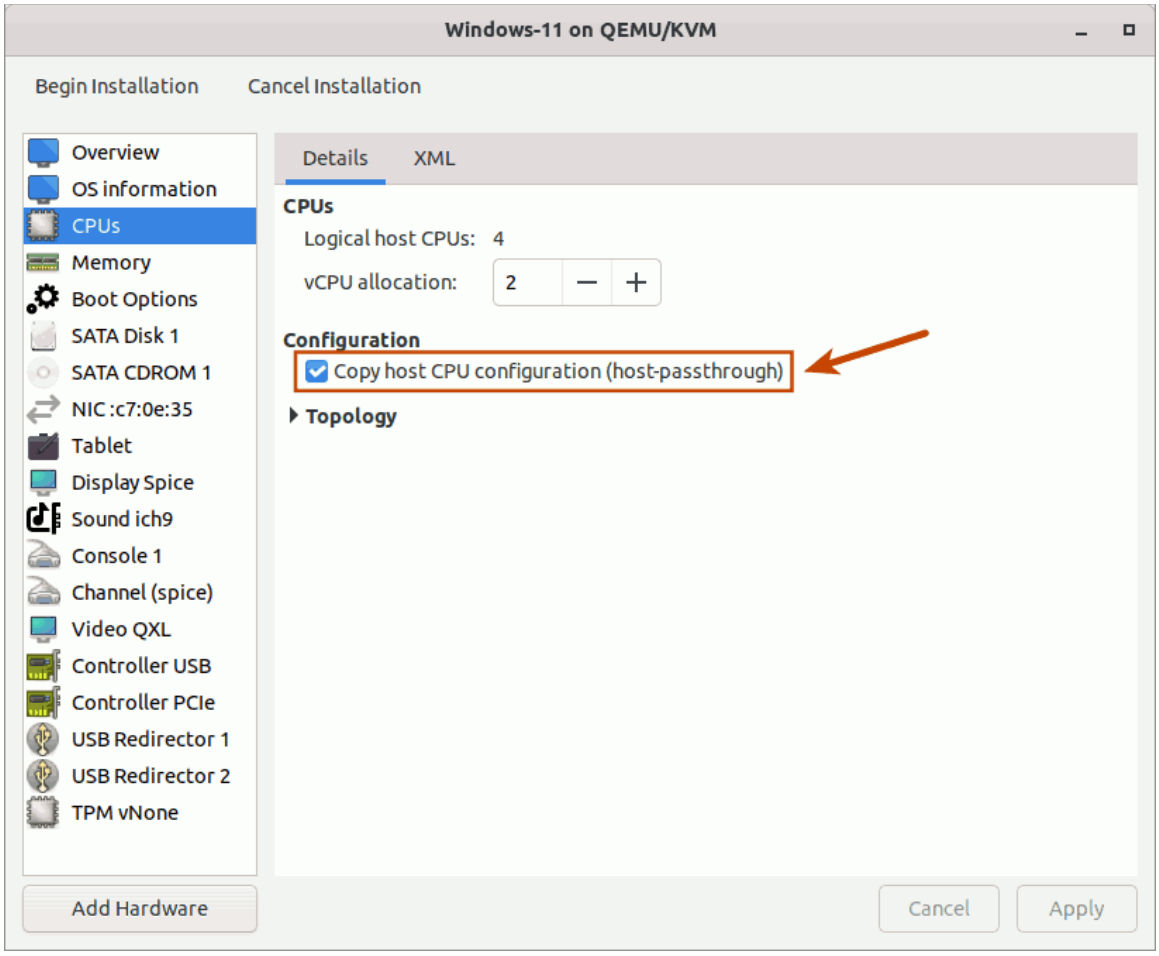
```
  <runtime state="on"/>
  <synic state="on"/>
  <stimer state="on">
    <direct state="on"/>
  </stimer>
  <reset state="on"/>
  <vendor_id state="on" value="KVM Hv"/>
  <frequencies state="on"/>
  <reenlightenment state="on"/>
  <tlbflush state="on"/>
  <ipi state="on"/>
  <evmcs state="on"/>
</hyperv>
```

The XML for the <timer> in the <clock> section is:

```
<clock offset="localtime">
  ...
  <timer name="hypervclock" present="yes"/>
</clock>
```

1.4. Enable CPU Host-Passthrough

Select the CPUs section in the left panel. Ensure that host-passthrough is enabled.



When the mode is set to host-passthrough, the host CPU's model and features are exactly passed on to the guest virtual machine. This causes the virtual machine to run close to the host's native speed. This is the recommended and default option as well.

1.5. Configure the Storage

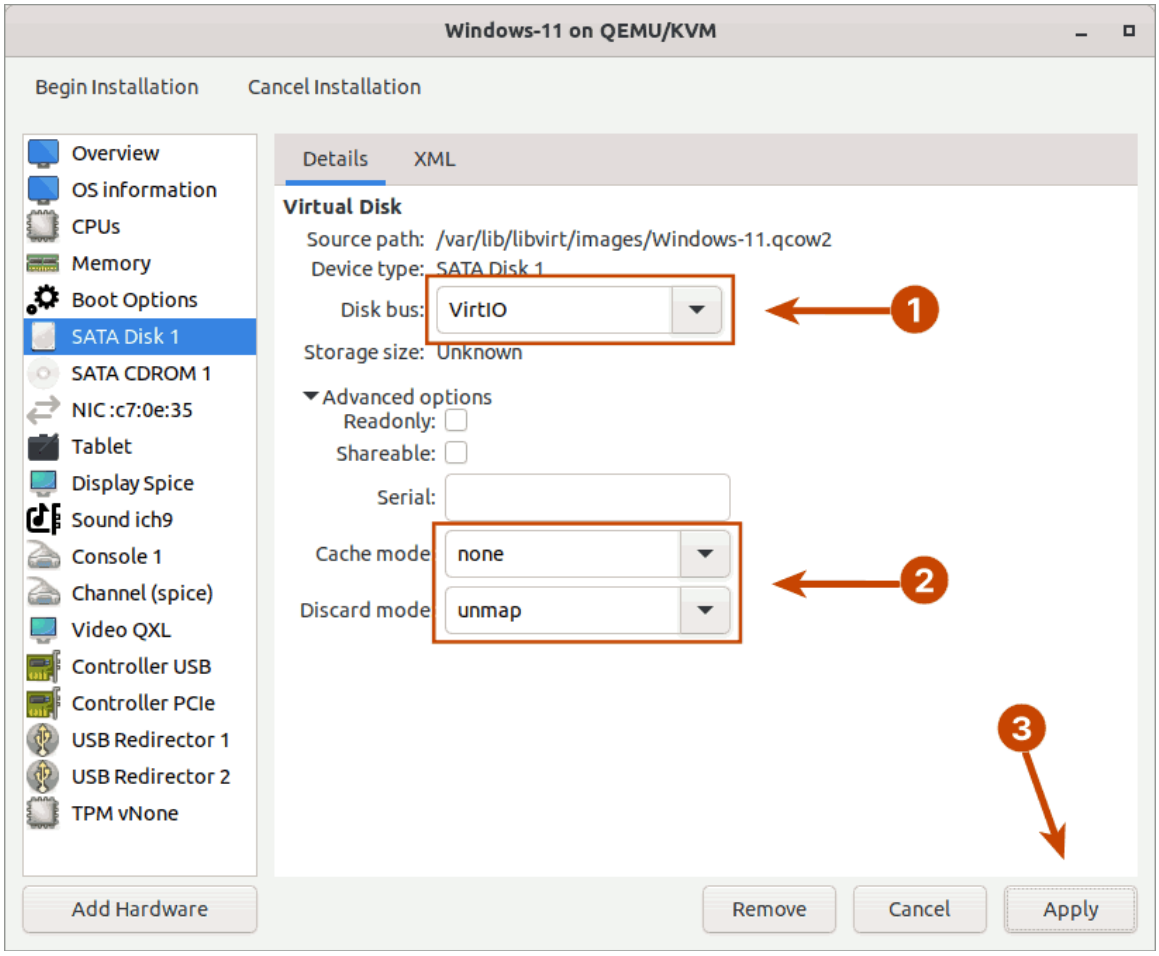
From the left panel, select SATA Disk 1.

Change the disk bus from SATA to VirtIO. VirtIO is preferred over other emulated storage controllers as it is specifically designed and optimized for virtualization.

Set the cache mode to none. In this mode, the host page cache is bypassed, and I/O occurs directly between the hypervisor user space buffers and the storage device. In terms of performance, it is equivalent to direct disk access on your host.

Set the discard mode to unmap. When you delete files in the guest virtual machine, the changes are reflected immediately in the guest file system. The qcow2 disk

image associated with the VM on the host, however, does not shrink to reflect the newly freed space. When you set the discard mode to `unmap`, the qcow2 disk image will automatically shrink to reflect the newly freed space.

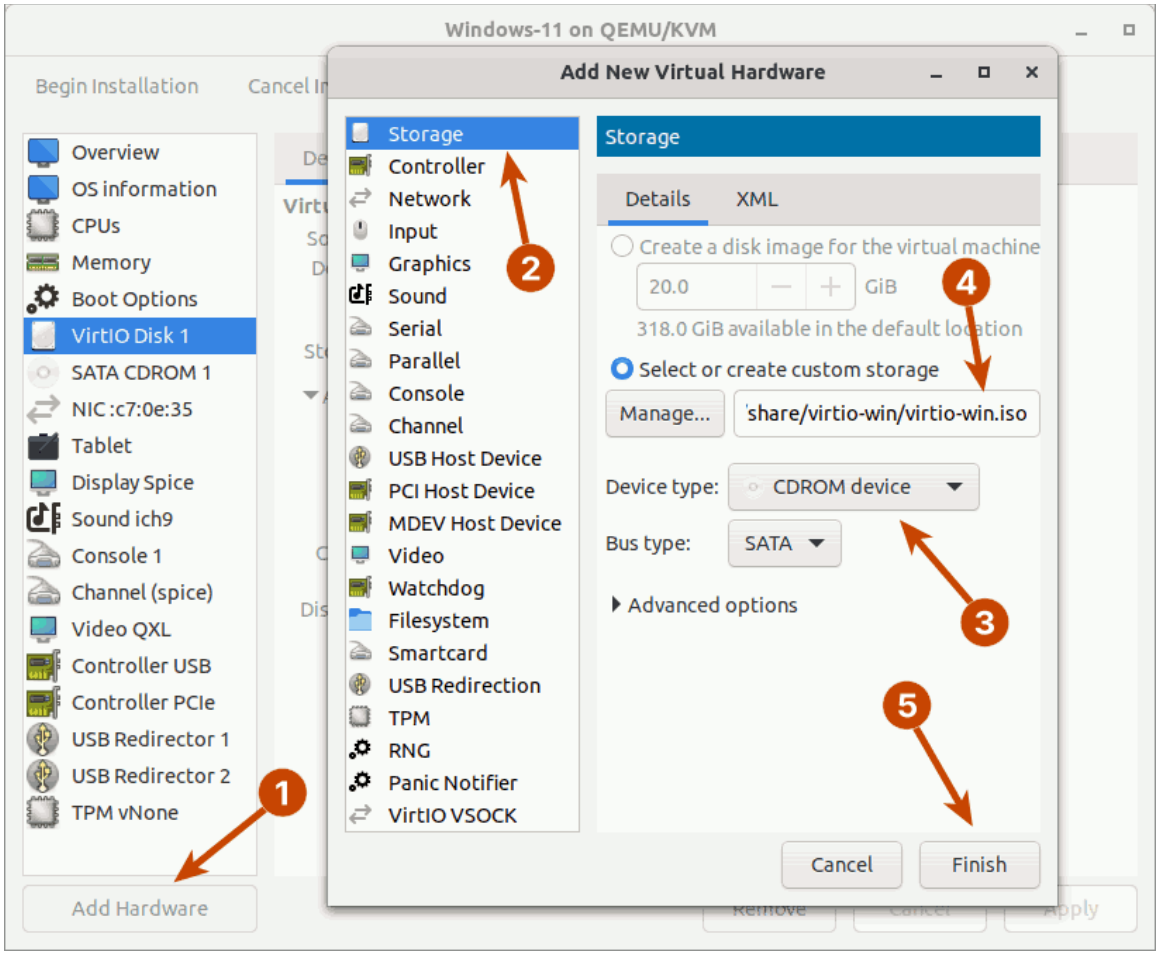


1.6. Mount the VirtIO-Win.ISO Image

VirtIO drivers are para-virtualized drivers for KVM guests. Microsoft, unfortunately, does not provide these drivers. When installing a Microsoft Windows virtual machine, you must install certain VirtIO drivers.

As a result, you must mount the `virtio-win.iso` image file, which contains the VirtIO drivers for Windows. This requires the addition of a second CDROM.

Click the Add Hardware button, then select CDROM device as the Device type in the window that appears and mount the `virtio-win.iso` image file.

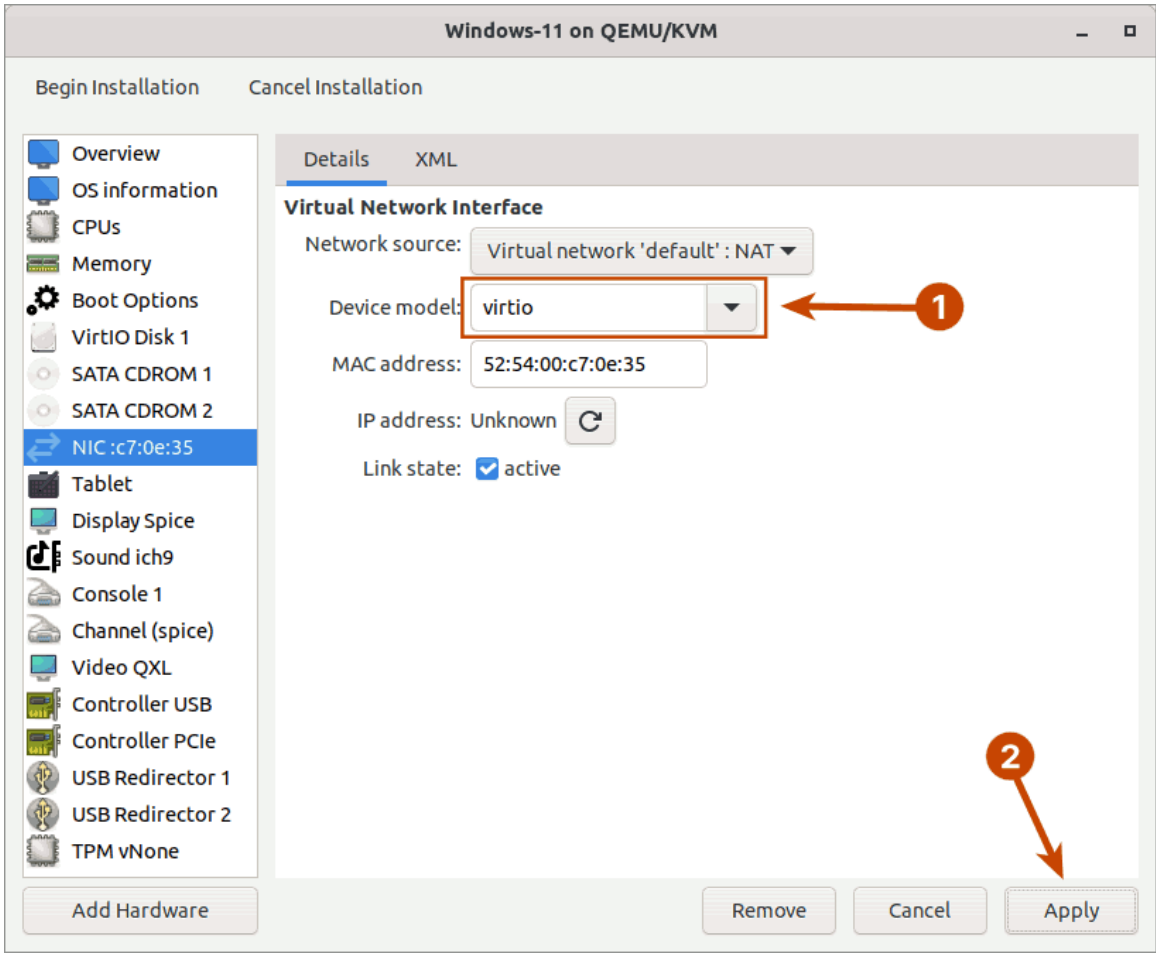


If you're using Fedora as your KVM host, the ISO image will be located at `/usr/share/virtio-win/`.

If you haven't already installed or downloaded `virtio-win.iso`, see the section titled 'Install VirtIO Drivers for Windows Guests' in my other blog post titled 'How Do I Properly Install KVM on Linux'.

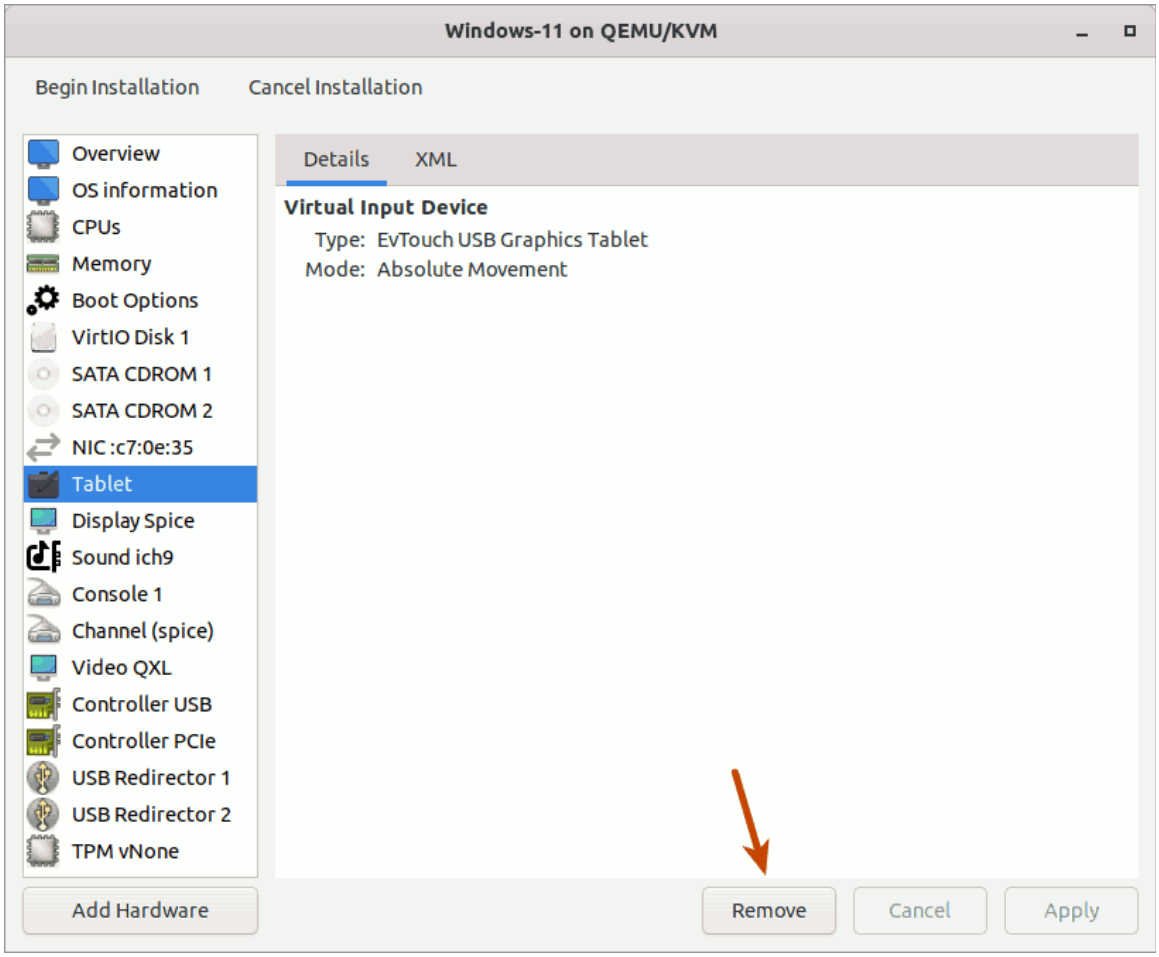
1.7. Configure Virtual Network Interface

In the NIC section, change the device model to virtio. The network VirtIO driver is specifically designed and optimized for virtualization. As a result, there will be no processing overhead, and the performance of the guest virtual machine will naturally improve.



1.8. Remove the USB Tablet Device

In a Windows virtual machine, removing the USB tablet device can reduce idle CPU usage and context switches. As a result, the performance of the Windows 11 virtual machine will improve.



1.9. Add QEMU Guest Agent Channel

The QEMU Guest Agent Channel establishes a private communication channel between the host physical machine and the guest virtual machine. This enables the host machine to issue commands to the guest operating system using libvirt. The guest operating system then responds to those commands asynchronously.

For example, after creating the Windows 11 guest virtual machine, you can shut it down from the host by issuing the following command:

```
$ sudo virsh shutdown Windows-11 --mode=agent
```

This shutdown method is more reliable than `virsh shutdown --mode=acpi` because it guarantees to shut down a cooperative guest in a clean state. If the agent is not present, libvirt must rely on injecting an ACPI shutdown event, which some guests ignore and thus do not shut down. You can also use the

same syntax to reboot (`virsh reboot`).

Some of the commands you can try, among many others, are:

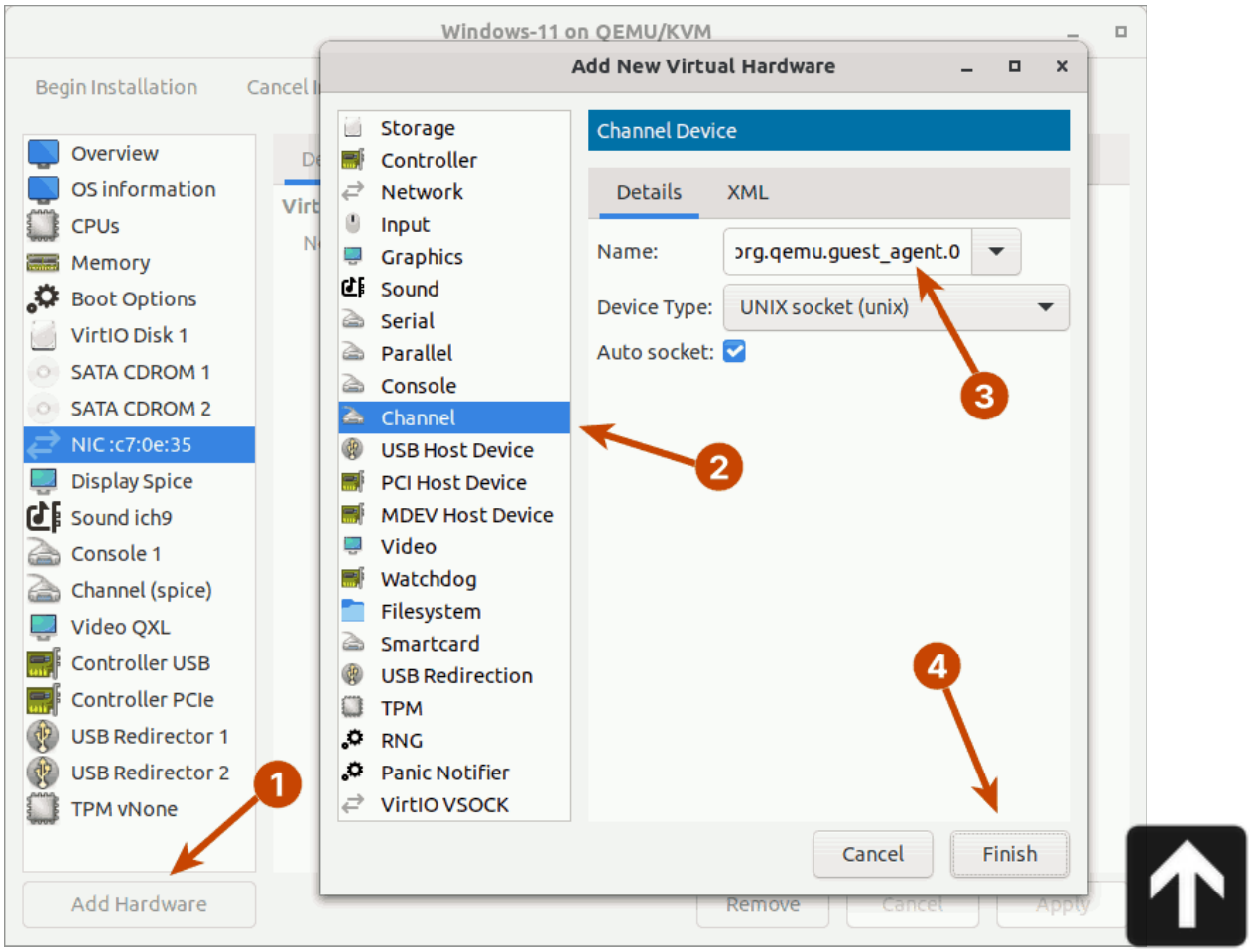
```
### Query the guest operating system's IP address via the gue
$ sudo virsh domifaddr Windows-11 --source agent

### Show a list of mounted filesystems in the running guest.
$ sudo virsh domfsinfo Windows-11

### Instructs the guest to trim its filesystem.
$ sudo virsh domfstrim Windows-11
```

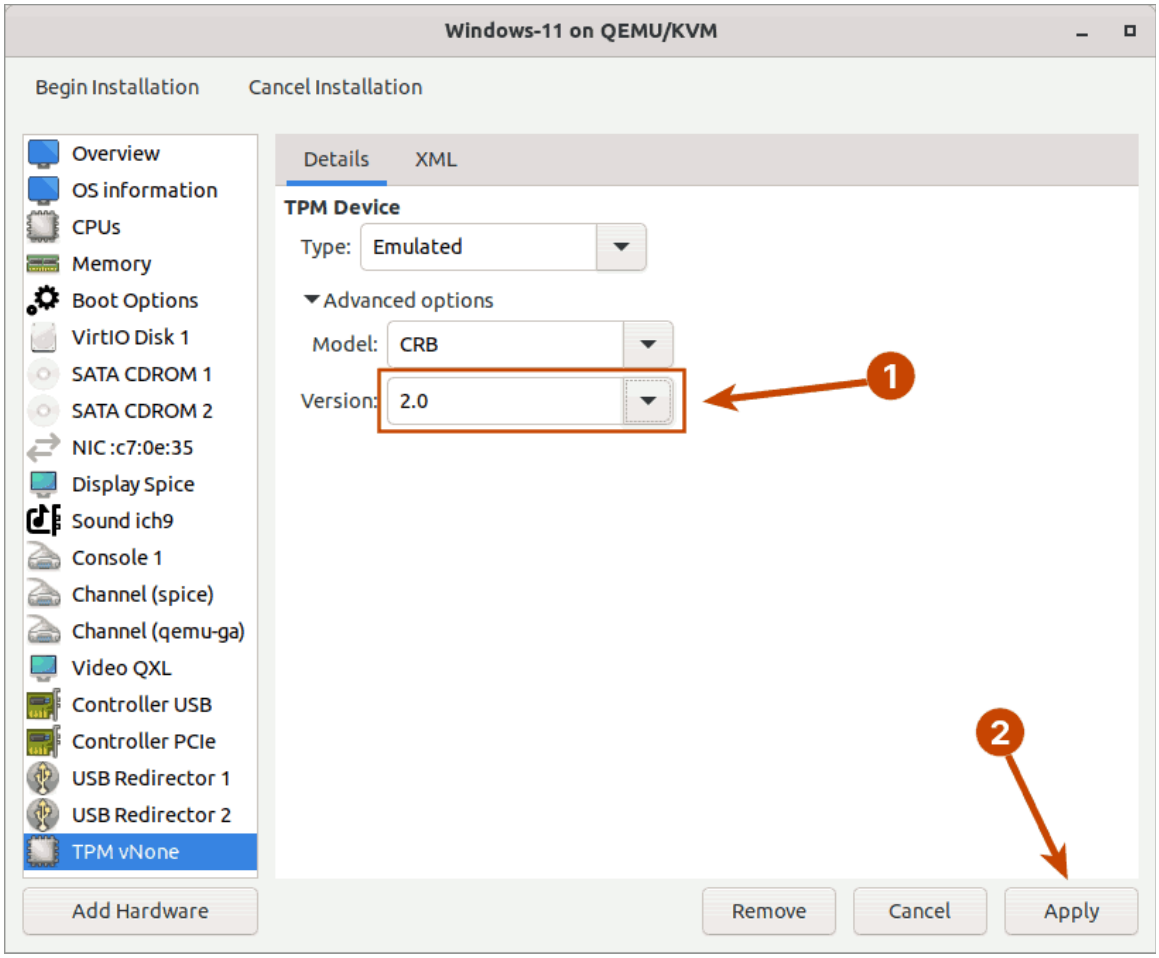
So, add a QEMU guest agent channel to the Windows 11 guest virtual machine.

Click the Add Hardware button to open the Add New Virtual Hardware window, and select Channel. Then, from the drop-down list, select 'org.qemu.guest_agent.0' and click Finish to apply.

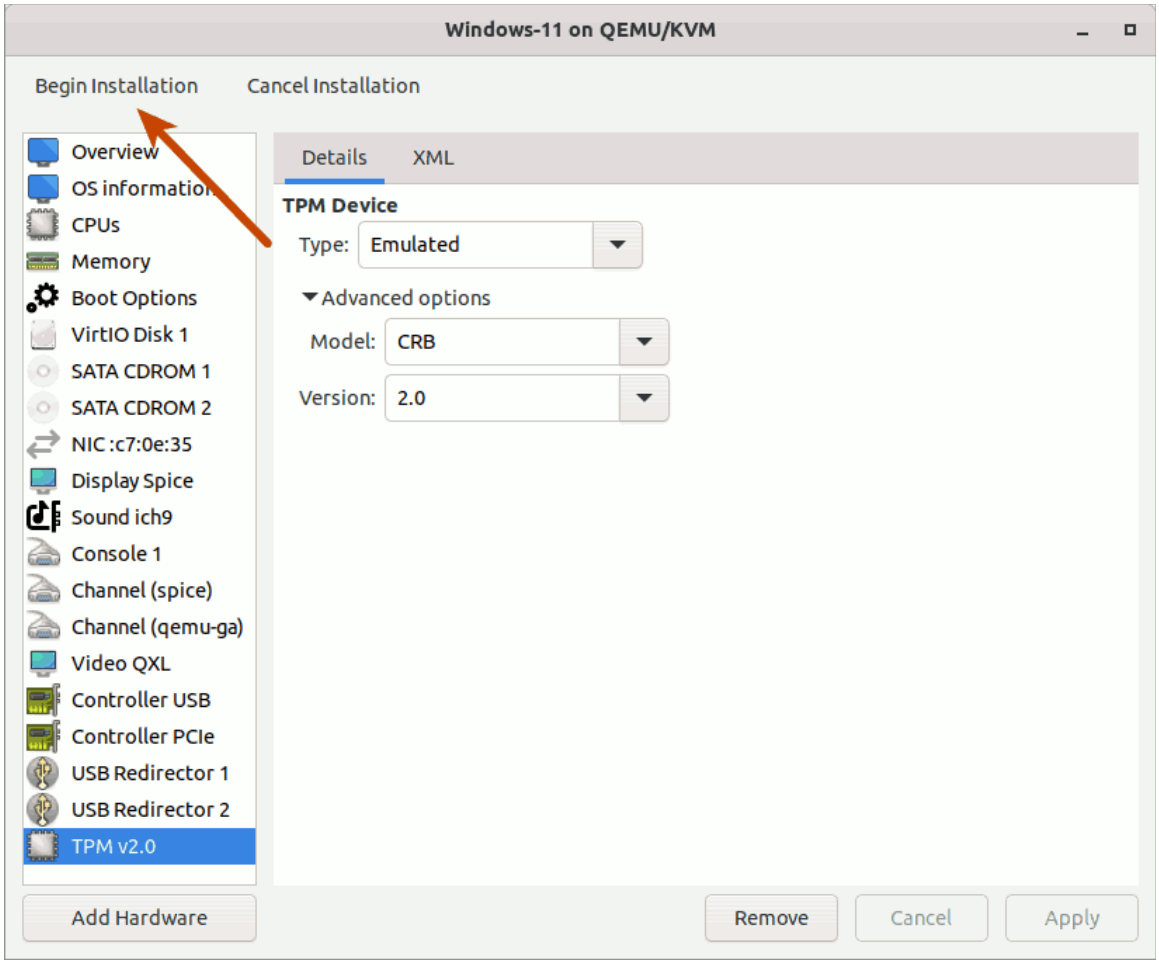


1.10. Enable Trusted Platform Module (TPM)

Enable the Trusted Platform Module (TPM). TPM technology is designed to provide hardware-based, security-related functions. Windows 11 requires TPM version 2.0.



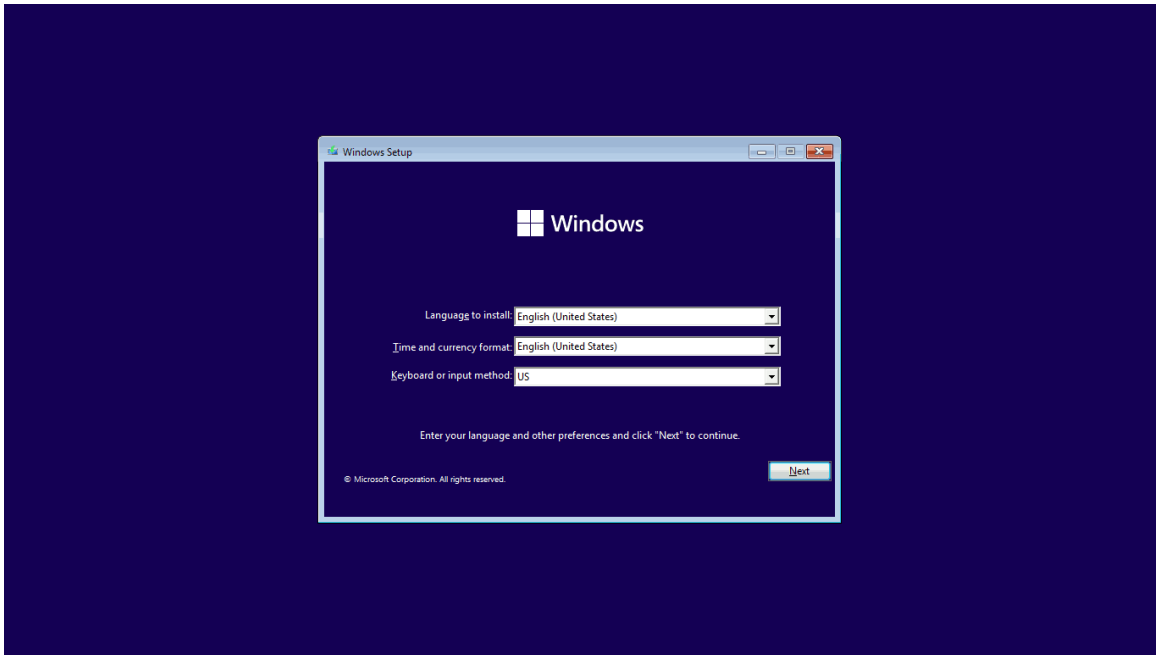
All of the virtual hardware and settings needed to install Microsoft Windows 11 have been configured. To begin the installation of Windows 11, click the 'Begin Installation' button in the upper left corner of the window.



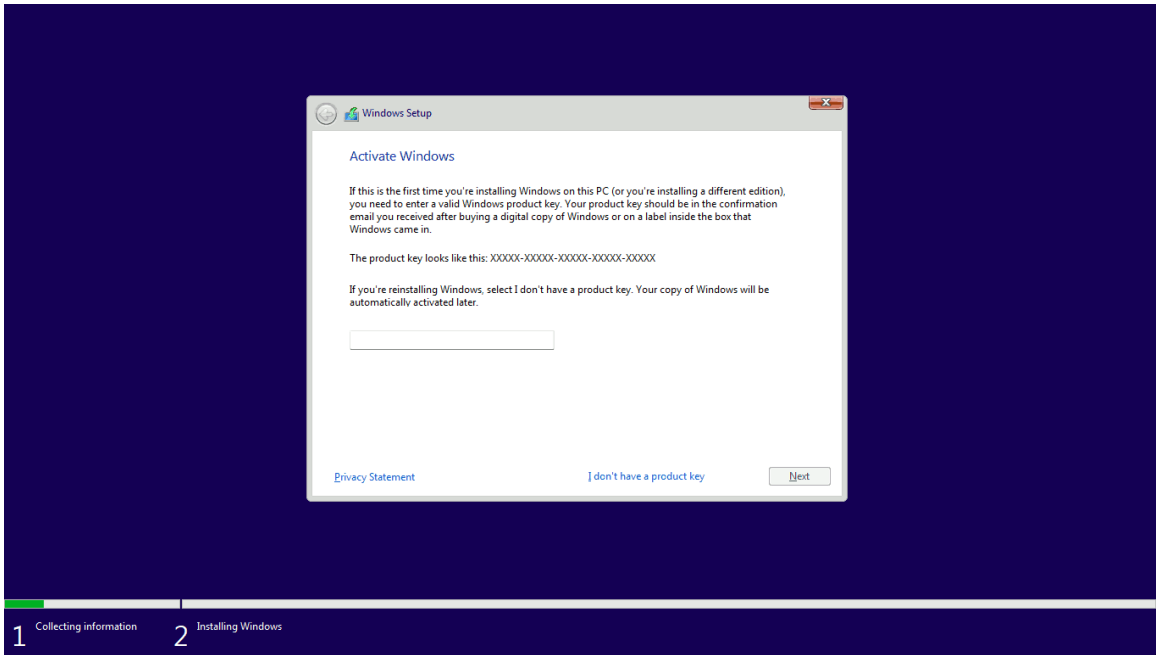
2. Install a Windows 11 Virtual Machine on KVM

Now that you have finished configuring Windows 11 virtual hardware and have clicked the 'Begin Installation' button, the Windows 11 installation starts.

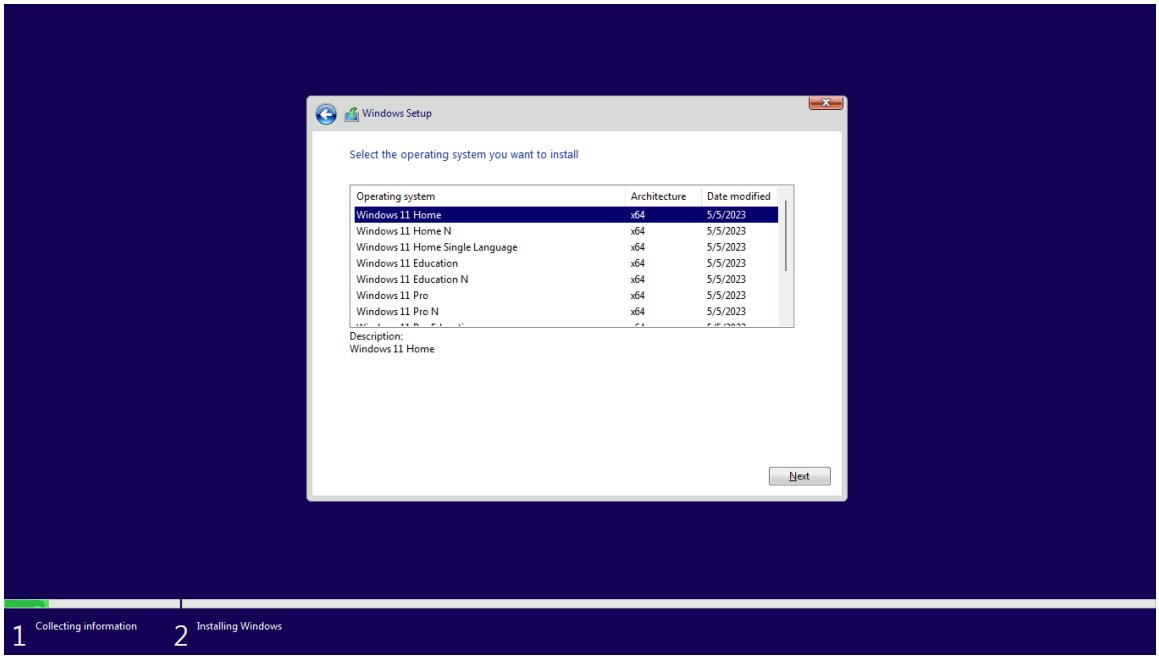
On the screen that appears, choose your language, time and currency format, and keyboard from the list of available options. Then press the Next button.



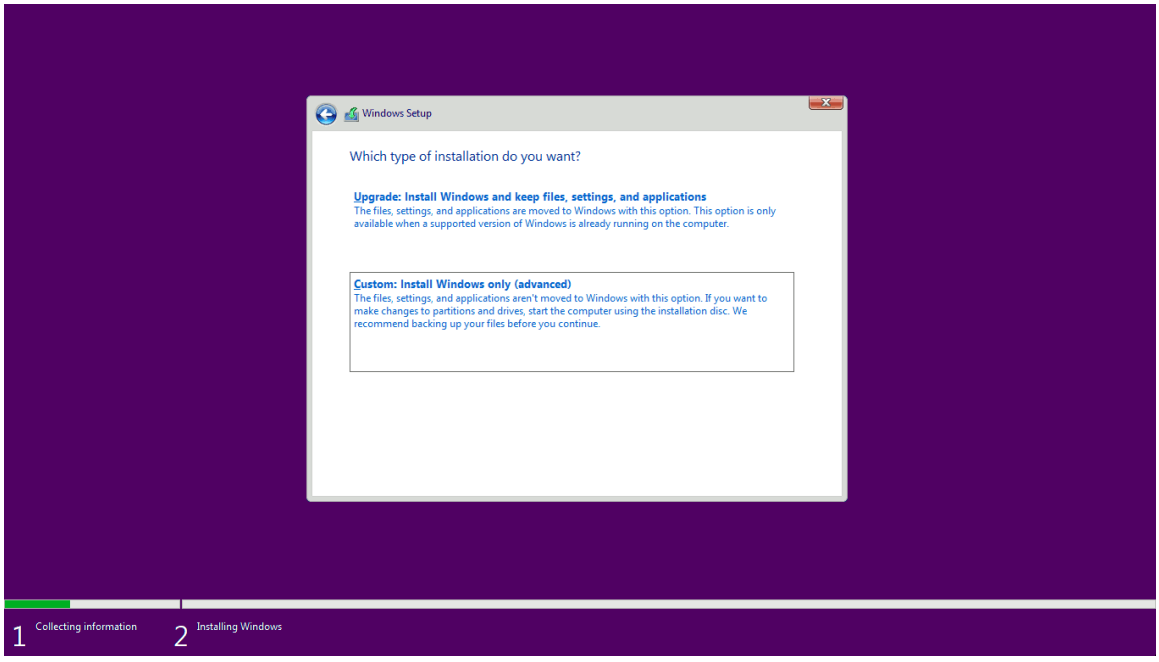
On the following screen, click Install Now. The Windows activation screen will appear. If you have a product key, enter it here. Otherwise, choose I don't have a product key.



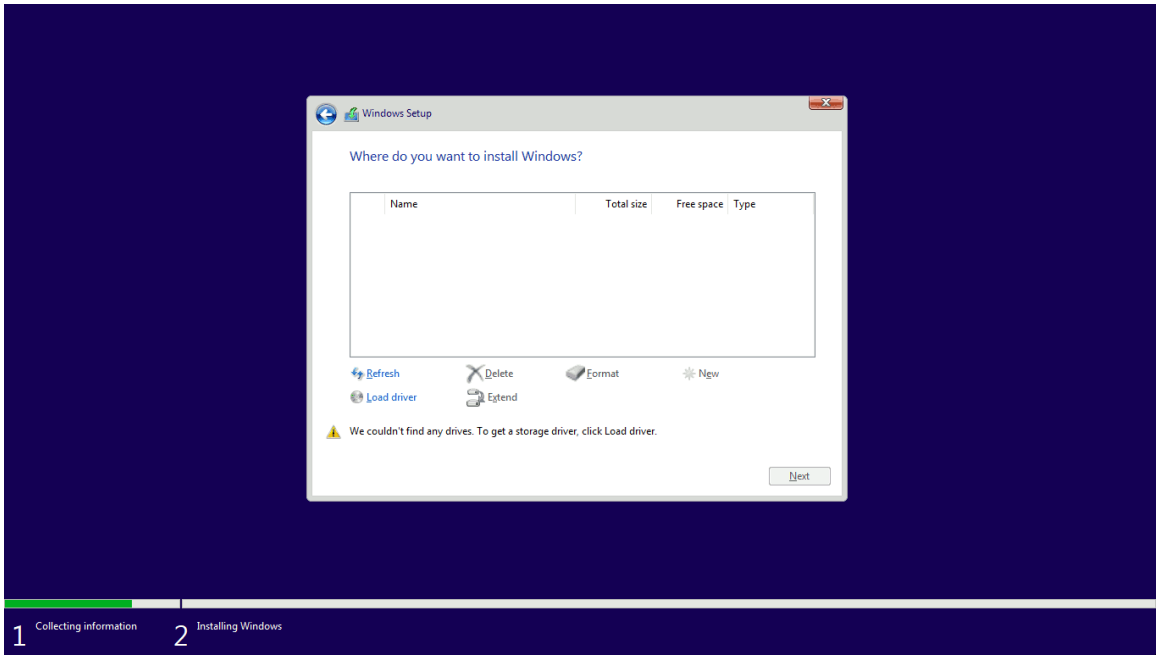
Choose the Windows version you want to install. I'll be installing Windows 11 Home for this tutorial.



When you get to the type of installation screen, choose Custom: Install Windows only (advanced).

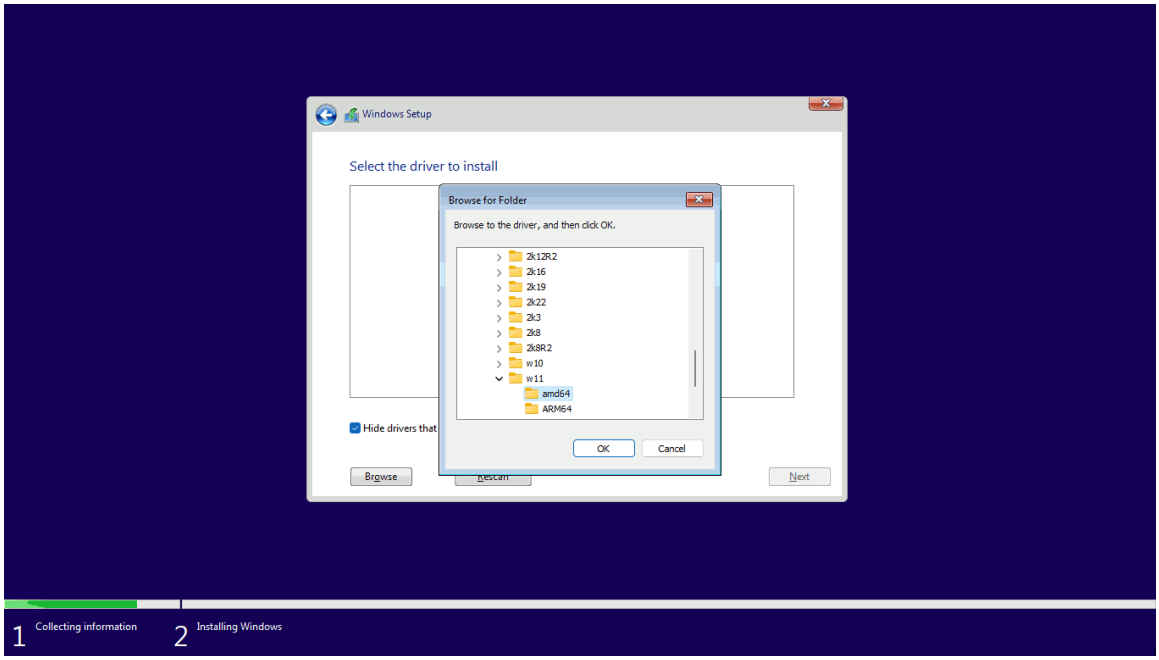


You must now select the disk on which Windows 11 will be installed. However, as you can see, the installer was unable to find any drives.

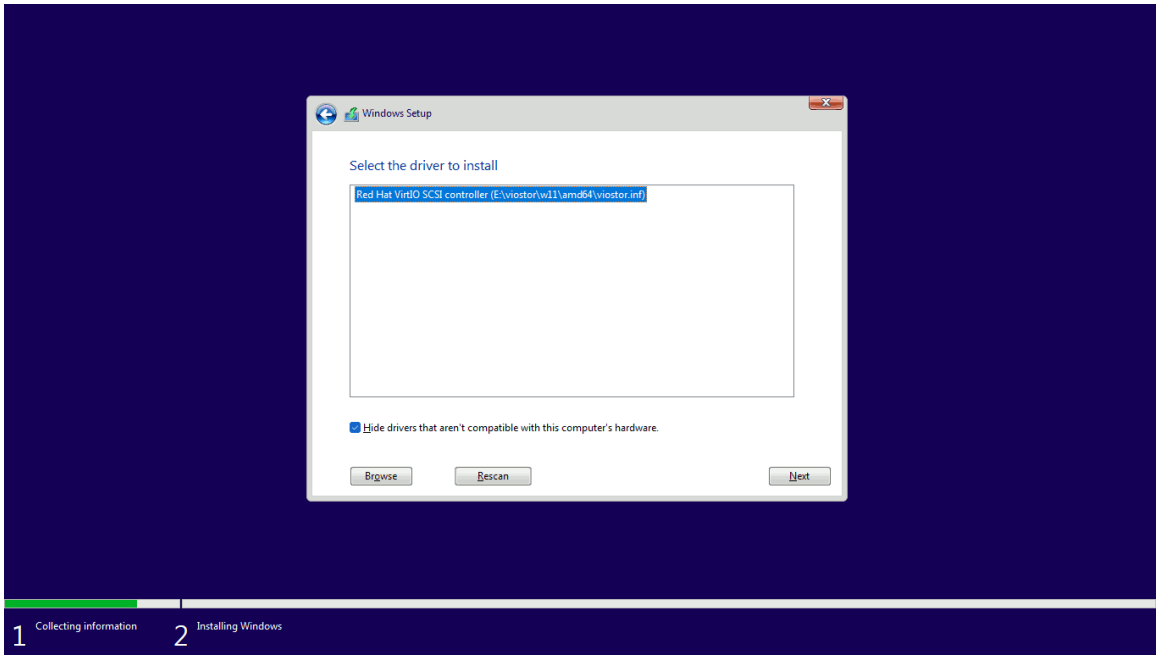


This is because you selected the VirtIO disk bus when configuring Windows 11 virtual hardware. VirtIO devices are not natively recognized by Windows, so you must manually install the drivers.

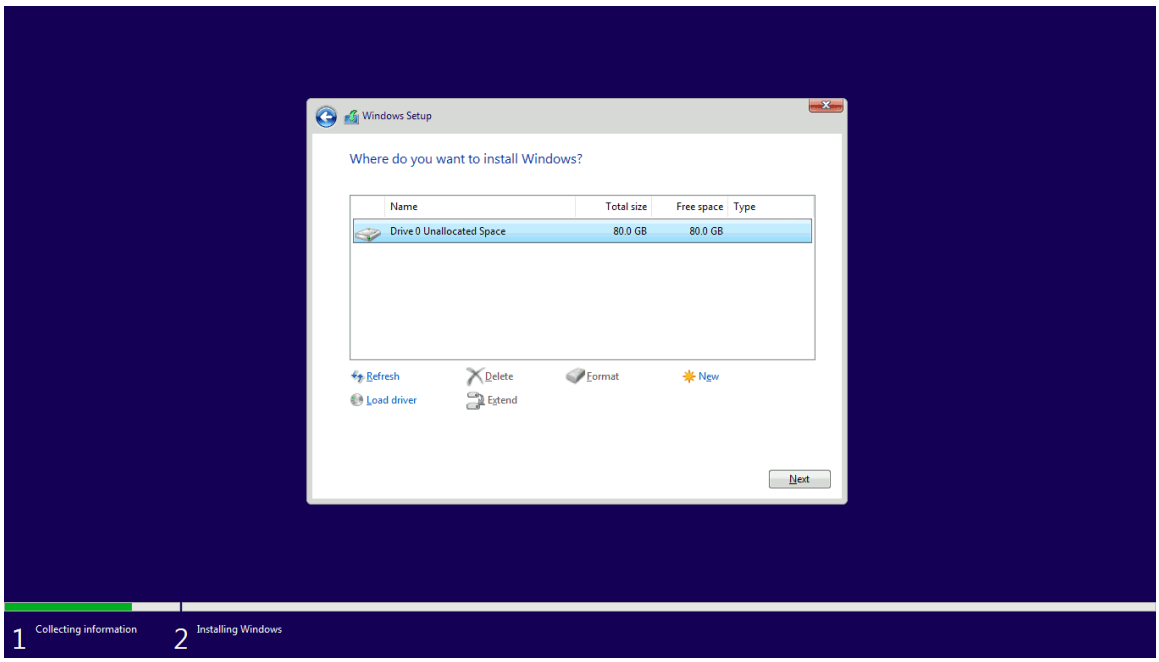
To install the VirtIO disk driver, click Load driver, then Browse, expand the CD Drive (E:), expand Viostor, expand w11, select amd64, and click OK.



Click Next to install.

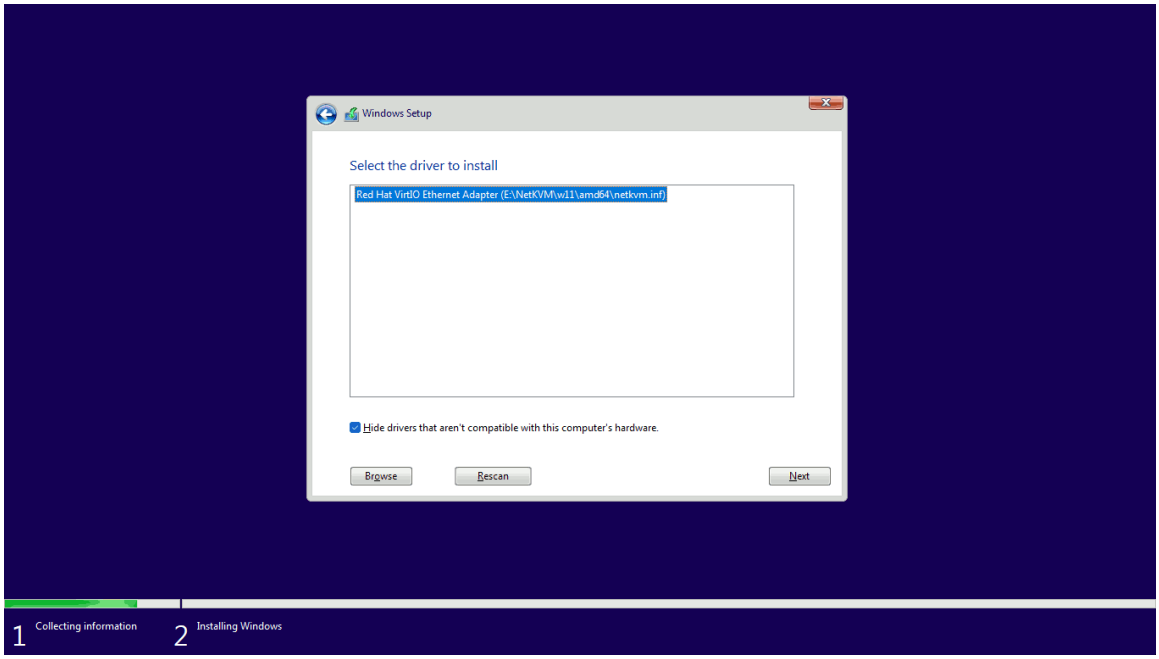


As you can see, the disk is now visible after installing the VirtIO storage driver.

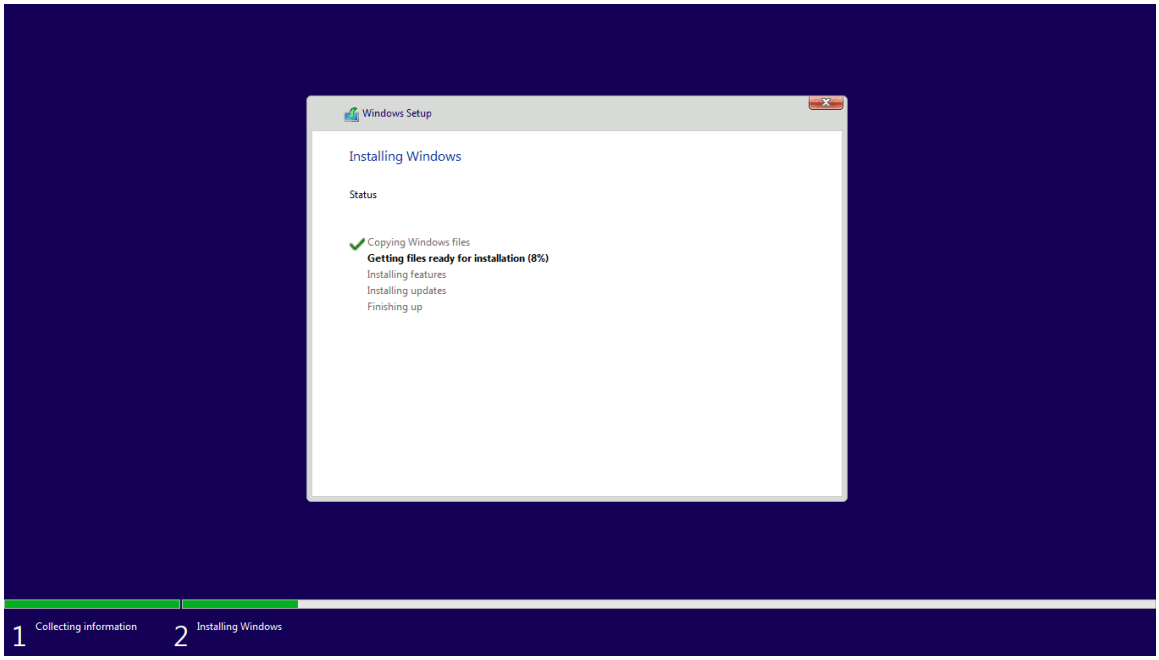


But don't proceed with the installation just yet. You still need to install the VirtIO network driver.

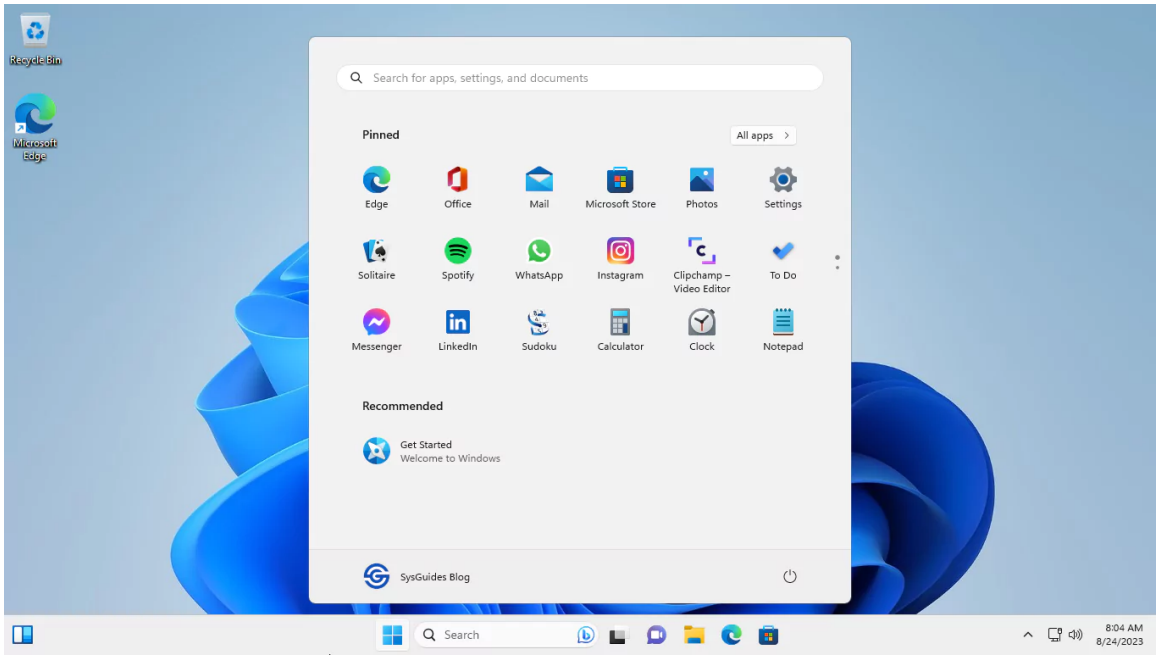
Repeat the procedure for the network device as well. Click Load driver again, then Browse, expand the CD Drive (E:), expand NetKVM, expand w11, select amd64, and click OK.



After installing the VirtIO network device driver, click the Next button to proceed with the installation.

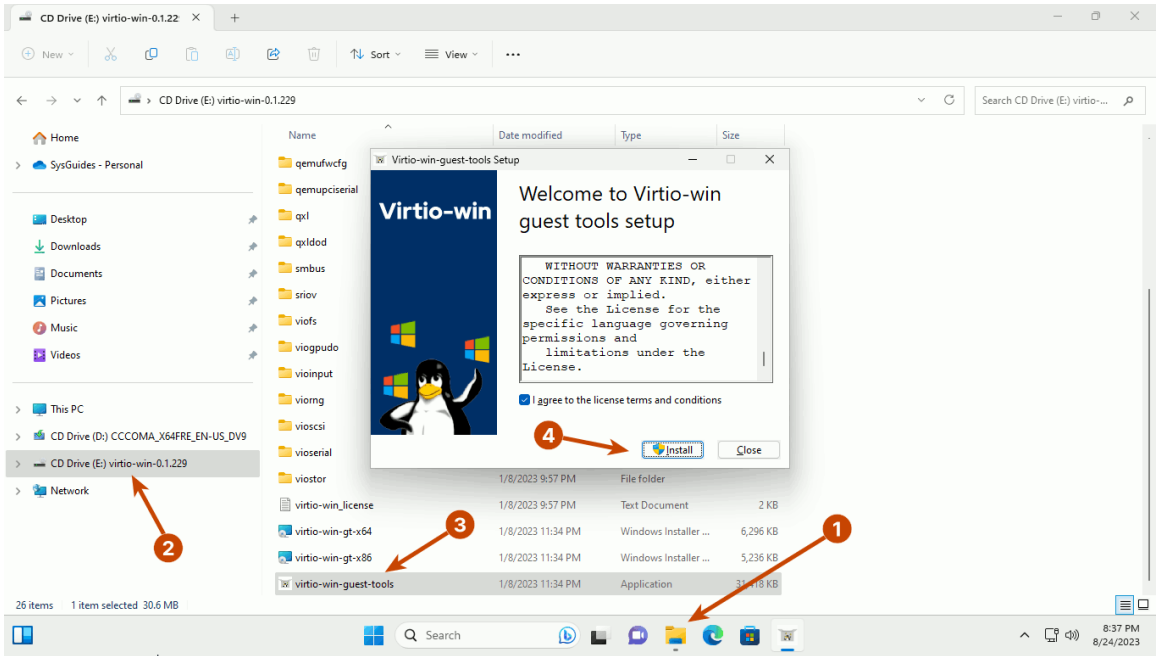


The next installation steps are all about personalization. Complete the installation according to your needs, and you will be taken to the desktop environment once it is finished.

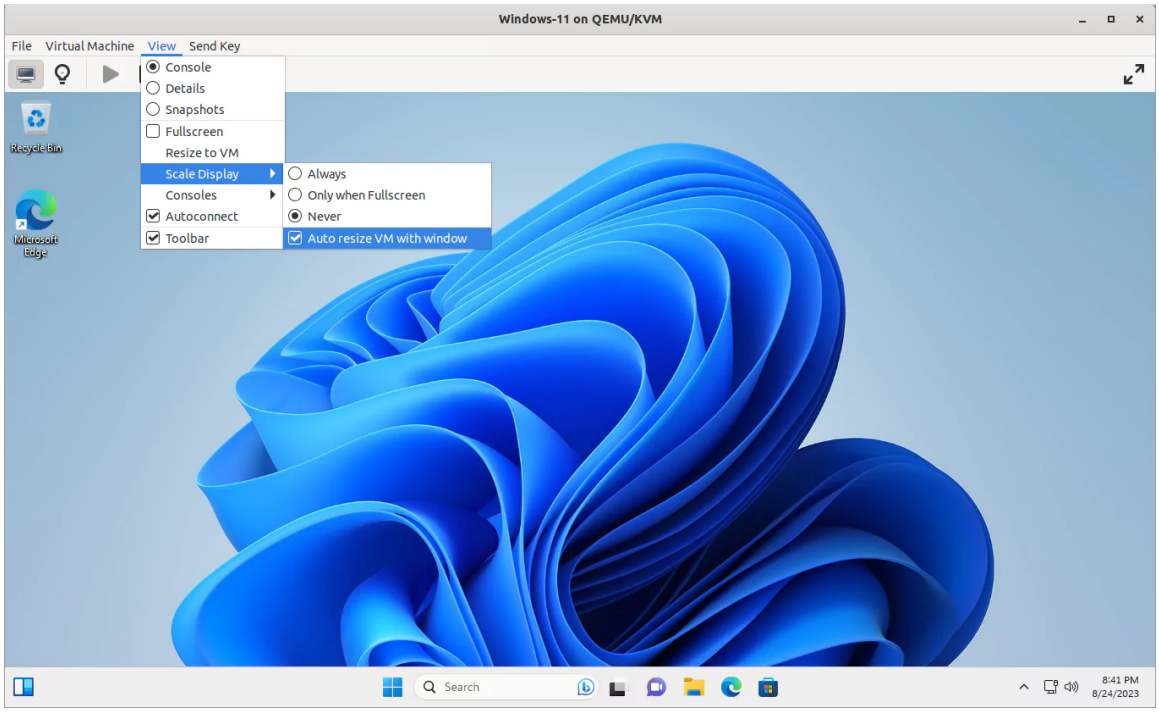


Finally, you must install VirtIO Windows Guest Tools. This package includes some optional drivers and services that will boost SPICE performance and integration. This includes the QXL video driver as well as the SPICE guest agent for copy and paste, automatic resolution switching, and other features.

So launch Windows Explorer, navigate to the CD Drive (E:), and double-click the **`virtio-win-guest-tools`** package to install it.

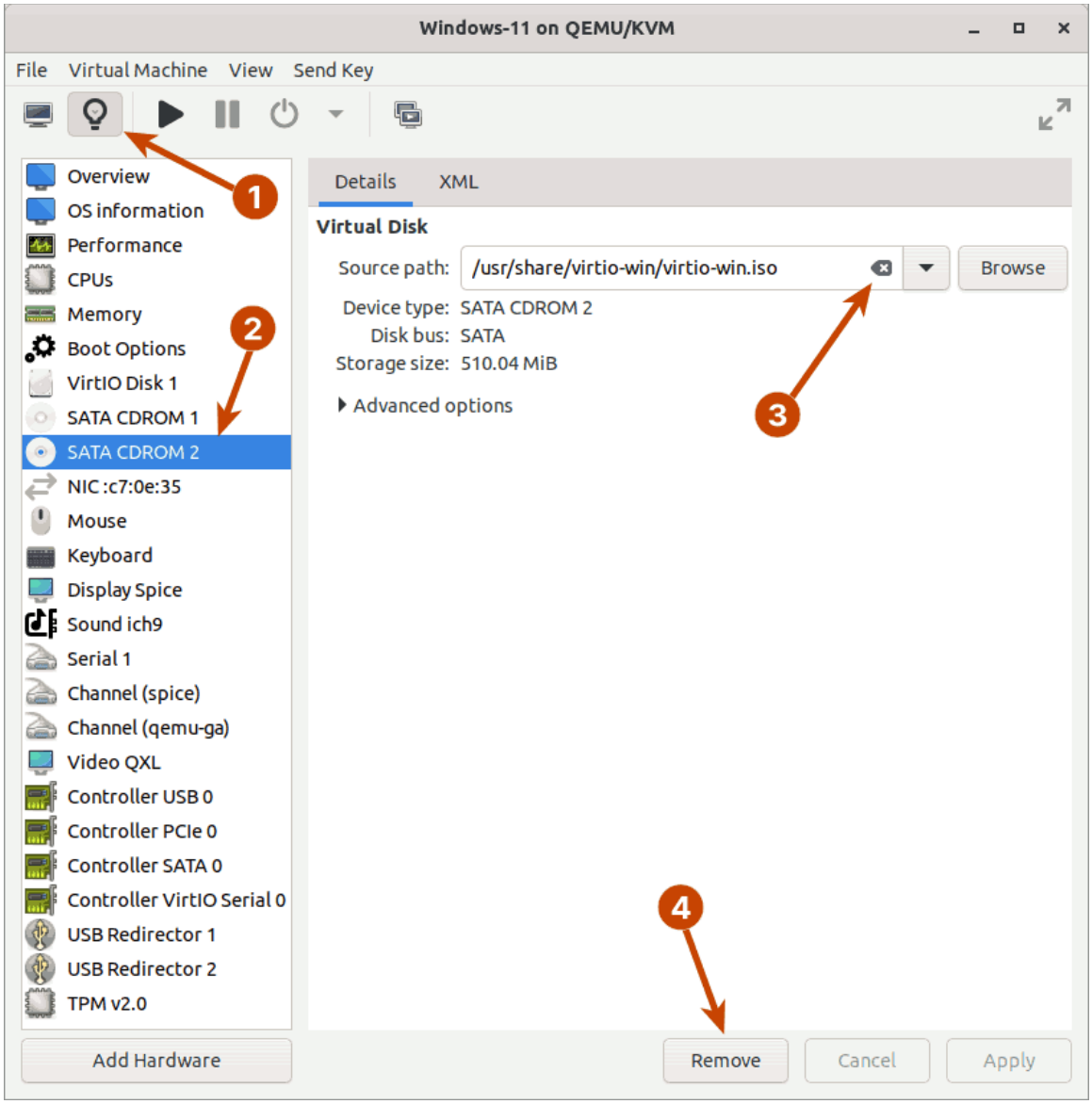


After installing the guest tools, on the Windows-11 KVM window, click View, Scale Display, and check the 'Auto resize VM with window' option. This will enable the Windows 11 guest window to automatically resize as you scale it.

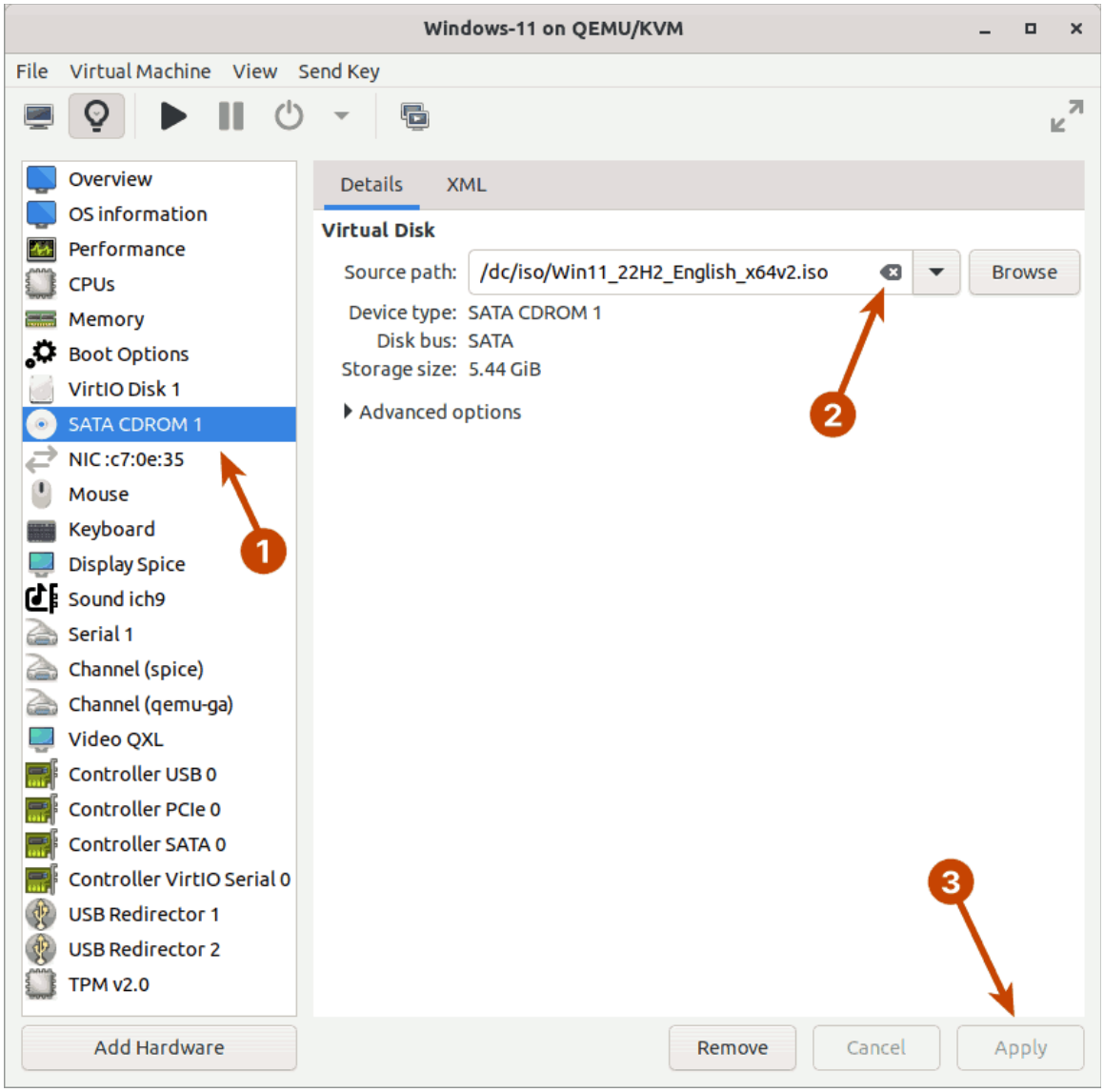


The Windows 11 operating system installation is now complete. Shut down the Windows 11 virtual machine.

Now that you've installed guest tools, you don't need the second CDROM drive. Click the lightbulb icon to access the hardware details. Unmount the `virtio-win.iso` image and then remove the second CDROM drive.



Unmount the ISO image of the Windows 11 installer from the first CDROM drive as well.

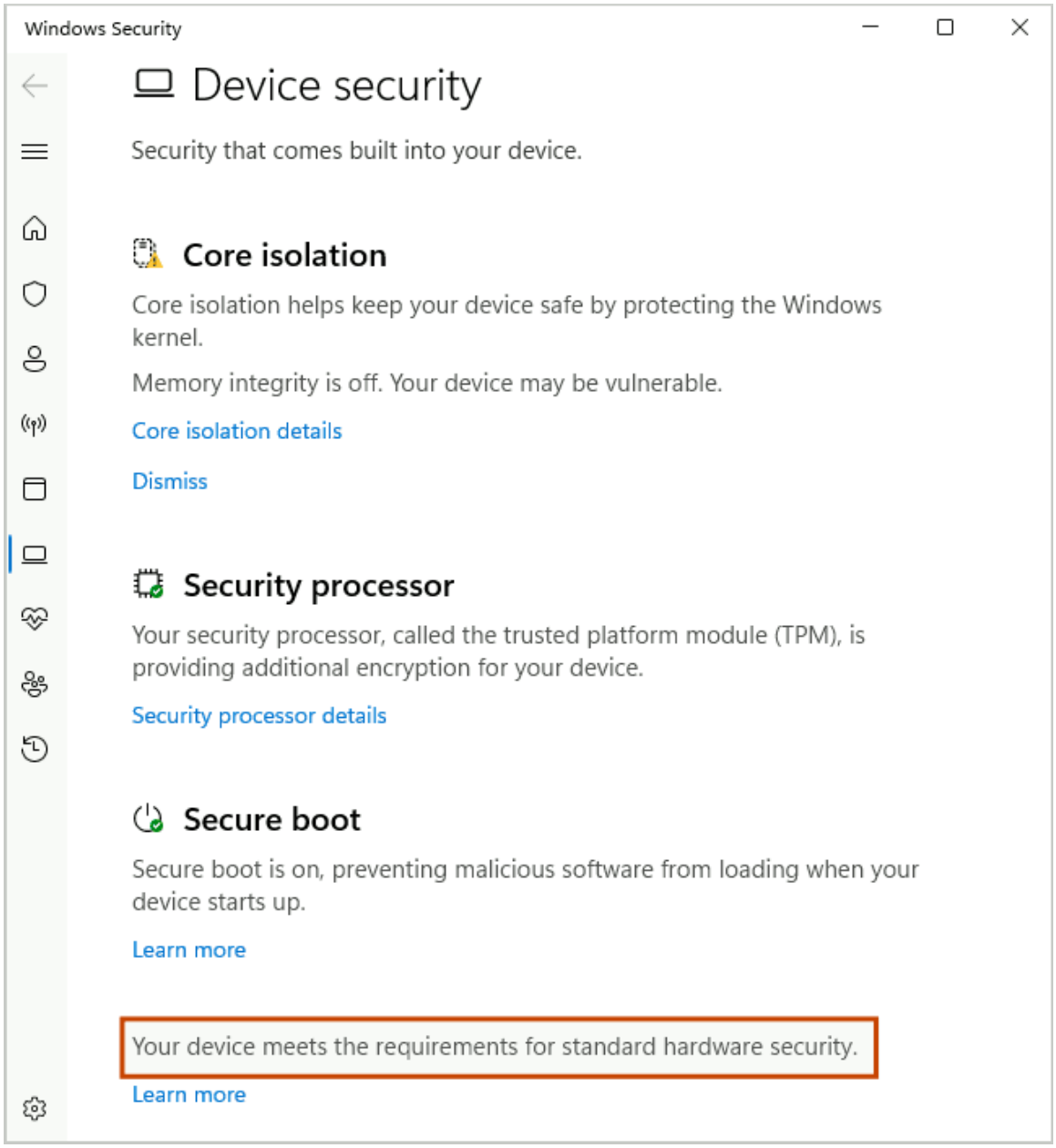


3. Enable Hardware Security on Windows 11

With the Q35 chipset selected, Secure Boot and TPM 2.0 enabled, and the latest WHQL-certified VirtIO drivers installed, your Windows 11 guest virtual machine already has standard security.

You can check if your VM passes standard security by opening the Device Security page.

To access the Device Security page, navigate to Settings > Privacy & Security > Windows Security > Device Security.



To make Windows 11 even more secure, you can enable Core Isolation.

Core isolation safeguards against malware and other attacks by separating computer processes from your operating system and device.

But before attempting to enable this feature, make sure that your processor supports it.

Your processor must meet the Windows Processor Requirements to enable this feature. If your processor is not on the list, skip this section and proceed to the next one.

Shut down your Windows 11 guest virtual machine. Open the virtual hardware

details page, then click the Overview option on the left panel and the XML tab on the right.

Under the **<cpu>** section, specify the CPU mode and add the policy flag.

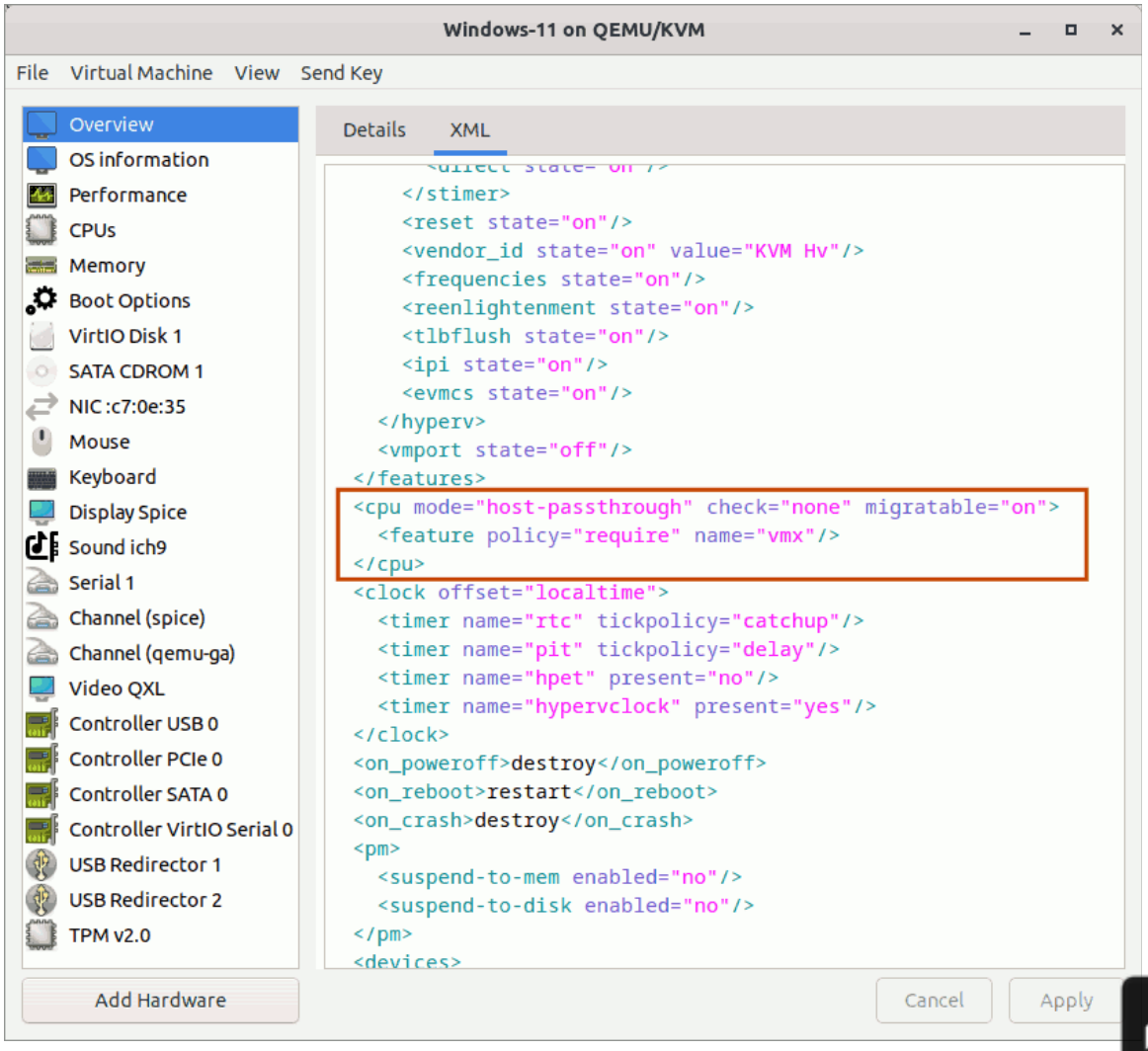
Replace this:

```
<cpu mode="host-passthrough" check="none" migratable="on"/>
```

With this:

```
<cpu mode="host-passthrough" check="none" migratable="on">
  <feature policy="require" name="vmx"/>
</cpu>
```

If you're using AMD CPUs, replace **vmx** with the **svm** policy flag.

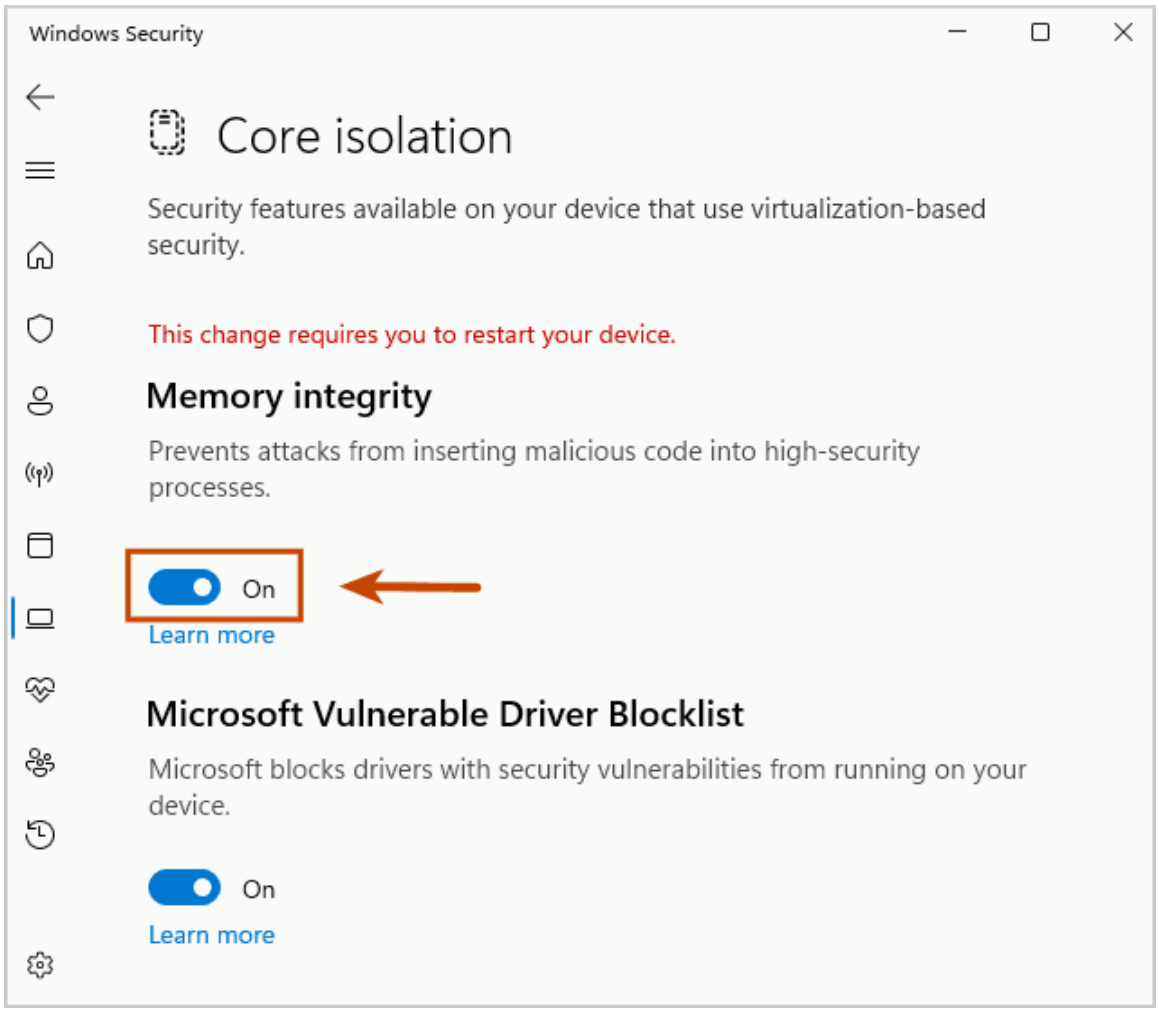


Start your Windows 11 guest virtual machine and navigate to the Core isolation

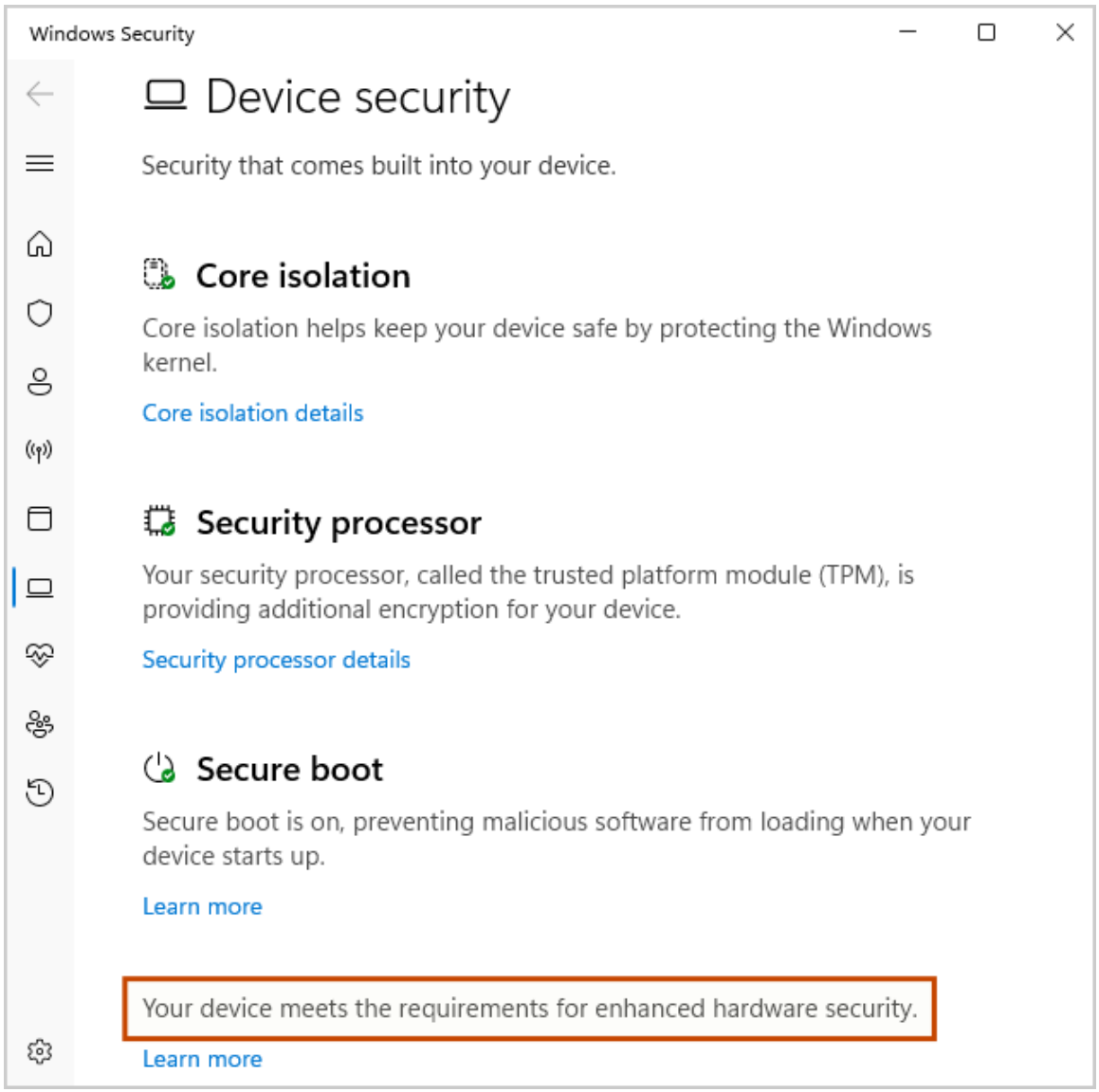
details page.

To access the Core isolation details page, navigate to Settings > Privacy & Security > Windows Security > Device Security > Core isolation details.

Toggle the Memory Integrity switch to enable it. When prompted, restart the Windows 11 VM.



After the reboot, check the security level of your device once more. Go to the Device Security page by navigating to Settings > Privacy & Security > Windows Security > Device Security.



You now have a Windows 11 guest virtual machine running with enhanced hardware security.

4. Optimize Windows 11 Performance

Configuring or disabling a number of Windows processes and features can help optimize the performance of a Windows 11 guest virtual machine.

The following are some suggestions for improving performance:

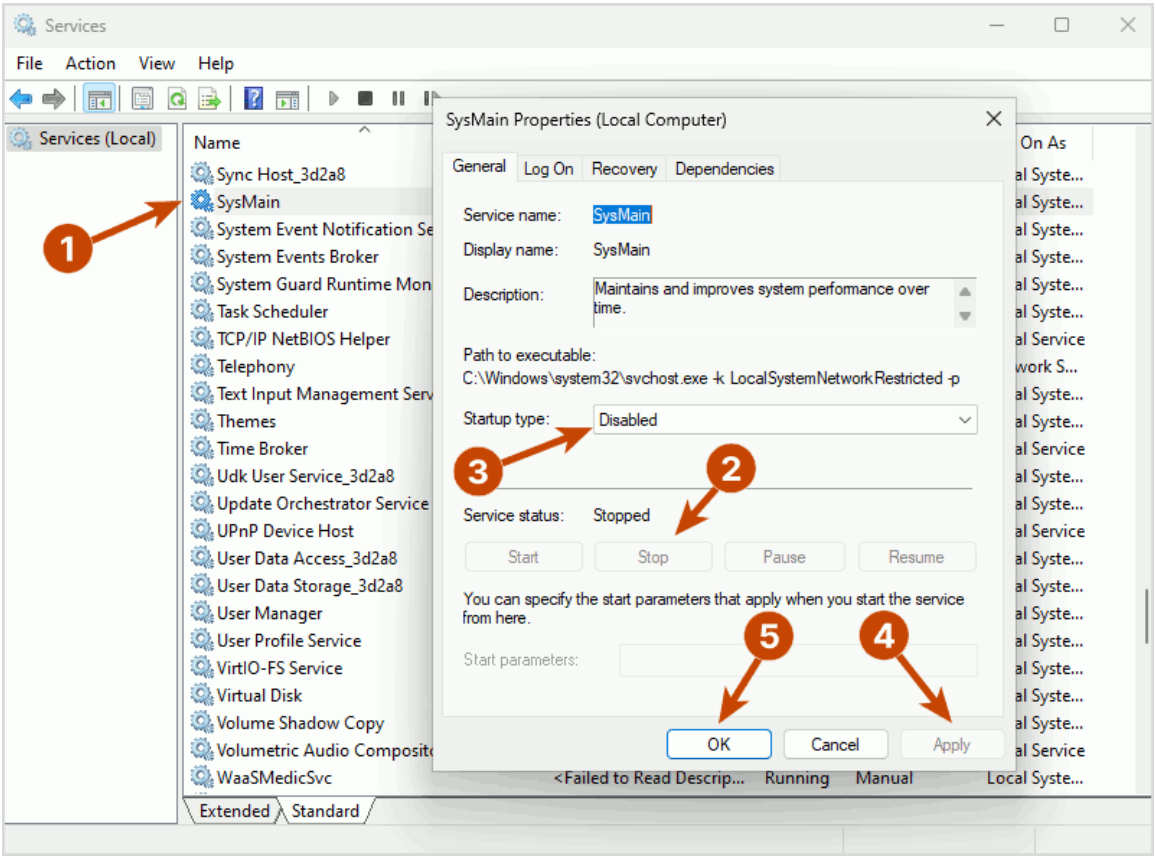
4.1. Disable SuperFetch

SuperFetch, also known as SysMain, is a standard Windows feature that preloads

the apps you use the most frequently. Although Superfetch is useful, it consumes a significant amount of CPU and RAM as a background service.

To disable Superfetch, type **`services`** into the search box and press `[Enter]` to open the Services window.

In the Services window, look for SysMain. Right-click it and select Properties. Then disable the service.



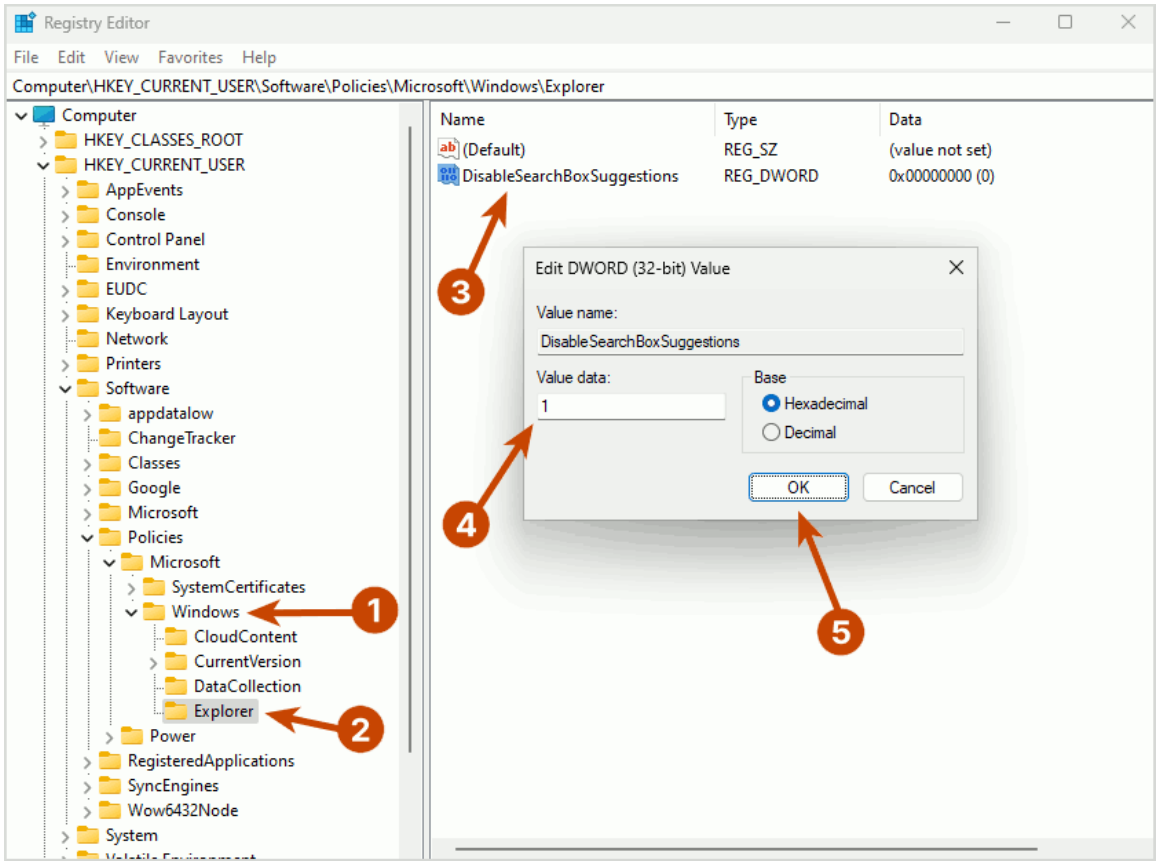
4.2. Disable Windows Web Search

When you search for something in the Windows Search box or Start menu, you may have to wait a few seconds as Windows retrieves your search results along with a list of suggested web results from Bing. Although this is a useful feature, you may dislike it and wish to disable it.

To disable web results on Windows 11, follow these steps:

1. Enter **`regedit`** into the search box and press `[Enter]` to launch the Registry Editor.

2. Browse to: `Computer\HKEY_CURRENT_USER\Software\Policies\Microsoft\Windows`.
3. Right-click the Windows key, select New, and then select the Key option. Enter Explorer as the key name and press `[Enter]`.
4. Now, right-click on the newly created Explorer key, select New, and then the DWORD (32-bit) Value option. Name the DWORD DisableSearchBoxSuggestions and press `[Enter]`.
5. Double-click the newly created DWORD DisableSearchBoxSuggestions and change its value from 0 to 1.



Close the Registry Editor window and restart your computer. You will now have fast-loading search results that do not retrieve results from the web.

4.3. Disable useplatformclock

When the Hyper-V extensions are enabled, setting the `useplatformclock` option in `bcdedit` to "yes" results in poor performance. As a result, disable this feature.

Open the Terminal as an Administrator and type the following command, then press `[Enter]`.

```
C:\> bcdedit /set useplatformclock No
```

4.4. Disable Unnecessary Scheduled Tasks

Review and disable any unnecessary scheduled tasks.

To get a list of all scheduled tasks, open the Terminal as an Administrator and run the following command:

```
C:\> Get-ScheduledTask
```

Use the command below to search for tasks that have the word '`schedule`' in their name.

```
C:\> Get-ScheduledTask -TaskName '*schedule*'

TaskPath                                    TaskName
--------                                    --------
\Microsoft\Windows\Defrag\                  ScheduledDefrag
\Microsoft\Windows\Diagnosis\               Scheduled
\Microsoft\Windows\UpdateOrchestrator\      Schedule Maintenance
\Microsoft\Windows\UpdateOrchestrator\      Schedule Scan
\Microsoft\Windows\UpdateOrchestrator\      Schedule Scan Static
\Microsoft\Windows\UpdateOrchestrator\      Schedule Wake To Work
\Microsoft\Windows\UpdateOrchestrator\      Schedule Work
\Microsoft\Windows\Windows Defender\        Windows Defender Sche
\Microsoft\Windows\WindowsUpdate\           Scheduled Start
```

I'm only going to disable the ScheduledDefrag task. It is entirely up to you which other scheduled tasks you wish to disable.

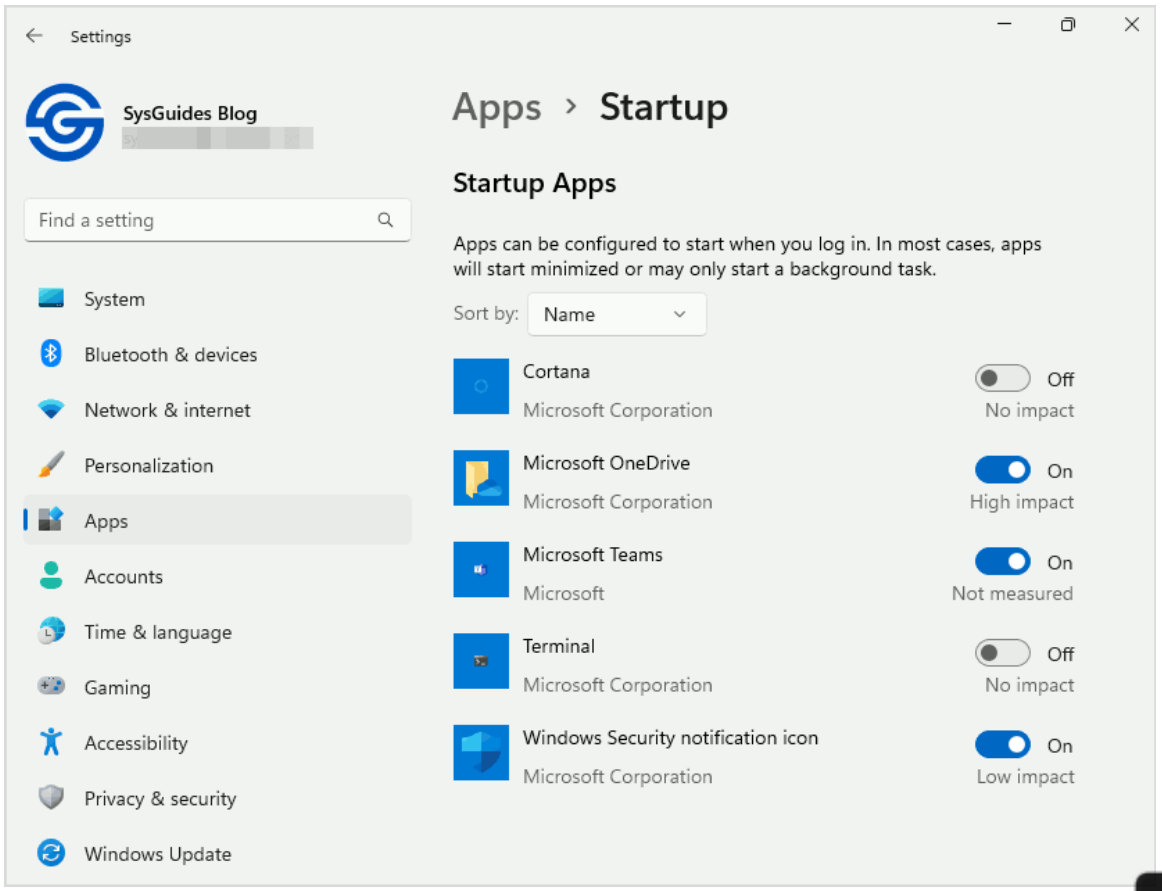
```
C:\> Disable-ScheduledTask -TaskPath '\Microsoft\Windows\Defi

TaskPath                    TaskName         State
--------                    --------         -----
\Microsoft\Windows\Defrag\  ScheduledDefrag  Disabled
```

4.5. Disable Unnecessary Startup Programs

Some programs start automatically and run in the background when you turn on your computer. You can disable these programs so that they do not start when your computer boots.

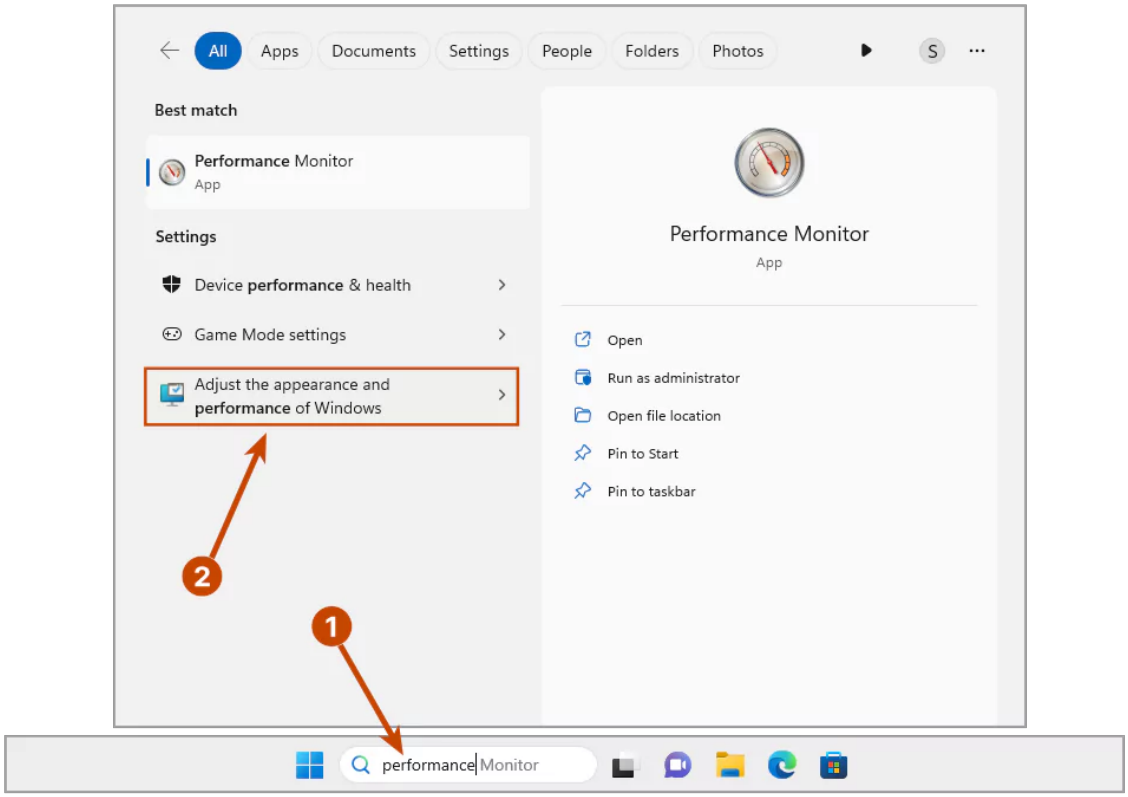
To stop a program from starting automatically, navigate to Settings > Apps > Startup. Then, turn off all programs that you don't need or use frequently.



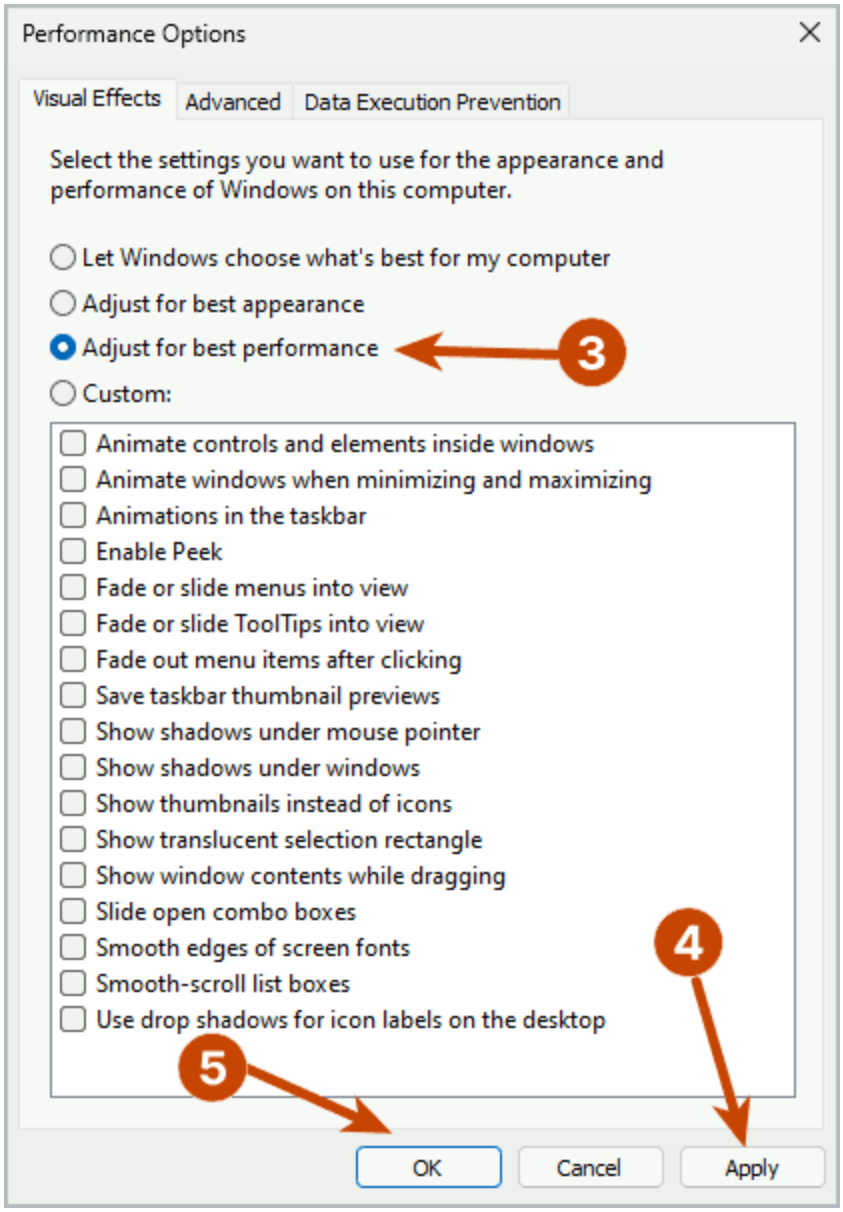
4.6. Adjust the Visual Effects in Windows 11

Many visual effects, such as animations and shadow effects, are included in Windows 11. These are visually appealing, but they can consume additional system resources and slow down your computer.

To disable visual effects in Windows, first type performance in the Search box, then select Adjust the appearance and performance of Windows from the list of results.



On the Visual Effects tab, select Adjust for best performance > Apply.



The process of properly installing a Windows 11 Virtual Machine on KVM has now been completed.

5. Conclusion

You can boost the performance of the Windows 11 guest virtual machine even further by turning off antivirus software, uninstalling unwanted software, and so on. These, however, are beyond the scope of this tutorial. You can look up optimizing Windows 11 on the internet, and there are numerous guides available.

If you want to share the host system files with your Windows guest virtual machine, please see my other blog on how to share files between the KVM host

and Windows guest virtual machine using Virtiofs.

6. Watch on YouTube

Tags: KVM QEMU Windows 11

← Previous: How to Install Fedora 38/39 with Full Disk Encryption, Snapshot and Rollback Support

Next: Share Files Between the KVM Host and Windows Guest Using Virtiofs →

Join the discussion

B I U S 1. • " </> {}

66 COMMENTS Newest

Bob M 18 days ago

I'm running Ubuntu 24.04 with the Cinnamon desktop environment. I can install Windows with no problem. It restarts and resizes the display without an issue. However my system crashes after I do the first set of updates. The error message is "system thread exception not handled". I'm unable to recover.

Any thoughts about how to debug this?

Thank you for this. Your instructions are very clear and comprehensive, and obviously a lot of work went into site.

Reply

Madhu Desai 18 days ago

Reply to Bob M

Author

Remove the XML line 'feature policy="require" name="vmx"' and try booting. And see if this solves the problem.

Reply

Zak J 23 days ago

Thank you. Your guide worked well with me Linux Mint 21.3 host. Your guides are detailed and written with meticulous detail.

Reply

Madhu Desai 23 days ago

Reply to Zak J

Author

You're most welcome.

Reply

Jasbir 1 month ago

You have written some great guides. Thanks for that

Reply

Jasbir 1 month ago

I just did a fresh install of Debian 12.6 on my wife's laptop. After this the next step was in install win11 in a KVM. I used your guide as there is a lot of useful info which I had no knowledge of earlier. After installing the guest additions and rebooting the guest additions were not working. I remember reading on the net where someone commented that Win11 does not do a proper shutdown but does a hibernation instead. after some googling found a solution of how to disable Win11 hibernation from the command line. After doing that the guest additions worked.
Also the embedded Windows key was extracted and saved to a text file once I had Debian installed. I used this key in this install and this was accepted.
the command for the extraction of the key under linux is
commands
sudo cat /sys/firmware/acpi/tables/MSDM
or
sudo hexdump -s 56 -e '"MSDM key: " /29 "%s\n"' /sys/firmware/acpi/tables/MSDM
I prefer the second one.

to disable hibernate run as administrator in a terminal
`powercfg.exe /hibernate off`

Reply

Qu, Yi 1 month ago

Great guide

Reply

Madhu Desai 1 month ago

Reply to Qu, Yi

Author

Thanks.

Reply

Pram 1 month ago

Can this be implemented in Windows 11 IoT LTSC?

Reply

Omar 2 months ago

For some reason removing the usb tablet device makes the installation hang on my system (`uname -a` output: Linux vivo 6.9.1-zen1-2-zen #1 ZEN SMP PREEMPT_DYNAMIC Wed, 22 May 2024 13:47:12 +0000 x86_64 GNU/Linux).

Reply

Nickolas 2 months ago

Again, an excellent guide! Thank you very much for putting so much time into it!

Reply

Madhu Desai 2 months ago

Reply to Nickolas

Author

You're most welcome.

Reply

Liron 3 months ago

Thanks man! very helpful.
It'd probably took some time to make this guide, much appreciated

Reply

Madhu Desai 3 months ago

Reply to Liron

Author

You're most welcome

Reply

NebKVM 3 months ago

I followed the instructions from this site, trying to install Windows 11 from official Microsoft IOS image, getting unable to boot from cd-rom.

failed to load uefi qemu dvd-rom qm00003

Reply

RCI 3 months ago

Core Isolation is not working for me.

Reply

Alessandro Araujo 2 months ago

Reply to RCI

Core Isolation failed.

Reply

angela slaney 4 months ago

Further to my screen resolution issues I went back to configuring the KVM and deselected QXL under Video.

The Red Hat driver wasn't working and Device Manager showed an exclamation. I selected virtio as the Video model. When restarted a

RedHat driver was in place on Windows and graphics resolution was available.

And after restarting virt-manager I had the option to auto resize the machine.

So use Virtio for video graphics!

Reply

angela slaney 4 months ago

Thanks for this. It has been super helpful.
I have an issue though. It first shows up as a greyed-out option for Scale Display . Auto resize VM to window and then under Windows display options the resolution is greyed out and fixed to1200 x 800. And I have 3480x2400 Dell laptop.
I have also a Win10 virtual device that was created years ago with VirtualBox and I used qemu to translate. That virtual machine allows resolution change t0 my hardware max. I'm out of ideas. Can you help?

Reply

Author

Madhu Desai 4 months ago

Reply to angela slaney

It appears that the latest virtio-win version 0.1.248 does not include qxl support. So, you should instead use the stable virtio-win version 0.1.240.

You can download the stable version from here: stable-virtio

In Windows, uninstall virtio-win-guest-tools version 0.1.248 and reinstall virtio-win-guest-tools from the stable virtio-win 0.1.240 ISO.

If you're using Fedora, first uninstall virtio-win version 0.1.248. Then, in the file /etc/yum.repos.d/virtio-win.repo, disable the latest version by setting enabled=0 under the section [virtio-win-latest]. Then, install virtio-win version

0.1.240.

Reply

angela slaney 4 months ago

Reply to *Madhu Desai*

Thanks for taking the time to reply. That has fixed it. It also gives me cut-and-paste between host and guest. Ta!

Reply

Qu, Yi 1 month ago

Reply to *Madhu Desai*

Your comment helped me much.

Reply

Albert 1 month ago

Reply to *Madhu Desai*

THANKS!

Reply

Sylvain 4 months ago

When I start windows vm, I'm stuck on the boot screen, where it says:

"Press any key to boot from CD or DVD..... (yes, there's a lot of dot)
BdsDxe: No bootable options or device was found.
BdsDxe: Press any key to enter the Boot Manager Menu"

screenshoot : https://ibb.co/JtyMdW3

When I press a key I enter the boot menu but I didn't manage to make windows start.

Here's my vm manager boot options:
Enable boot menu
VirtIO Disk1
SATA CDROM 1

SATA CDROM2
NIC:....
screenshot: https://ibb.co/M8CPLrw

Thanks for the very detailed guide!

Reply

Madhu Desai 4 months ago

Reply to Sylvain

Author

Did you press any key when asked to press any key to boot, or did you just wait it out?

In the second screenshot, you have also enabled the boot menu and the NIC. Do you intend to install Windows using PXE? If you are not going to install Windows via PXE, uncheck both 'enable boot menu' and 'NIC'.

Reply

Sylvain 4 months ago

Reply to Madhu Desai

I don't know what PXE, so I unchek both 'enable boot menu' and 'NIC'.
If I don't press any key, nothing happen, so I press a key and end up in what looks like a bios, screenshot: https://ibb.co/Y27v4w3

Reply

Patrik G 4 months ago

Sorry to double post and say that fedora don't ship the spice driver and agent any more in virtio, so you need to install them manually. See this issue https://github.com/virtio-win/kvm-guest-drivers-windows/issues/1054

Can be find at:
https://www.spice-space.org/download/binaries/spice-guest-tools/spice-guest-tools-latest.exe

https://www.spice-space.org/download/windows/qxl-wddm-dod/qxl-wddm-dod-0.21/spice-qxl-wddm-dod-0.21.zip'

Last edited 4 months ago by Patrik G

Reply

Patrik G 4 months ago

Sorry to say, that the fedora virtio removed the windows spice agent and driver install.
So you need to add them manually i took them from
https://www.spice-space.org/download/windows/spice-guest-tools/spice-guest-tools-latest.exe
https://www.spice-space.org/download/windows/qxl-wddm-dod/qxl-wddm-dod-0.21/spice-qxl-wddm-dod-0.21.zip

Reply

Diana 4 months ago

Can you please provide a guide on how to upgrade an existing installation from Windows 10 to windows 11? I've set up my qemu/kvm like in this tutorial, for win11. My license required I install windows 10 and then upgrade to 11. However, all attempts to upgrade the operating system via Windows update result in it being reverted when the installation reaches 28% or so. The same occurs when I try to update using an ISO/ CD image. Any ideas?

Reply

bob dawson 4 months ago

Please do "How to Properly Install a Windows 11 Virtual Machine on Proxmox"

Reply

fixxs 5 months ago

Excellent guide. Almost everything works for me -audio sound & mic,

camera-, but I am having troubles with bluetooth card. It is a 003:007 Intel Corp. AX201 Bluetooth. It is detected in win11 but with error 10 (in details problem code is 0000000A) have you any idea to solve it?

Reply

Madhu Desai 5 months ago

Reply to fixxs

Author

I think you should try this 'How to fix onboard Intel Bluetooth Error Code 10 on Windows guest'. It is old, but hopefully it will fix the problem.

Reply

fixxs 5 months ago

Reply to Madhu Desai

I tried but it does not work, at the moment to save the XML the addition disappears.I imagine that is related to <domain type="kvm">. and the solution proposed is for QEMU

Reply

Author

Madhu Desai 5 months ago

Reply to fixxs

I do not have a bluetooth card; instead, I use a bluetooth dongle (TP-Link).

This worked for me. In the Windows 11 Virtual Machine Manager's virtual hardware, I selected 'Add new hardware' -> 'USB host devices' and added my TP-Link USB Bluetooth device.

You should probably look for and add your device under 'Add new hardware' -> 'PCI Host Device'.

My Bluetooth headphones were detected in Windows 11. Hopefully, this solves your problem.

Reply

Benjamin Poirier 5 months ago

As mentioned in a few other comments, the instructions regarding the configuration of Hyper-V Enlightenments do not quite work as-is with AMD processors. The VM fails to start with the error:
qemu-system-x86_64: Hyper-V enlightened VMCS (hv-evmcs) is not supported by kernel

Indeed, https://www.qemu.org/docs/master/system/i386/hyperv.html mentions
"hv-evmcs [...] The feature is Intel-only."

Removing "<evmcs state="on"/>" from the XML configuration is enough to avoid the problem.

Reply

Author

Madhu Desai 5 months ago

Reply to Benjamin Poirier

Thanks for the suggestion. I'll add a note about this.

Reply

Load More Comments

Search the Website

Search...

Search

Latest Posts

How to Properly Dual-boot Windows 11 and Ubuntu

How to Install Fedora 40 with LUKS Full Disk Encryption, Snapshot, and Rollback Support

How to Create and Manage Internal Snapshots in KVM

Share Files Between the KVM Host and Windows Guest Using Virtiofs

How to Properly Install a Windows 11 Virtual Machine on KVM

Popular Categories

Distro (13)

Security (8)

Storage (15)

Virtualization (8)

WebDev (1)

Windows (3)

Like this Blog?

Readers like YOU help me keep this blog alive. If you like my work and want to thank me, you can buy me a coffee!

Buy Me a Coffee