

Oracle VirtualBox on Linux HOST (Bare Metal) installation guide:

Ref: <https://kifarunix.com/install-virtualbox-7-on-debian-12/>

```
sudo apt update
```

```
sudo echo 'deb http://ftp.de.debian.org/debian bullseye main ' | sudo tee  
/etc/apt/sources.list.d/debian11.list
```

```
sudo apt update
```

https://www.virtualbox.org/wiki/Linux_Downloads

```
wget https://download.virtualbox.org/virtualbox/7.0.8/virtualbox-7.0_7.0.8-  
156879~Debian~bullseye_amd64.deb -P ~/Downloads/
```

```
sudo apt update
```

```
sudo apt install ~/Downloads/virtualbox-7.0_7.0.8-156879~Debian~bullseye_amd64.deb
```

```
sudo rm -rf /etc/apt/sources.list.d/debian11.list
```

Tweak:

1. Run VirtualBox.
2. Click on the New Button.
3. Give your Virtual Machine a name.
4. a) (VM) Type: Microsoft Windows. b) Version: Windows 10 (64-bit).
5. Click on the Next button.
6. Allocate Memory (RAM) (3072 or 4096 MB).

7. Choose 'Create a Virtual Hard Disk Now'. Click on the Create Button.

8. Hard Disk File Type: VDI (VirtualBox Disk Image) -> Next.

9. Storage on Physical Hard Disk: Dynamically Allocated -> Next.

10. File Location and Size:

Location: `/home/yourusername/VirtualBox VMs/yourvmname/yourvmname.vdi`

(Choose the default location).

Size: 25.00 GB. OK & Exit.

11. Click on the Settings Button.

a) General -> Advanced -> Shared Clipboard + Drag'n'Drop -> Bidirectional.

b) System -> Processor -> Processor(s) -> 2,4,8 (depending on your actual CPU). Extended Features -> Enable PAE/NX (Uncheck the PAE/NX option if it creates any trouble in the future.)

c) Display -> Acceleration -> Enable 3D Acceleration.

d) Shared Folder from Linux Host (Bare Metal) to Windows Guest (VM):

Storage -> Select the Empty CD ROM Drive -> Attributes -> Optical Drive -> Choose a Disc File -> Select the ISO from your file manager.

e) Shared Folder -> On the Top Right Corner, find a folder icon with a plus sign. Click on the button 'Adds new shared folder'.

f) Create a Shared folder on your Actual Machine (the Linux HOST). Copy the path to that folder.

g) Folder Path: Other -> Select the shared folder from the file browser. Select Automount. OK.

h) Press OK to Close the Settings Dialogue.

Windows 10 Guest Installation:

12. Click on the Start Button and Install Windows 10. Complete the installation.

13. From the VirtualBox Menu Bar, Devices -> Optical Drives -> Eject/Remove the Windows 10 ISO.

VBox Guest Addition:

14. Devices (Menu) -> Insert Guest Additions CD Image...

a) VBox will request you to download the required setup image files.

Allow VBox to download what it tries to download and install the Guest Additions.

b) On the Guest VM (Windows), find 'This PC'. You'll find the Guest Additions on a Virtual Drive. CD Drive (D): VirtualBox Guest Additions.

c) Find the executable 'VBoxWindowsAdditions.exe'. Double-click and install the Guest Additions. Reboot the VM (the Windows guest) when prompted.

d) Now you're all set.

NOTE: Without the Guest Additions CD, you won't have access to the shared folder, and the Bidirectional Clipboard will also not work.

Install some basic Windows utilities:

Since you're not going to use an antivirus application to keep the Windows VM running at a decent speed, you'll have to block the internet. TinyWall Firewall will let you block the internet connection. Anytime you can change the firewall mode to connect to the internet. The default Windows text editor is frustrating. It can't handle Linux Line Endings and Unicode characters properly. Notepad2-mod will solve the problem. 7-Zip will be very useful to extract compressed archives straight from the Windows VM.

TinyWall Firewall:

<https://tinywall.pados.hu/>

Notepad2-mod:

<https://xhmikosr.github.io/notepad2-mod/>

7-Zip:

<https://www.7-zip.org/>

Now you're almost ready to use the VM.

Try a few Windows exclusive programs:

I'll face too many troubles without a few Windows programs. Unfortunately, those programs won't run under WINE either.

Here's what I needed:

Nikon NX Studio:

<https://downloadcenter.nikonimglib.com/en/download/sw/208.html>

https://imaging.nikon.com/lineup/software/nx_studio/

BluffTitler:

<https://www.outerspace-software.com/blufftitler>

Create a backup of the VM.

Backup the VM's Folder (not the shared one). If you mess up the guest Windows machine at some point, you will get a fresh copy of the guest VM from that backup.

Just don't expect a VM to run as smooth as a real machine. Know that it somehow works. A lot of games won't perform well inside a VM because they need access to a real machine with a dedicated GPU. Some of them will simply refuse to get installed.

Use the newly set up VM if it works for you.

Thanks!