

Virtual Machine, errors, and installation

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Outline

- Basics of Virtual Machines.
- Installation Prerequisites.
- Errors and glitches.
- VBox Installation

What is Virtual Machine

A virtual machine (VM) is a software program or operating system that not only exhibits the behavior of a separate computer but is also capable of performing tasks such as running applications and programs like a separate computer. It is backed by physical resources of a host.

Terminology

Host OS: Running on physical computer.

Guest OS: Running inside host OS in emulated environment.

Virtual Machine: Set of files that make up a guest OS.

Guest Additions: Special software package installed inside VM to improve performance of the guest OS and to add extra features.

Why we need VM

- To use/try different/multiple OS.
- To run old/unsupported application in old operating system.
- To test new software as a user and developer.

Installation Prerequisites or cause of common errors

Prerequisites

- Virtualization should be enabled in BIOS.
- At least 10 GB of free space.
- Lots of memory (8 GB or more recommended).
- Hyper-V disable (for windows-10 user only if Vbox is very slow).

How to enable virtualization

Windows Users

- Disable fastboot from power option.
- Reboot your OS.
- Press the BIOS Key [F2/F10/F12]
- Enable the Virtualization

Linux Users

- Reboot your OS.
- Press the BIOS Key [F2/F10/F12]
- Enable the Virtualization



When I press the sleep button:

Sleep

Password protection on wakeup

☒ Require a password (recommended)

When your computer wakes from sleep, no one can access your data without entering the correct password to unlock the computer. [Create or change your user account password](#)

☐ Don't require a password

When your computer wakes from sleep, anyone can access your data because the computer isn't locked.

Shutdown settings

☒ Turn on fast startup (recommended)

This helps start your PC faster after shutdown. Restart isn't affected. [Learn More](#)

☒ Sleep

Show in Power menu.

☐ Hibernate

Show in Power menu.

☒ Lock

Advanced

Lenovo BIOS Setup Utility

CPU Setup

EIST Support

[Enabled]

Core Multi-Processing

[Enabled]

Intel(R) Virtualization Technology

[Disabled]

VT-d

[Disabled]

C1E Support

[Enabled]

C State Support

[C1C3C6C7]

Turbo Mode

[Enabled]

CPU ID

306C3

Microcode Revision (MM/DD/YYYY)

00000019 (02/26/2014)



Main Security Configuration Boot Options Exit

Language

[English]

Virtualization Technology

[Enabled]

SATA Emulation

[AHCI]

POST Messages

[Disabled]

After Power Loss

[On]

Remote Wakeup Boot Source

[Local Hard Drive]

Wake on LAN Power-On Password Policy

[Require Password]

► BIOS Power-On

Num Lock State at Power-On

[On]

S4/S5 Wake on LAN

[Disabled]

► Device Options

► Thermal

► UEFI HII Configuration

Runtime Power Management

[Enable]

Idle Power Savings

[Extended]

SATA Power Management

[Enabled]

Main Devices Advanced Power

Lenovo BIOS Setup Utility

Security

Startup

Administrator Password

Not Installed

Power-On Password

Not Installed

Set Administrator Password

Enter

Set Power-On Password

Enter

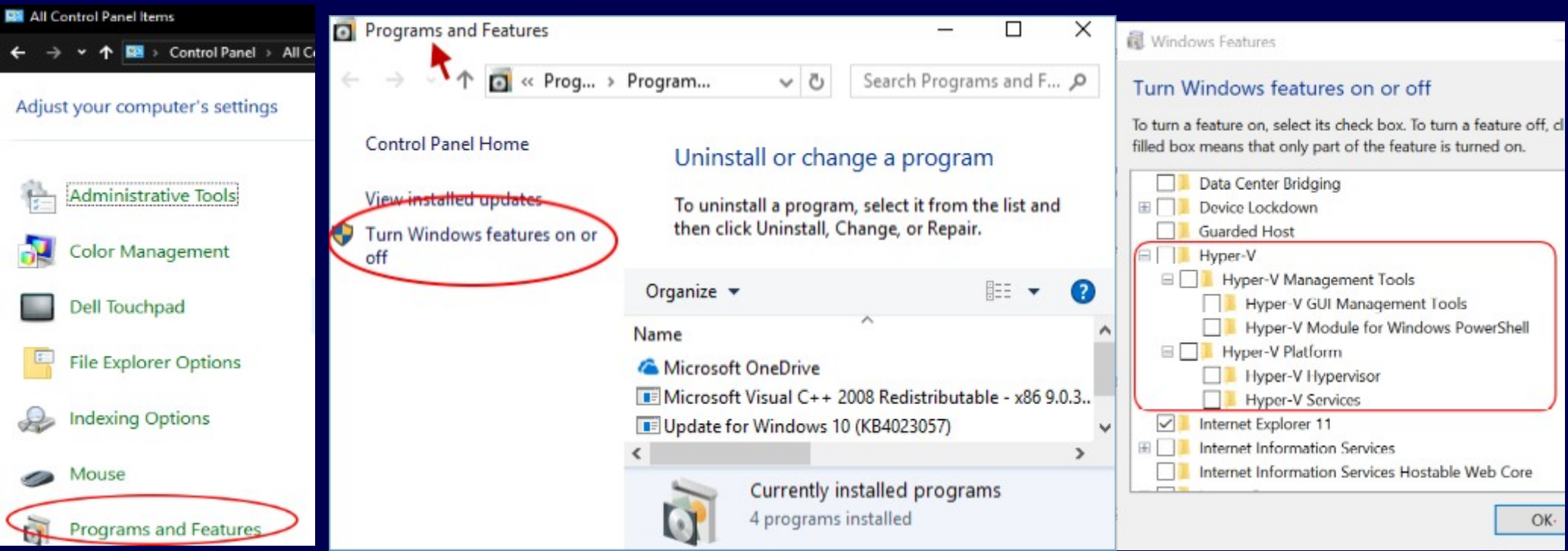
Lenovo Service Engine

[Enable]

► Secure Boot

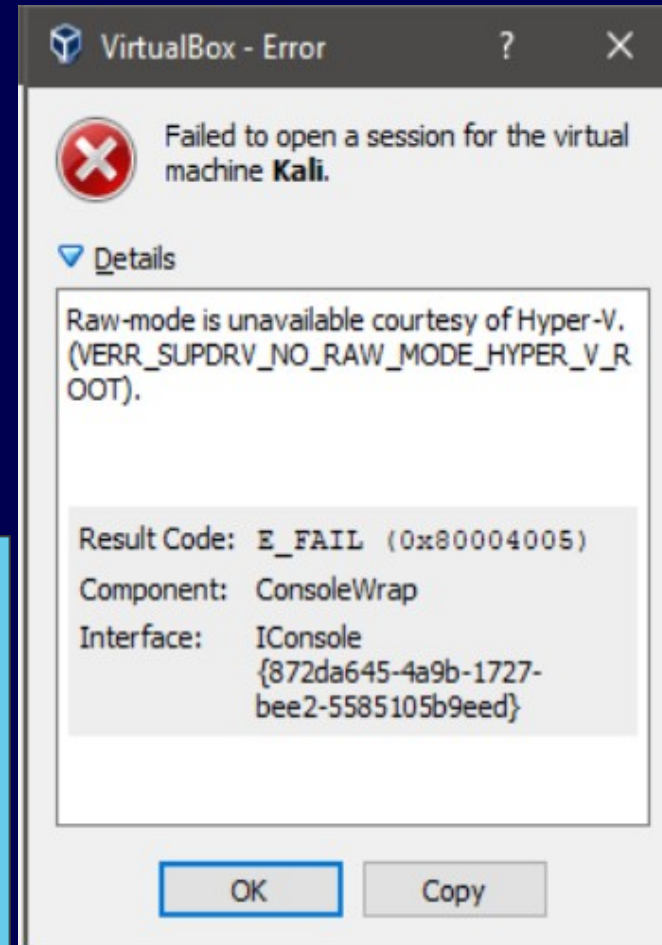
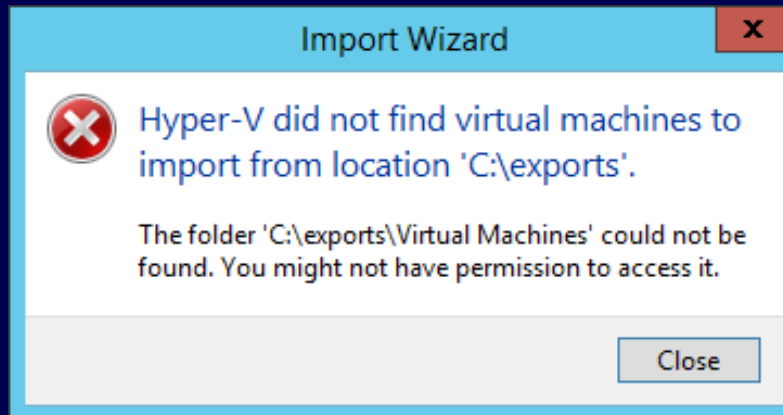
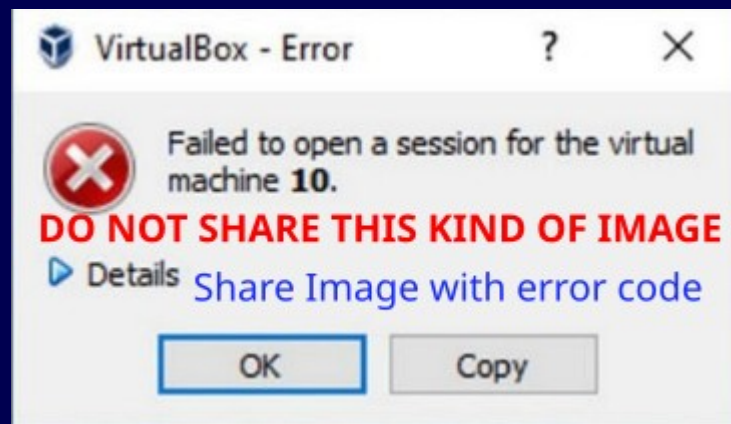
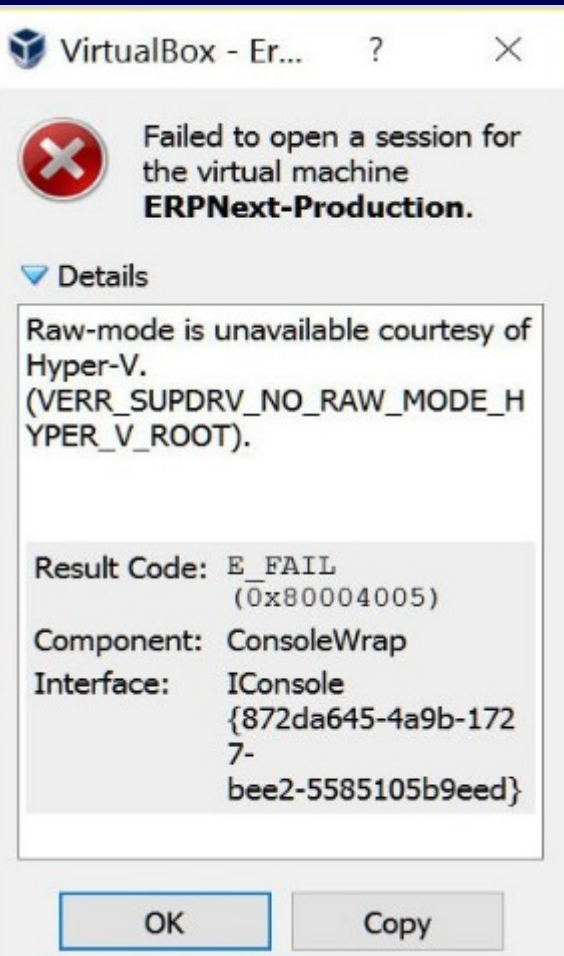
How to disable Hyper-V (Optional)

- Control Panel → select “Programs and Features” → select “Turn Windows features on or off”. → expand Hyper-V → expand “Hyper-V Platform”, and then clear the Hyper-V Hypervisor check box.
- Open cmd as admin and type ---> `bcdedit /set hypervisorlaunchtype off`

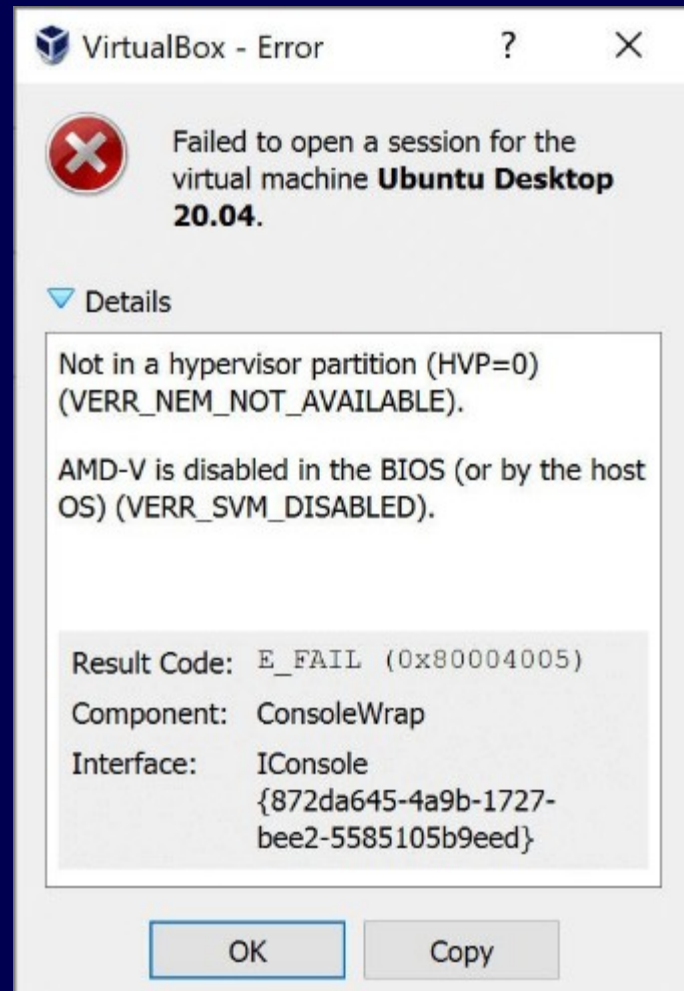
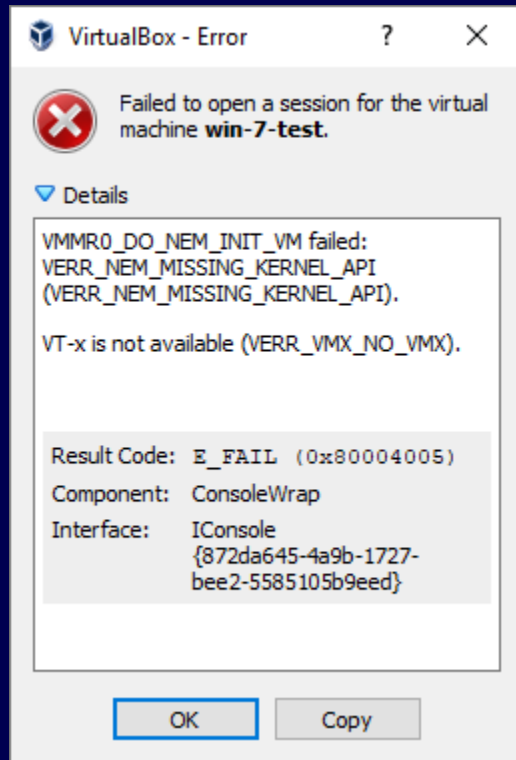
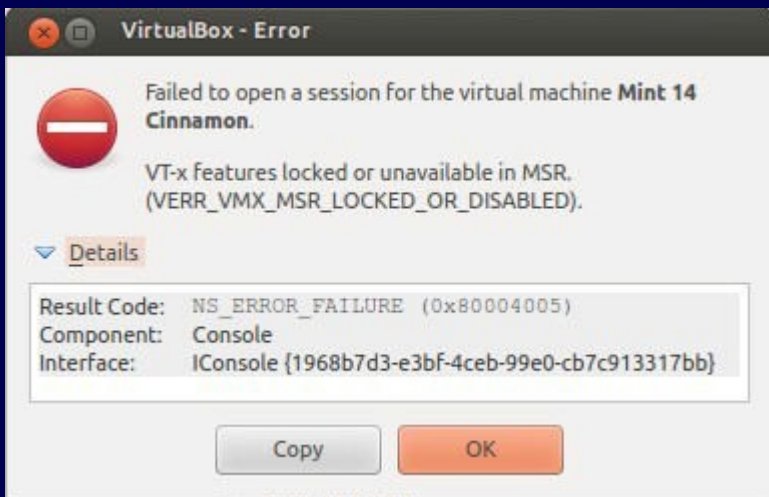
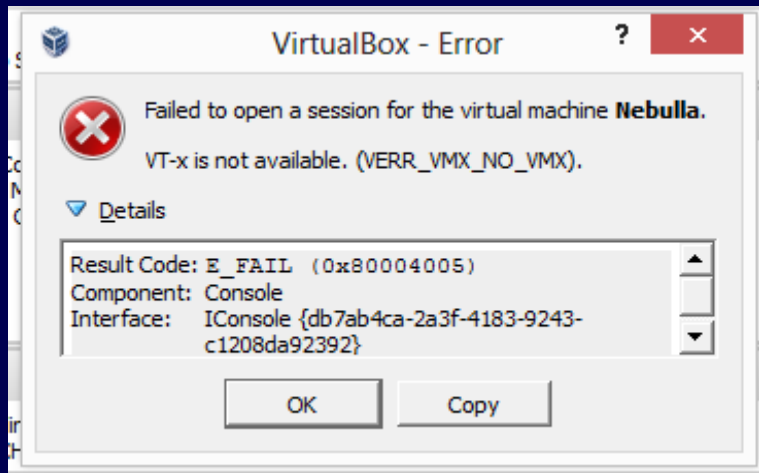


Errors and Glitches

Errors due to enabled Hyper-V

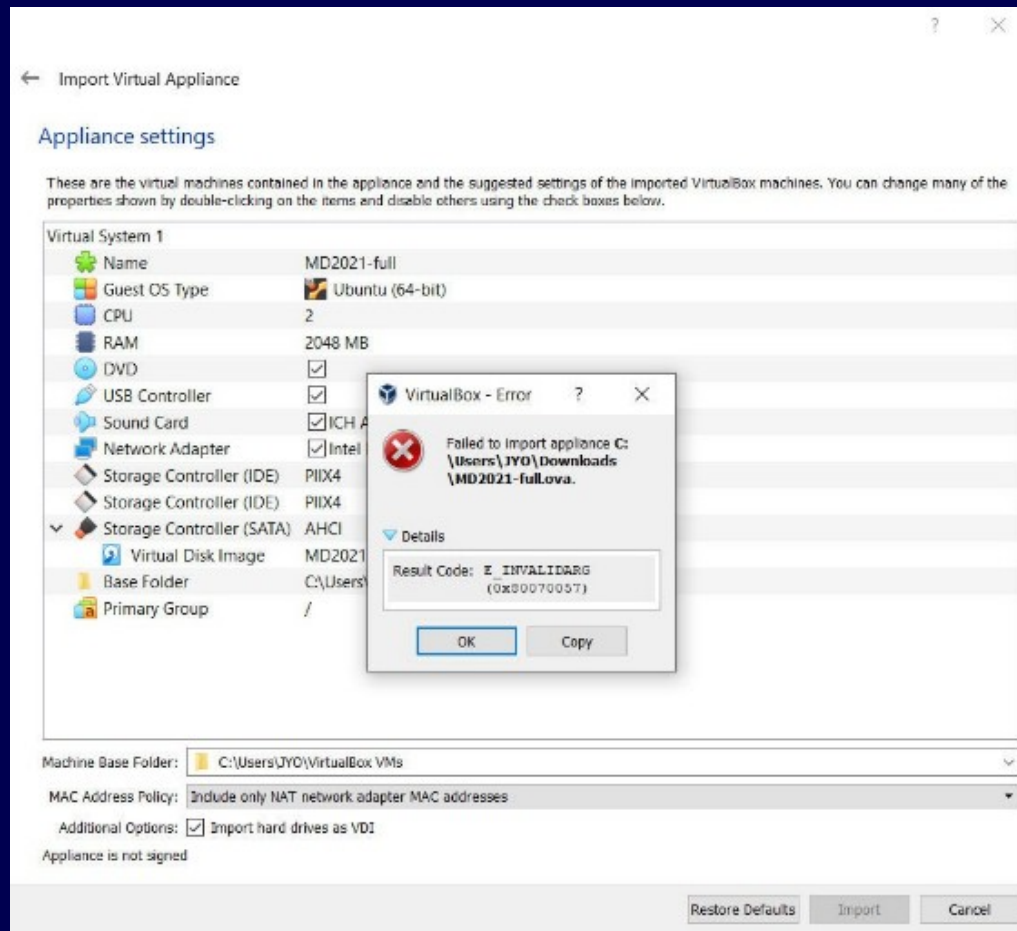
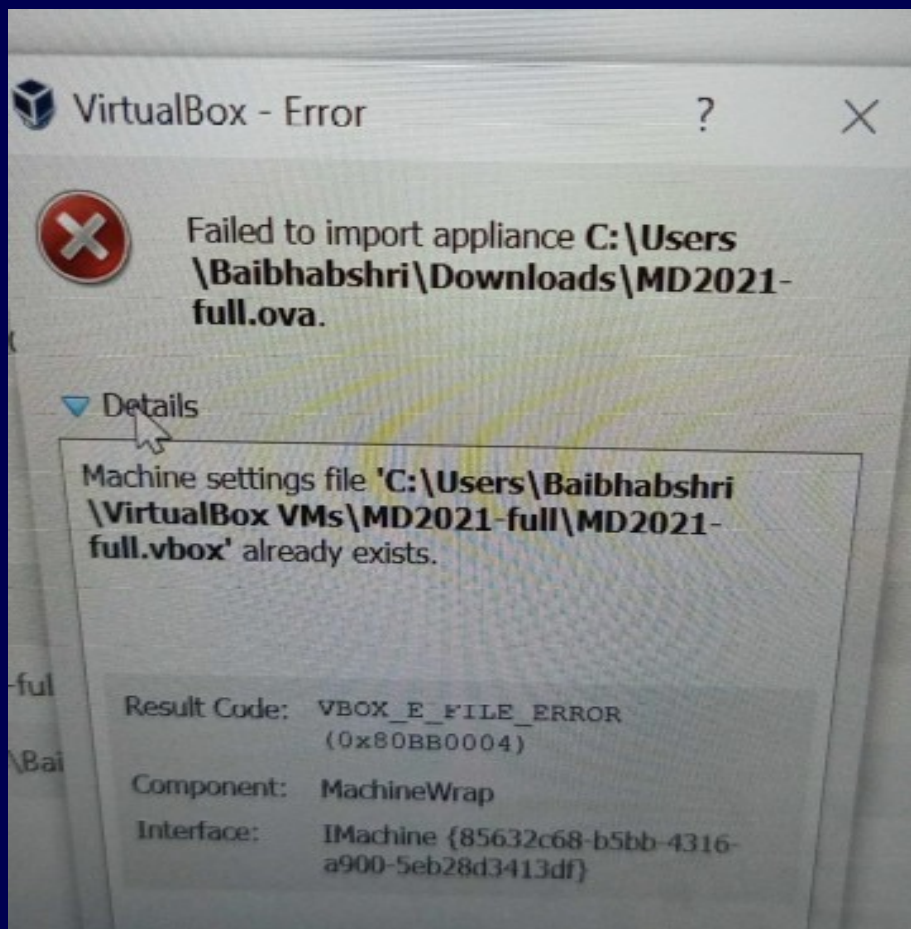


Errors due to disabled virtualization



Erros due to duplicate file.

It generally occurs when you import ova file 2nd time





Failed to acquire the VirtualBox COM object.

The application will now terminate.

▼ Details

Error in C:\Users\SREESAILA\VirtualBox
VirtualBox.xml (line 20) – UUID
"{00000000-0000-0000-0000-000000000000}" has
zero format.

F:\tinderbox\win-6.1\src\VBx\Main\src-server
VirtualBoxImpl.cpp[740] (long __cdecl
VirtualBox::init(void)).

Result Code: E_FAIL (0x80004005)

Component: VirtualBoxWrap

Interface: IVirtualBox {d0a0163f-e254-4e5b-
a1f2-011cf991c38d}

Callee: IVirtualBoxClient {d2937a8e-
cb8d-4382-90ba-b7da78a74573}

OK

Copy

VirtualBox - Critical Error



Failed to create the
VirtualBoxClient COM object.

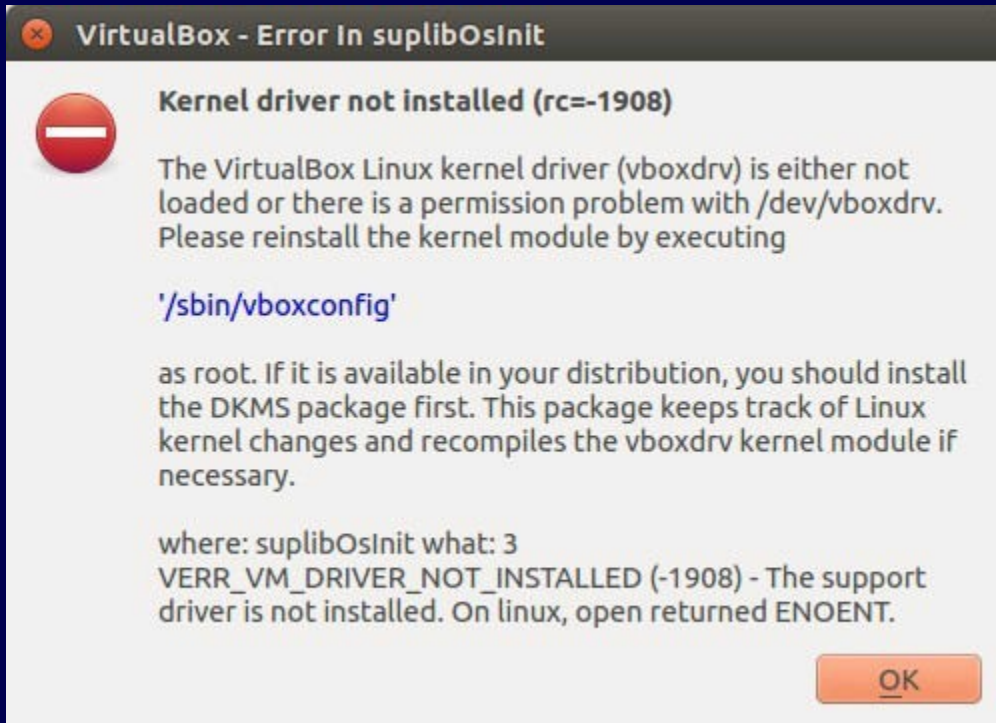
The application will now terminate.

▶ Details

Copy

OK

Errors on Linux



Execute the following commands

```
sudo /usr/lib/virtualbox/vboxdrv.sh setup
sudo modprobe -a vboxdrv
sudo apt update
sudo apt upgrade
sudo apt install -f
```

How to improve the host and guest OS performance?

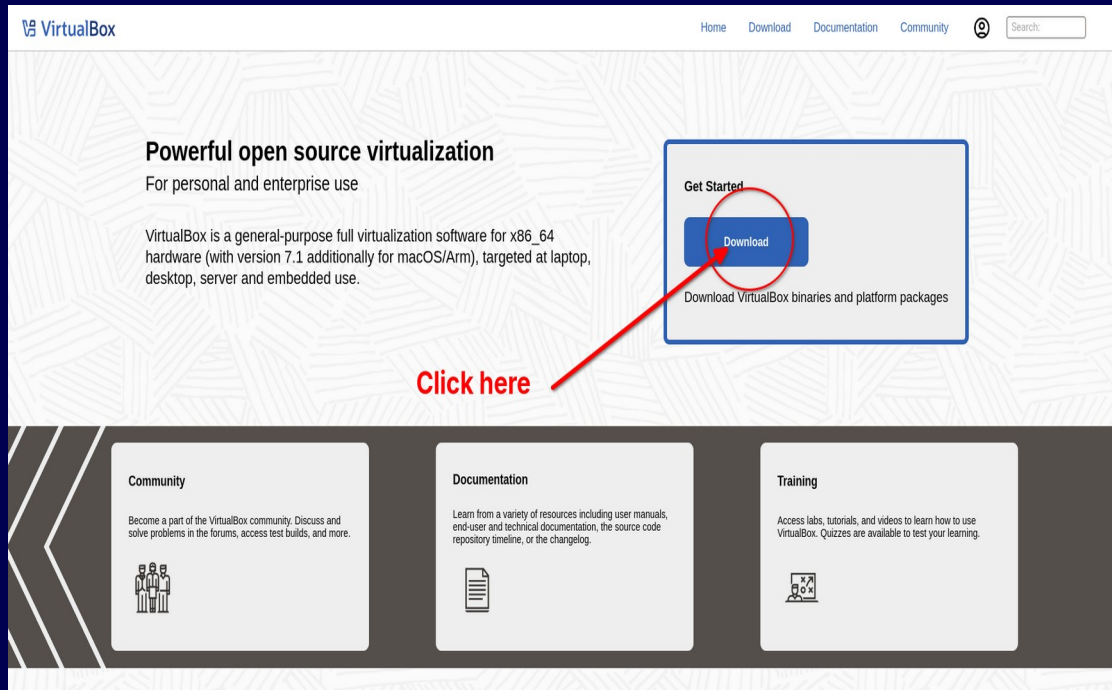
- Make sure your Drive-C has enough space.
(Windows only)
- If you have only 4GB RAM then you should avoid running applications inside your HOST OS.
- Go to power option and choose performance mode.

Guest Additions will solve following issues

- Screen size of guest OS.
- Shared folder(to share files b/w host and guest OS).
- Share Clipboard
- Performance.

How to Import qe2025.ova

Download and Install the VirtualBox



VirtualBox Platform Packages

VirtualBox 7.1.8 platform packages

-  **Windows hosts**
-  **macOS / Intel hosts**
-  **macOS / Apple Silicon hosts**
-  **Linux distributions**
-  **Solaris hosts**
-  **Solaris 11 IPS hosts**

Platform packages are released under the terms of the [GPL version 3](#)

Import qe2025.ova file



Shared Folder

Oracle VM VirtualBox Manager

File Machine Help

Tools

New Settings Discard **Start**

MD2021-lite Powered Off

MD2021-full Powered Off

debian-antix Powered Off

deb-antix-mate Powered Off

MD2021-testing Powered Off

General

Name: MD2021-full
Operating System: Ubuntu (64-bit)

System

Base Memory: 2048 MB
Processors: 2
Boot Order: Floppy, Optical, Hard Disk
Acceleration: VT-x/AMD-V, Nested Paging, KVM Paravirtualization

Display

Video Memory: 128 MB
Graphics Controller: VMSVGA
Remote Desktop Server: Disabled
Recording: Disabled

Storage

Controller: IDE
IDE Secondary Device 0: [Optical Drive] Empty
Controller: SATA
SATA Port 0: MD2021-lite 1-disk001.vdi (Normal, 20.00 GB)

Audio

Host Driver: PulseAudio
Controller: ICH AC97

Network

Adapter 1: Intel PRO/1000 MT Desktop (NAT)

USB

USB Controller: OHCI
Device Filters: 0 (0 active)

Shared folders

None

Description

None

Preview

MD2021-full

Linux : Create a directory and share the path in VBox

Windows: Create a folder --> Sharing permission ---> give path in VBox.

1 Create a directory

2

3

4

5

6

Click on sharing

click on share

click on share

File Machine View Input Devices Help

Recycle Bin

Vbox_share

right click and go to properties

Open

- Pin to Quick access
- Scan with Windows Defender...
- Give access to
- Restore previous versions
- Combine files in Acrobat...
- Include in library
- Pin to Start
- Add to archive...
- Add to "Vbox_share.rar"
- Compress and email...
- Compress to "Vbox_share.rar" and email
- Send to
- Cut
- Copy
- Create shortcut
- Delete
- Rename
- Properties

Network File and Folder Sharing

Vbox_share Shared

Network Path \\DESKTOP-U8GTU\Sai\Desktop\Vbox_share

Share...

Advanced Sharing

Set custom permissions, create multiple shares, and set other advanced sharing options.

Advanced Sharing...

Password Protection

People must have a user account and password for this computer to access shared folders.

To change this setting, use the [Network and Sharing Center](#).

OK Cancel Apply

Network access

Choose people to share with

Type a name and then click Add, or click the arrow to find someone.

Name Permission Level

Sai	Owner
-----	-------

I'm having trouble sharing

Share Cancel

Thanks