



# Local Virtual Machine Installation

## Additional Reading

[Visit our website](#)

# Introduction

This document contains instructions for installing a local virtual machine on [Windows](#) and [macOS](#). You only need to follow the instructions for the operating system that you are using.

## Installation for Windows

To install a local virtual machine on Windows, you will need Oracle VM VirtualBox and Kali Linux. You may additionally need to install 7-Zip. The following instructions will take you through the installation of all three.

## Installing Oracle VM VirtualBox for Windows

1. Go to the VirtualBox downloads page using this link: [VirtualBox downloads](#).
2. Look for the option labelled "**Windows hosts**" and click on it. This will start the download process for VirtualBox, which is a program that lets you run other operating systems on your computer.

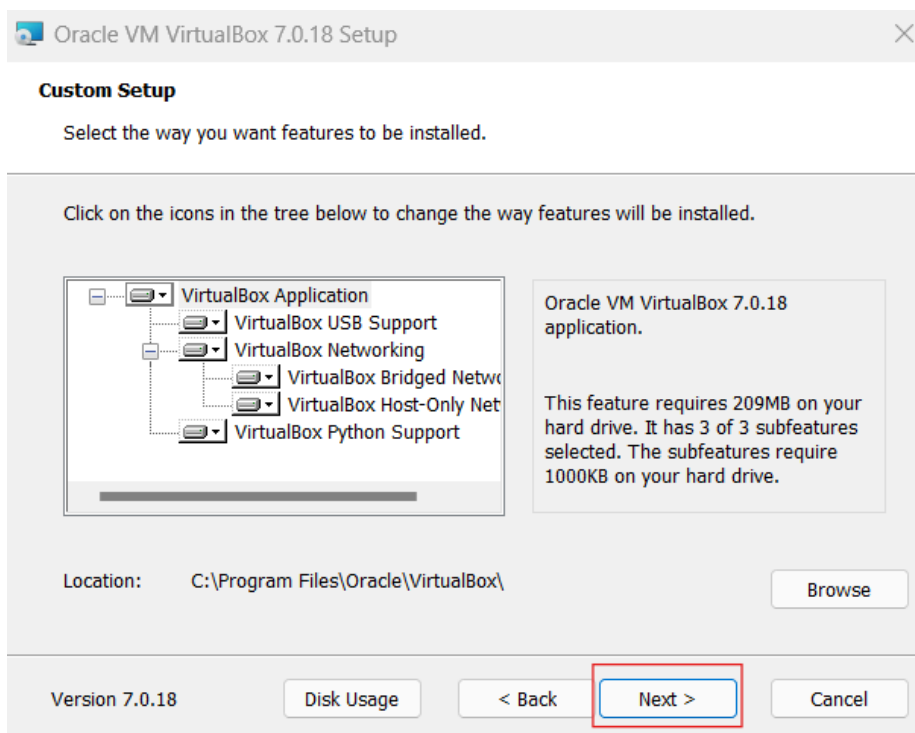


If there's a newer version available than the one mentioned above (7.0.18), don't worry. Just get the latest version.

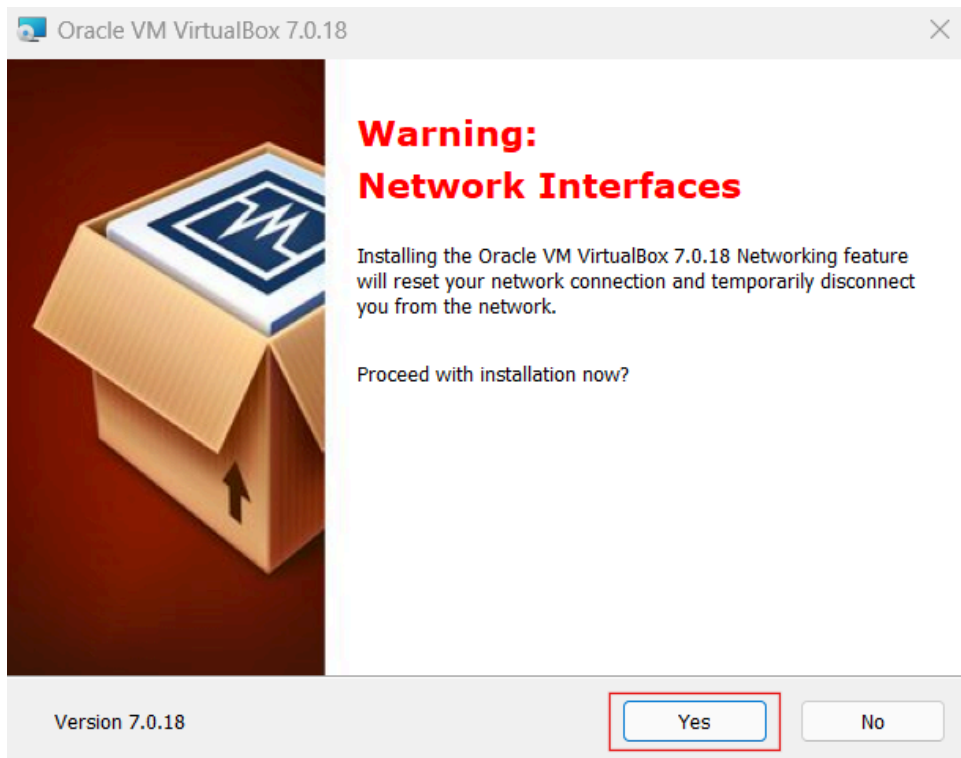
3. Once the download is complete, find the file you just downloaded and double-click on it to open it. You might see a window asking if you want to allow the app to make changes to your device. Click **"Yes"** to continue.
4. After this, a setup wizard window should appear. Simply click **"Next"** to proceed.



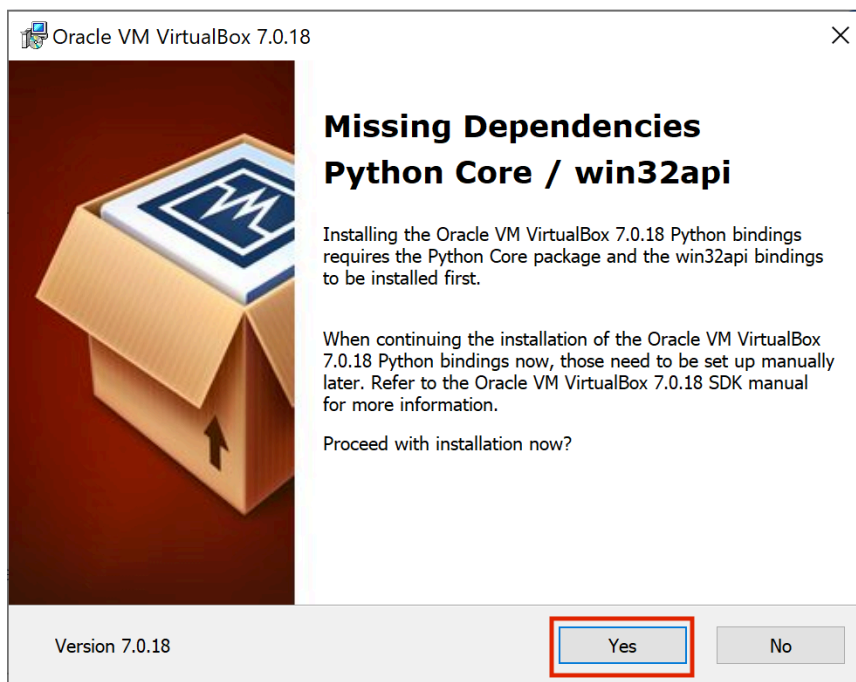
5. The following window will appear allowing you to customise settings. Click **"Next"** to continue.



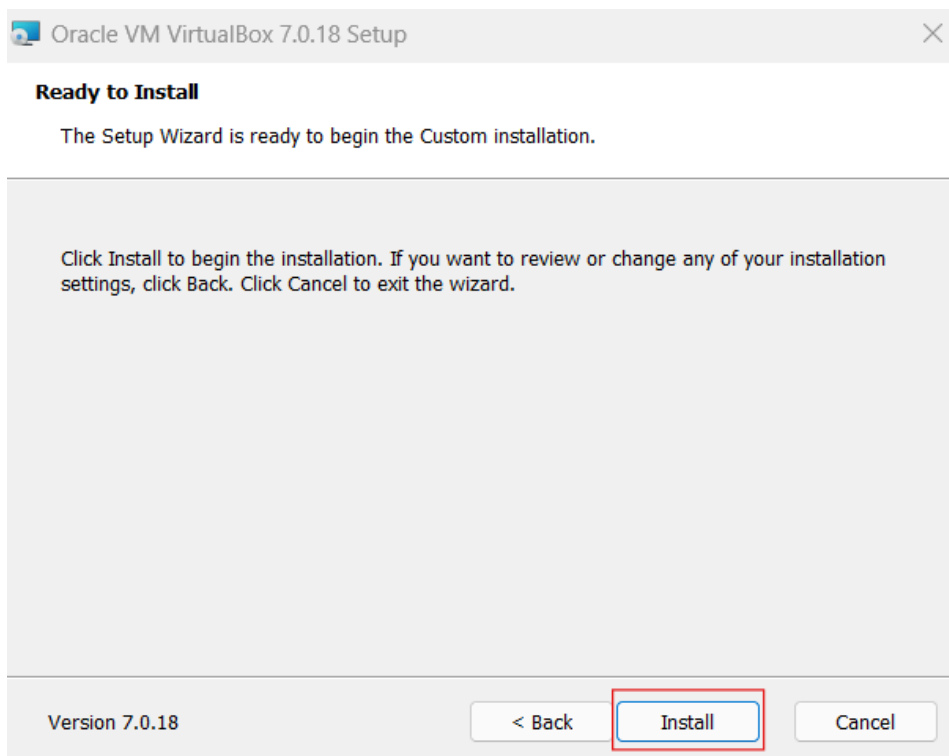
6. After clicking “**Next**” another window will appear, warning you that installing VirtualBox will reset your network connection. Proceed by clicking “**Yes**” to continue with the installation



7. If a pop-up window alerts you about missing dependencies (such as Python Core or win32api), simply proceed with the installation by clicking “**Yes**”.



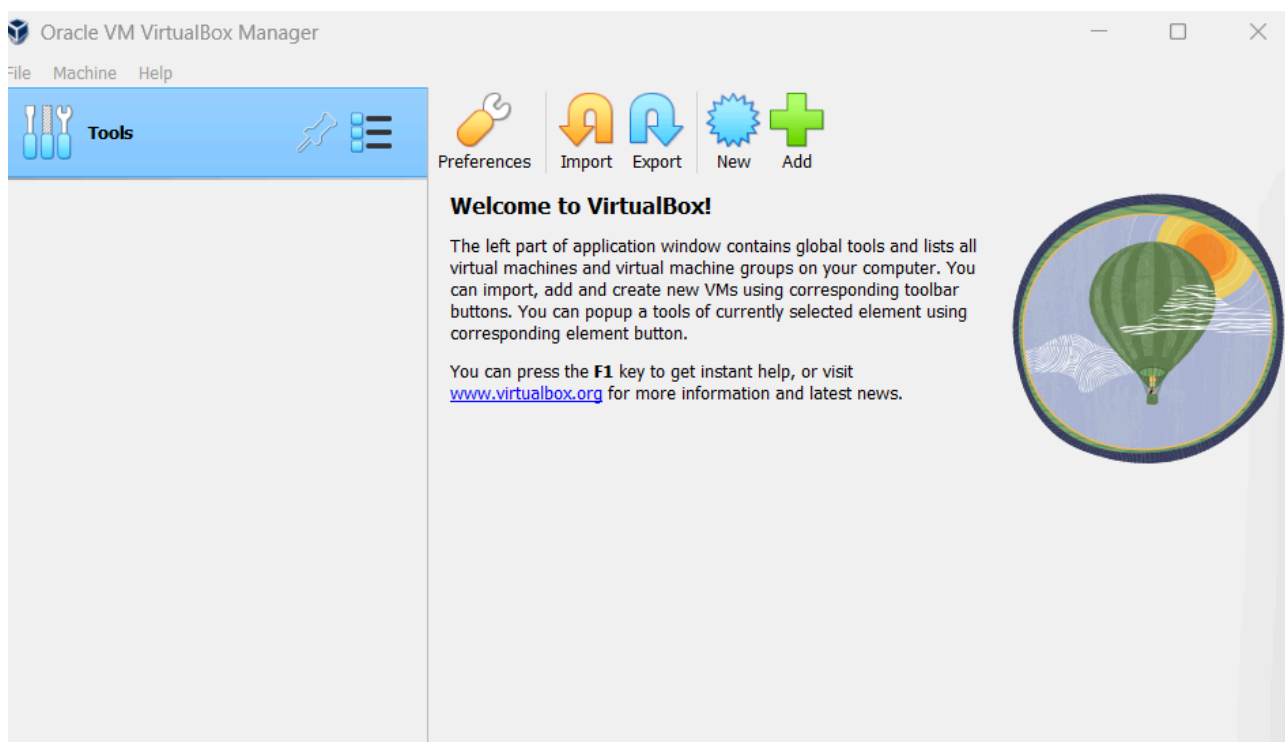
8. If no such pop-up appears, a window will inform you that the installation is ready. Click **"Install"** to proceed.



9. After clicking **"Install"**, the installation process will commence. Typically, it takes a few seconds to complete. Once finished, you'll see the following window pop up:



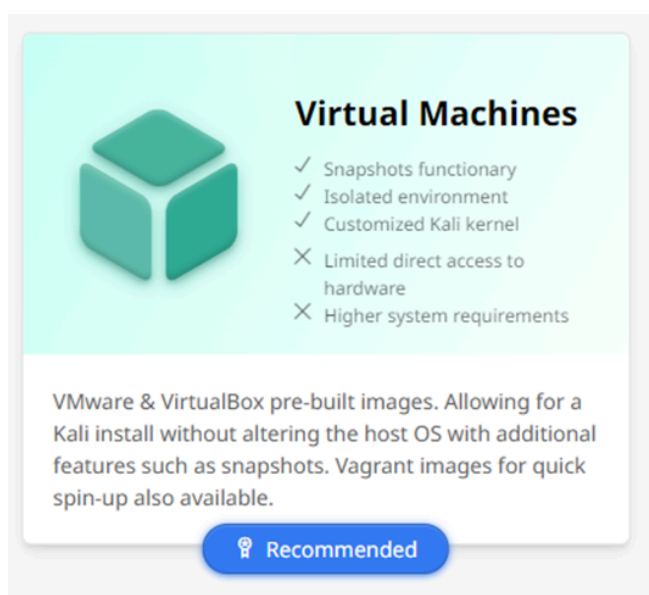
- Click “**Finish**” and VirtualBox's user interface will appear. Congratulations on successfully installing VirtualBox!



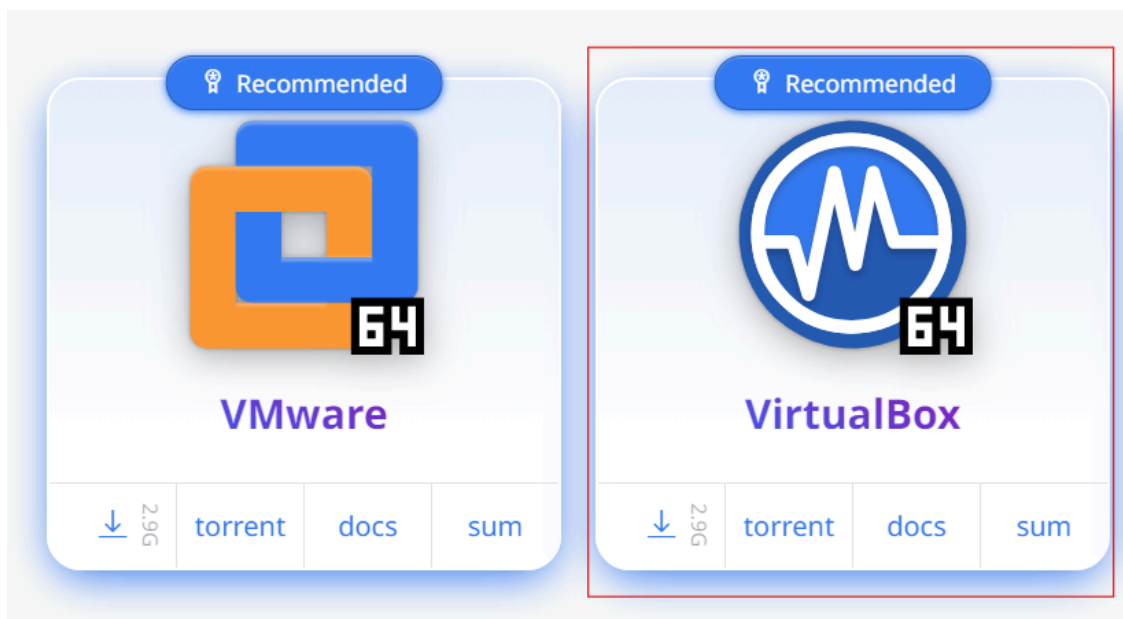
## Installing Kali Linux

Next, you will install Kali Linux within a virtual machine.

- Go to the Kali Linux download page by clicking on this link: [Kali downloads](#).
- Select the Virtual Machines option.



3. Select the **VirtualBox** option and then download. Ensure you have a stable internet connection as the file is about 2.9 GB and may take a few minutes to download.



### Take note

The Kali Linux file downloaded above is a zip file. To open it, you may need a specific tool like 7-Zip, which is designed to extract compressed files.

# Installing 7-Zip

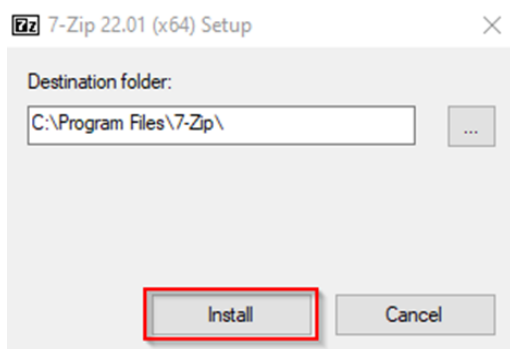
Work through the following steps to download and install 7-Zip to extract files from a zipped folder.

1. Navigate to [7-Zip](#).
2. Download the 64-bit Windows 7-Zip or macOS (arm64 / x86-64) as it matches the Kali Linux system you downloaded earlier.

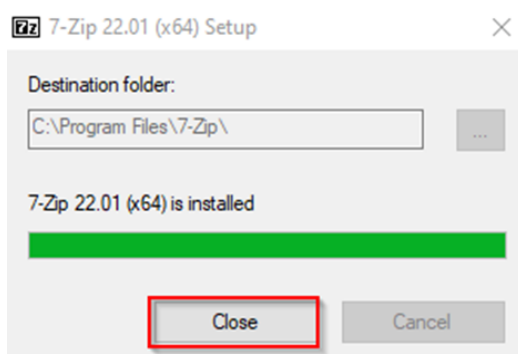
## Download 7-Zip 22.01 (2022-07-15):

Link	Type	System	Description
<a href="#">Download</a>	.exe	64-bit Windows x64	7-Zip for Windows
<a href="#">Download</a>	.exe	32-bit Windows x86	
<a href="#">Download</a>	.exe	64-bit Windows arm64	

3. Once it's downloaded, select **"Yes"** then select **"Install"**.

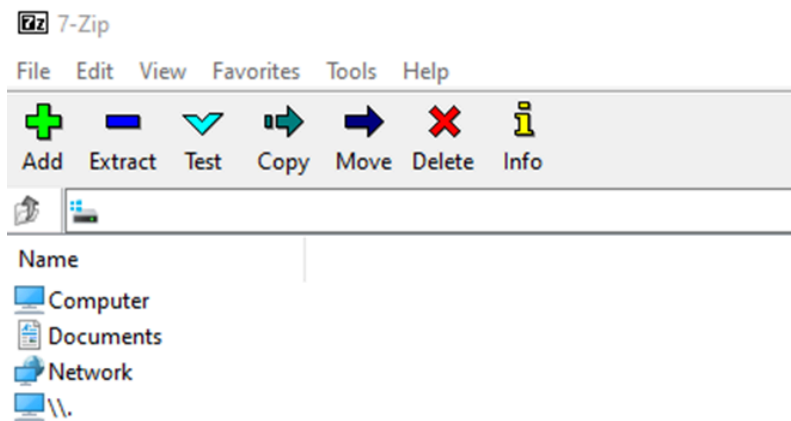


4. Select **"Close"**.





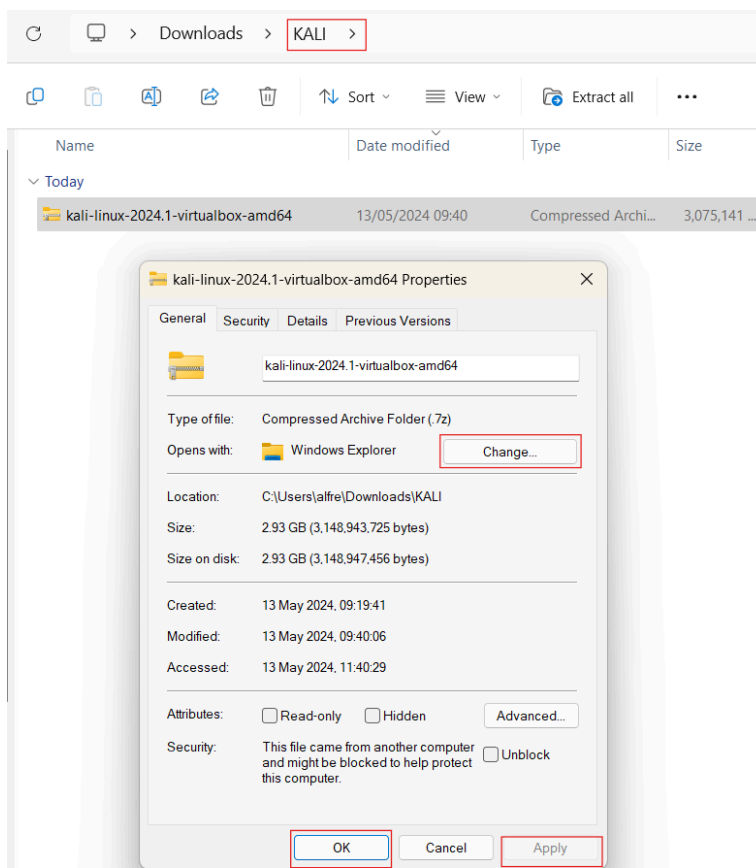
5. Go to the Windows Search box, type “7-Zip”, and select it to see the window below.



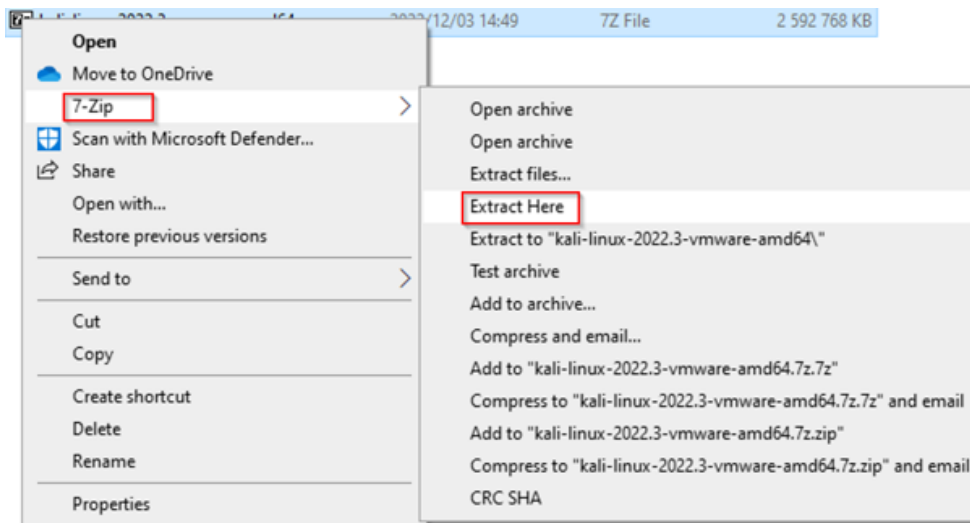
## Compiling all three installations

Now it's time to put all the three elements we have downloaded together.

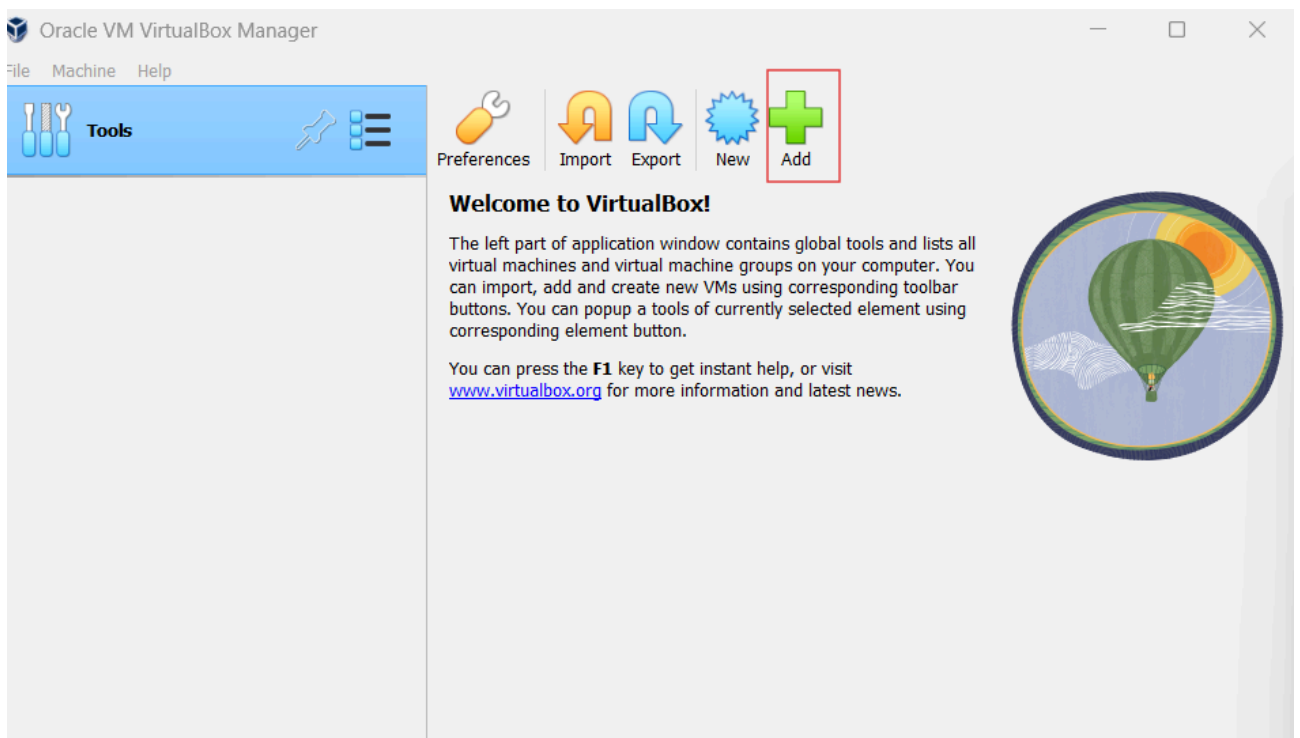
1. Create a new folder called “KALI”. This folder will be used to store the Kali Linux files once extracted.



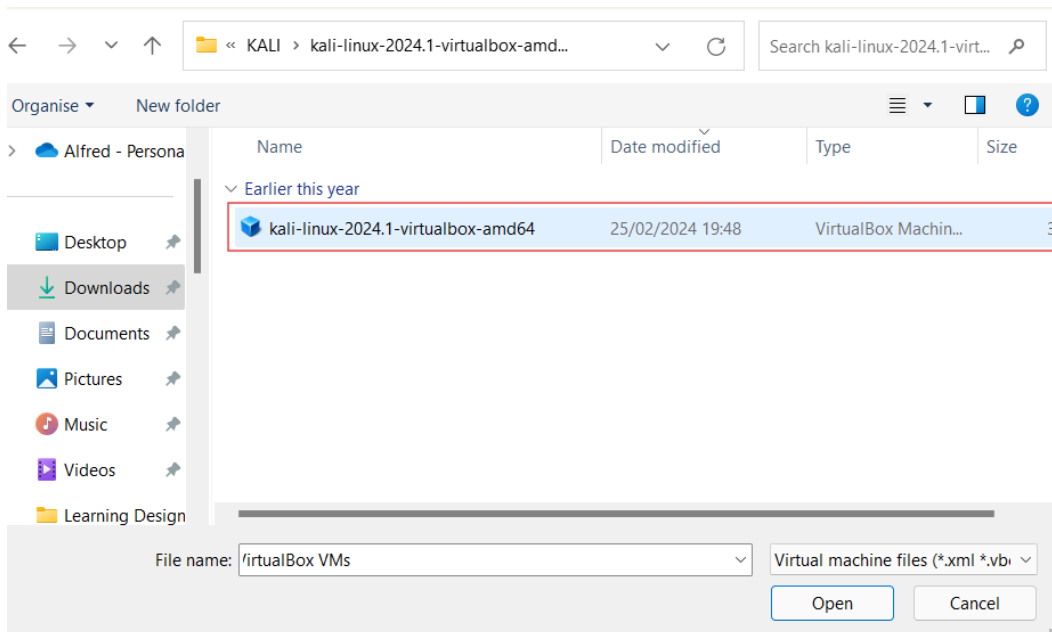
2. Once the **kali-linux-2024.1-virtualbox-amd64** file from the above installation has finished downloading, go to the file and right-click.
3. Scroll down to “**Properties**” and change “**Opens with**” to the 7-Zip Installer you downloaded above.
4. Select “**Apply**” then select “**Okay**”.
5. Right-click the **kali-linux-2024.1-virtualbox-amd64** file, go to 7-Zip, and select “**Extract Here**”.



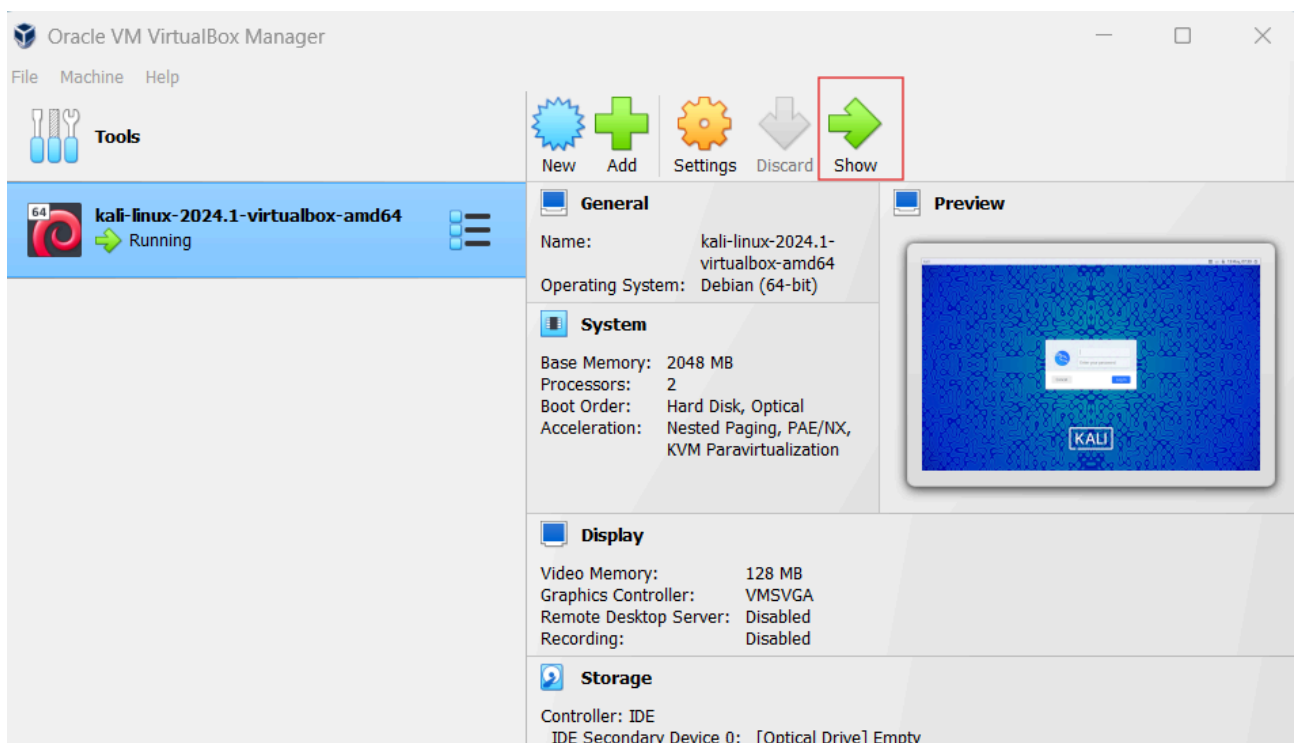
6. After extracting the file, open the **Oracle VM VirtualBox** application and select “**Add**” from the menu.



7. Navigate to the “KALI” folder you created earlier, which now holds the extracted files. Open this folder and choose the file named **kali-linux-2024.1-virtualbox-amd64** to add it to VirtualBox.



8. After opening, you'll be directed to VirtualBox. From there, simply click on “**Start**” from the menu.
9. After starting, Kali Linux may take some time to boot up. To display your virtual machine, simply click on “**Show**” from the VirtualBox menu.



10. Once everything is set up, you'll see a login window where you can enter your credentials. The default username and password are both **"kali"**. You can use these to log in, though you're free to change them to something more secure if you wish.

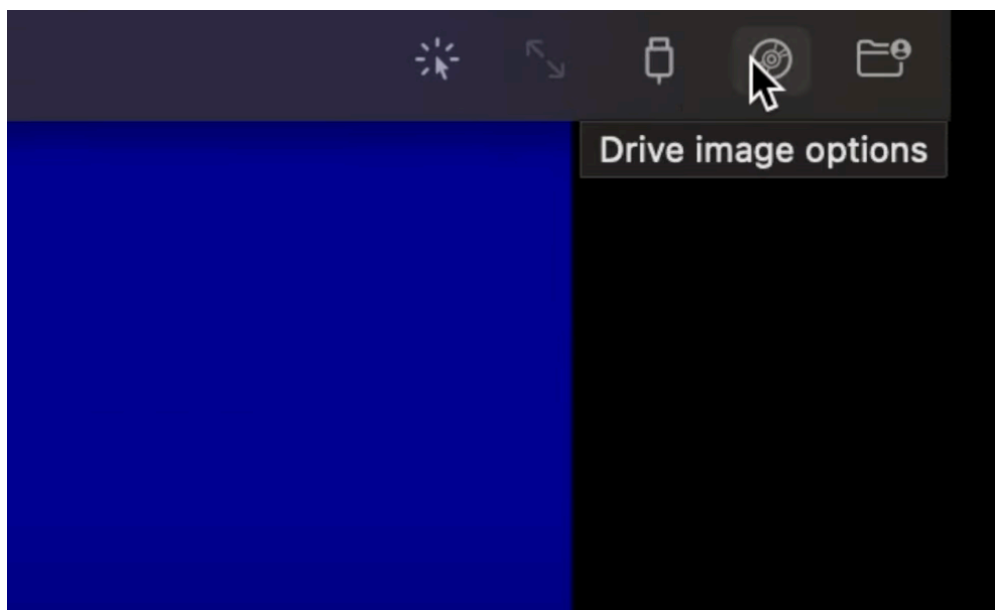


# Installation for macOS

The process for installing a local virtual machine on macOS is similar to installing one on Windows, but without the need for 7-Zip, and UTM must be installed instead of Oracle VM VirtualBox.

1. Go to [UTM](#) and select “**Download**” to install the UTM virtual machine software.
2. Go to the [Kali Linux website](#), select “**Installer Images**”, and download the relevant one.
3. Start up UTM, select “**Create a New Virtual Machine**”, and then select “**Virtualize**”.
4. From the list of operating systems, select “**Other**”, then select “**Browse**”. Find the Kali Linux **.iso** file that you downloaded previously.
5. Once you have selected the **.iso** file, select “**Continue**” and move the memory slider to 2048 MB.
6. For storage, input 32 GB.
7. You should now be on the Summary page. Give your virtual machine a name (e.g., “Kali Linux”), check the box next to “**Open VM Settings**”, and select “**Save**”.
8. The settings panel for your VM should now appear.
9. In the left-hand pane, select “**New**”, select “**Serial**”, and then select “**Save**”.
10. Select the big play button to start the machine and begin the installation process. You will see two windows pop up, and you’ll want to work in the Terminal 1 window.
11. Select “**Install**” and work your way through the Kali Linux installation process.
12. When prompted to create a username and password for your account, you will want to make both of these “**kali**”.
13. When you reach the partitioning section, choose “**Guided – use entire disk**”.
14. You will eventually be prompted to select software to install. Make sure you only select “**GNOME**” and “**default — recommended tools...**”, then continue.

**Important:** Once the installation has finished (and you see the “Finish the Installation” window), select the top right icon called “**Drive image options**” and eject the image file as shown in the following image:



15. Finally, choose to continue, which will restart the virtual machine. The Kali Linux desktop will boot up. You do not need to do anything here; simply wait and the login screen should appear after about 10 seconds.
16. Input your username and password, which should both be “kali”.