

# Installing VirtualBox



# VirtualBox

- VirtualBox is a cross-platform virtualization software



on Windows - Linux,  
Solaris, Mac OS X



create and run multiple VM's,  
running different operating systems,  
on the same computer  
at the same time.

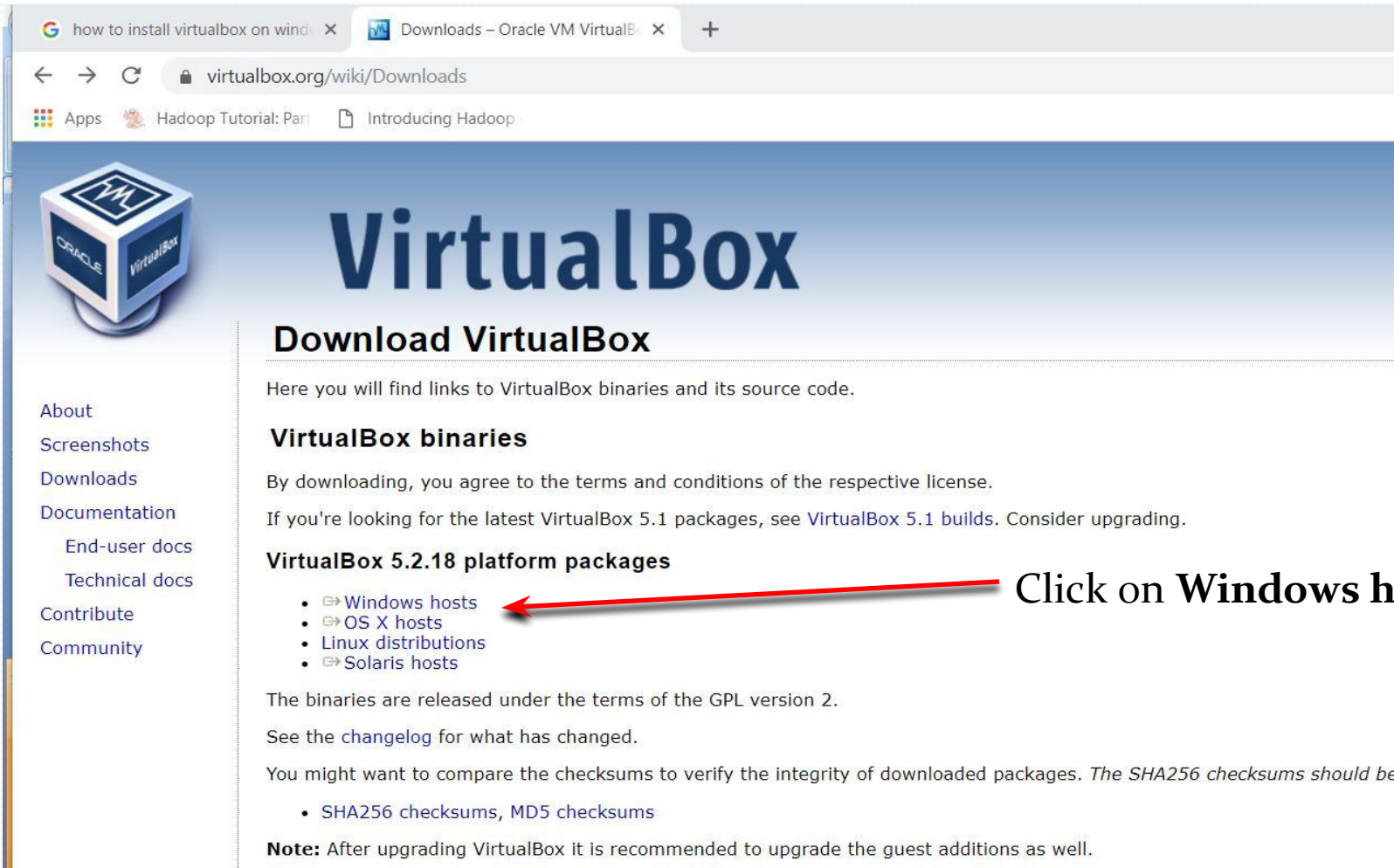
- Opensource
- Easy to setup



# Windows

# Oracle VM VirtualBox - Download

- <https://www.virtualbox.org/wiki/Downloads>




The screenshot shows the Oracle VM VirtualBox website's download page. The browser's address bar displays 'virtualbox.org/wiki/Downloads'. The page features the VirtualBox logo on the left and a navigation menu with links to 'About', 'Screenshots', 'Downloads', 'Documentation', 'End-user docs', 'Technical docs', 'Contribute', and 'Community'. The main content area is titled 'Download VirtualBox' and includes a paragraph stating that users will find links to binaries and source code. Below this, the 'VirtualBox binaries' section explains that downloading implies agreement to the license and provides a link to the latest 5.1 builds. The 'VirtualBox 5.2.18 platform packages' section lists four options: Windows hosts, OS X hosts, Linux distributions, and Solaris hosts. A red arrow points from the text 'Click on Windows hosts' to the 'Windows hosts' link. The page also mentions that binaries are released under the GPL version 2, provides a link to the changelog, and notes that SHA256 and MD5 checksums should be compared to verify package integrity. A final note recommends upgrading guest additions after upgrading VirtualBox.

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virtualbox.org/wiki/Downloads

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## VirtualBox

### Download VirtualBox

Here you will find links to VirtualBox binaries and its source code.

#### VirtualBox binaries

By downloading, you agree to the terms and conditions of the respective license.

If you're looking for the latest VirtualBox 5.1 packages, see [VirtualBox 5.1 builds](#). Consider upgrading.

#### VirtualBox 5.2.18 platform packages

- [Windows hosts](#)
- [OS X hosts](#)
- [Linux distributions](#)
- [Solaris hosts](#)

The binaries are released under the terms of the GPL version 2.

See the [changelog](#) for what has changed.

You might want to compare the checksums to verify the integrity of downloaded packages. *The SHA256 checksums should be*

- [SHA256 checksums](#), [MD5 checksums](#)

**Note:** After upgrading VirtualBox it is recommended to upgrade the guest additions as well.

Click on Windows hosts

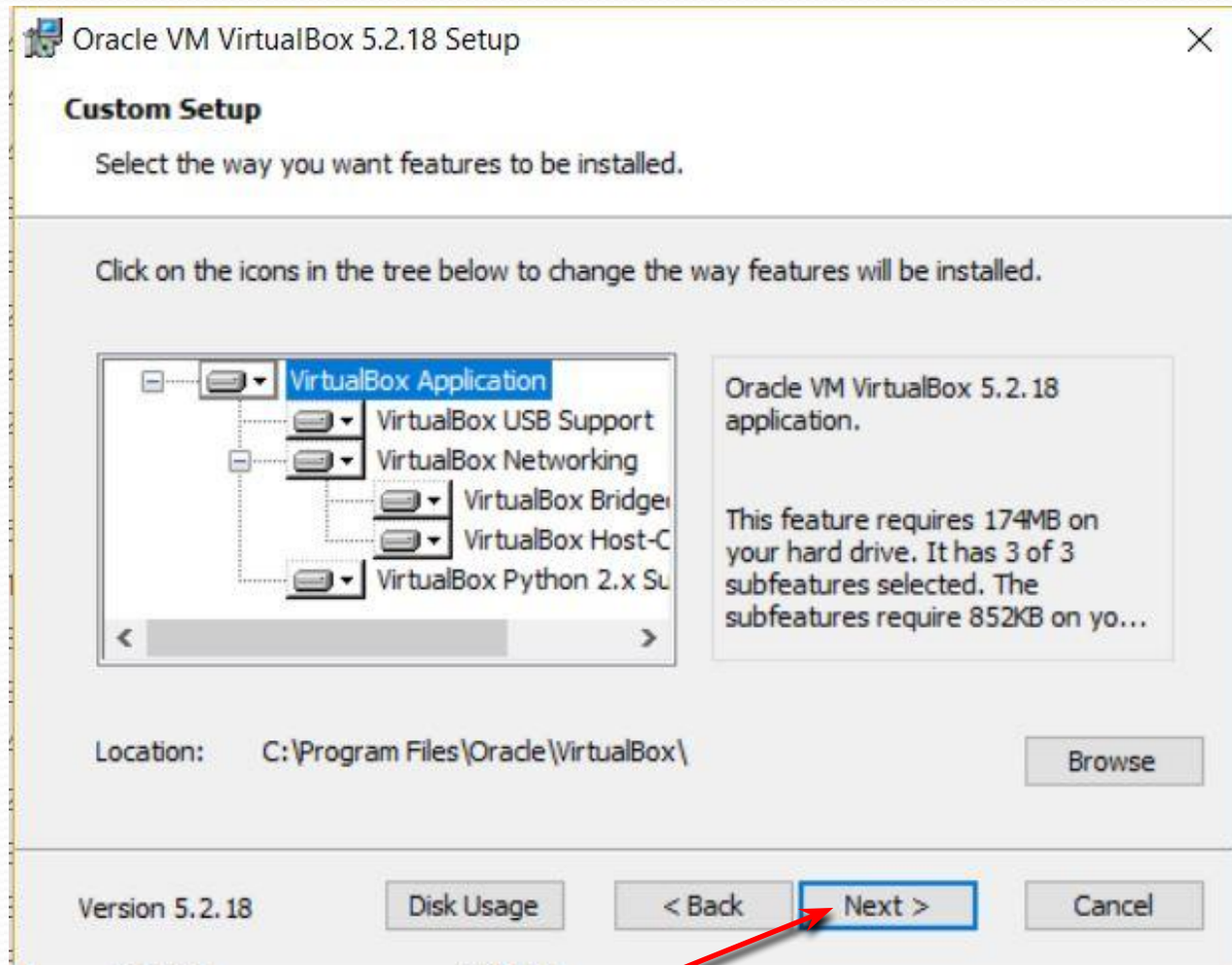
# Installation Steps – Windows 10

- Steps to follow:
  - 1) Click on '*Windows hosts*'
  - 2) The .exe file will start downloading
    - VirtualBox-5.2.18-124319-Win.exe
  - 3) Go to Downloads folder
  - 4) Right click on the .exe file ➡ Run as Administrator

# Installation Steps

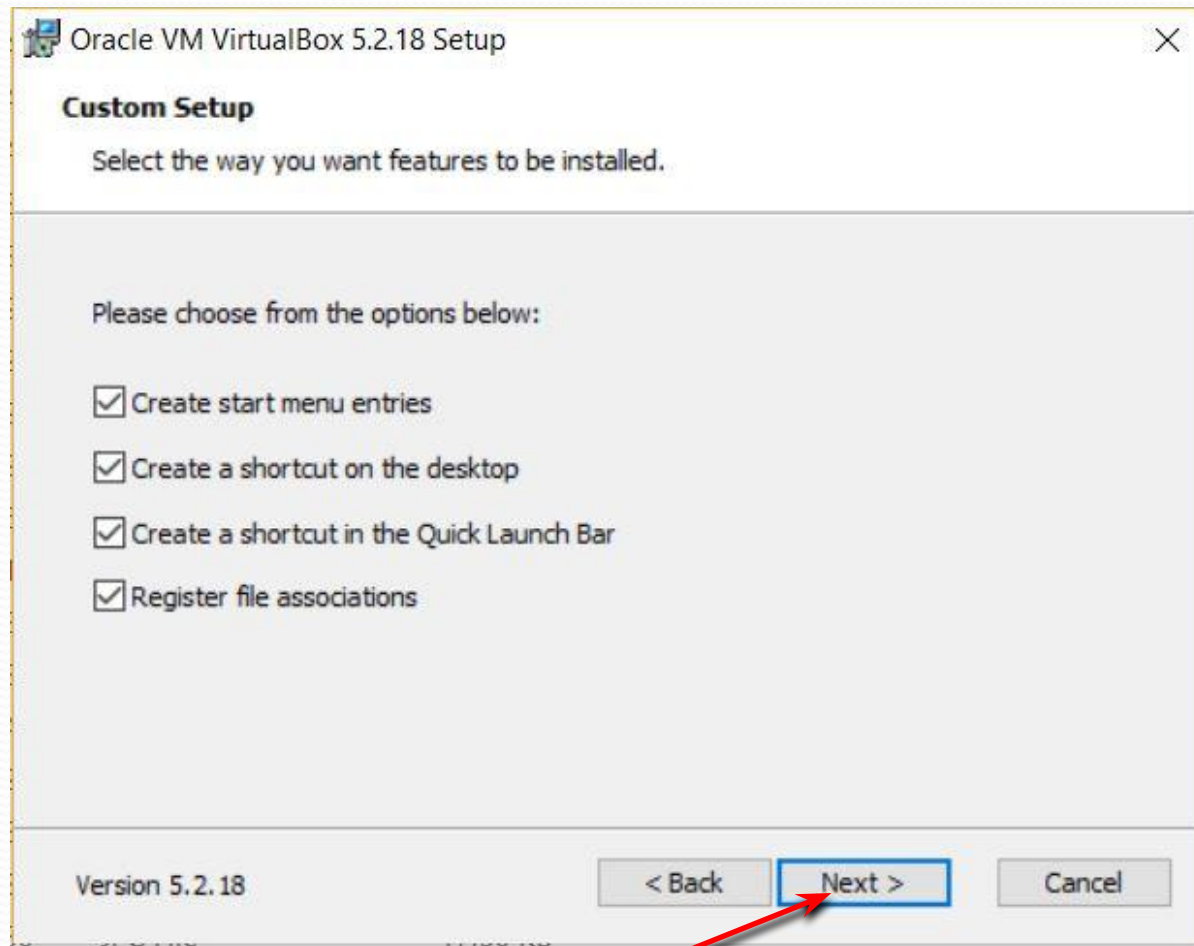


# Installation Steps



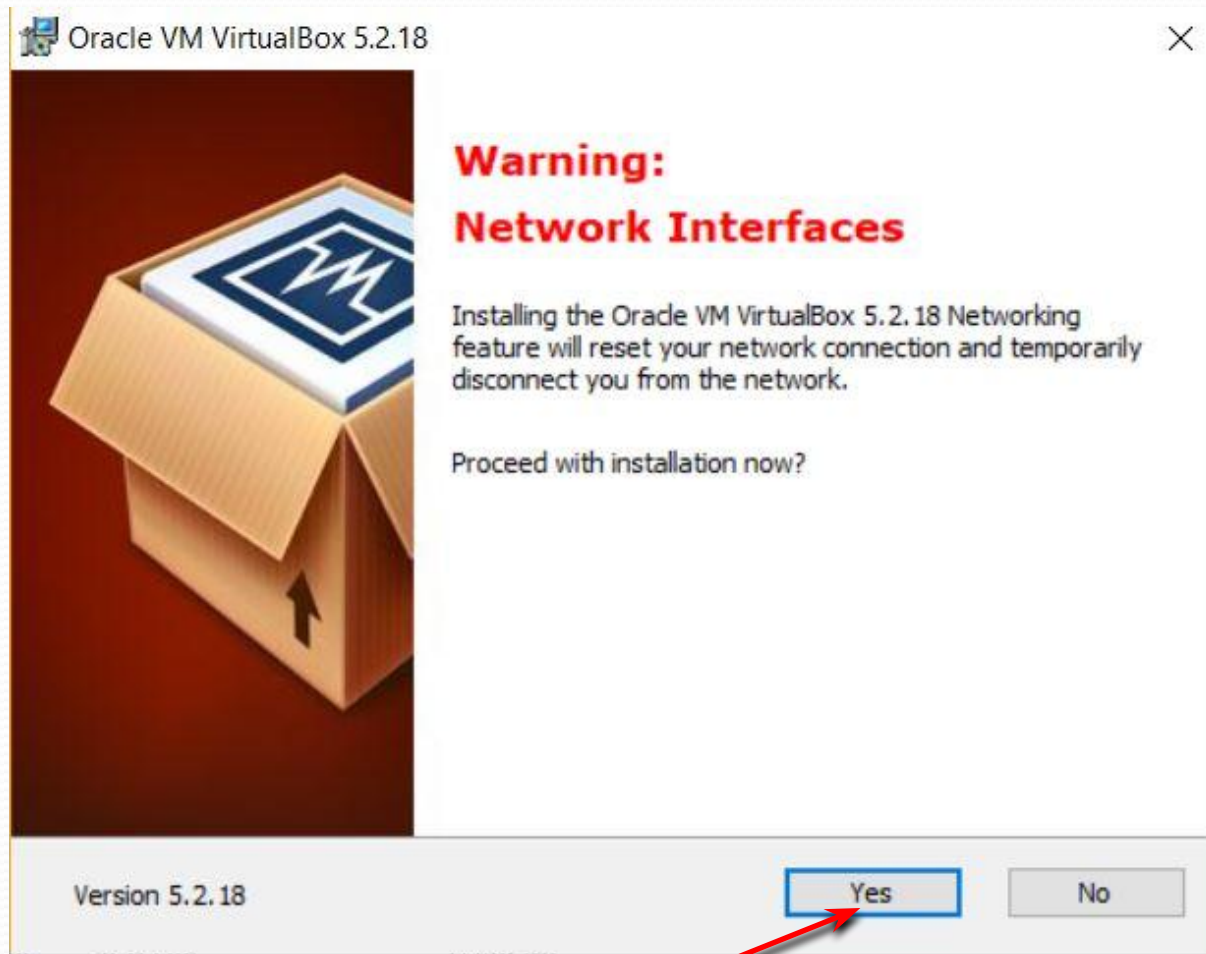


# Installation Steps

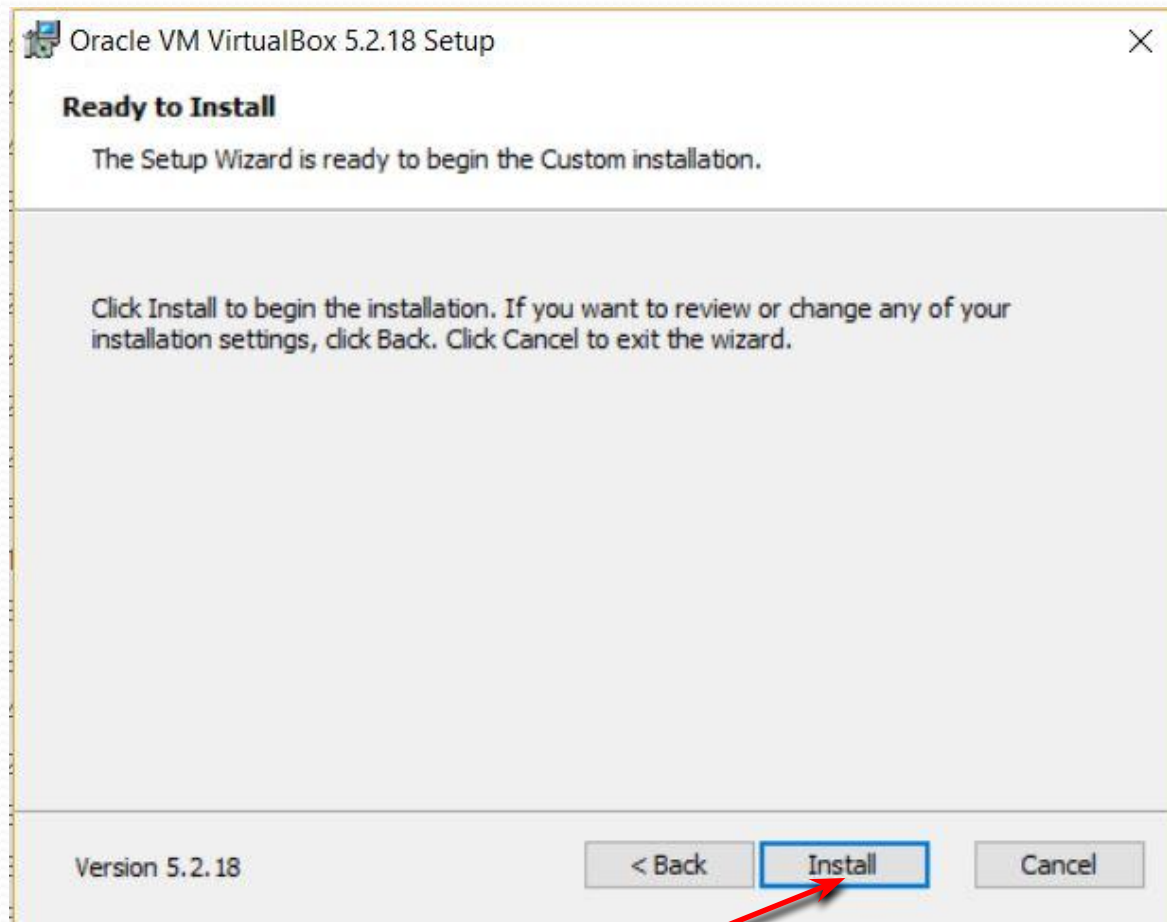




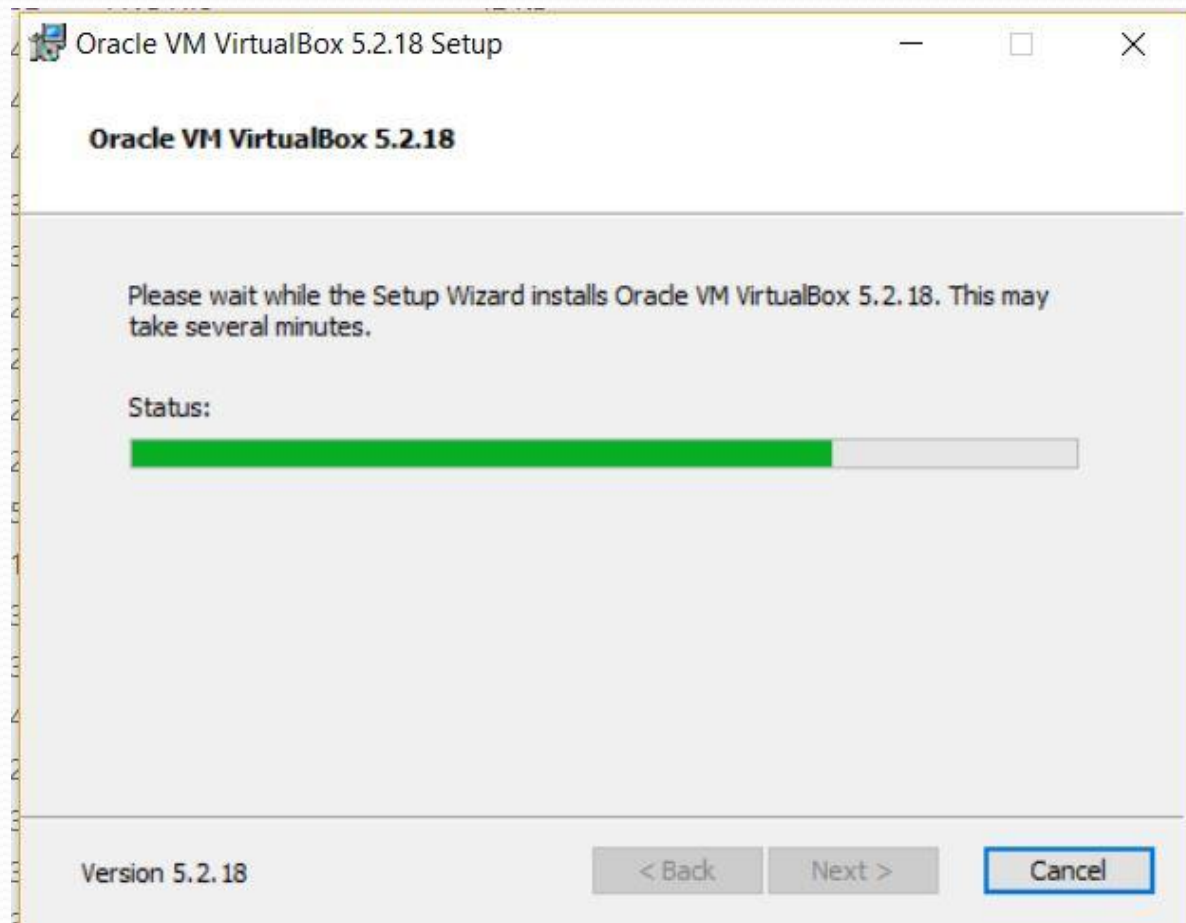
# Installation Steps



# Installation Steps



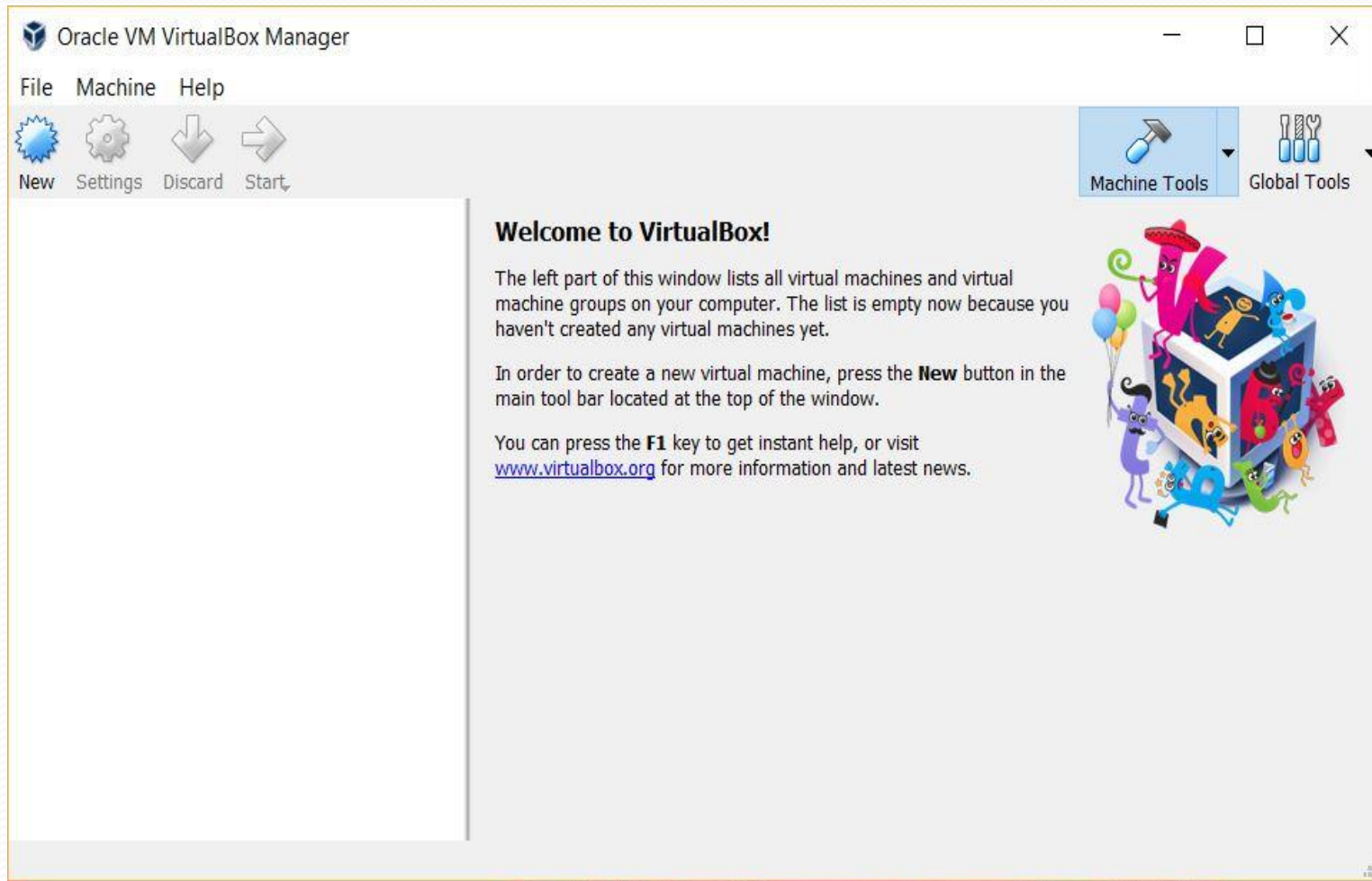
# Installation Steps



# Installation Steps



# Oracle VM VirtualBox – Windows 10



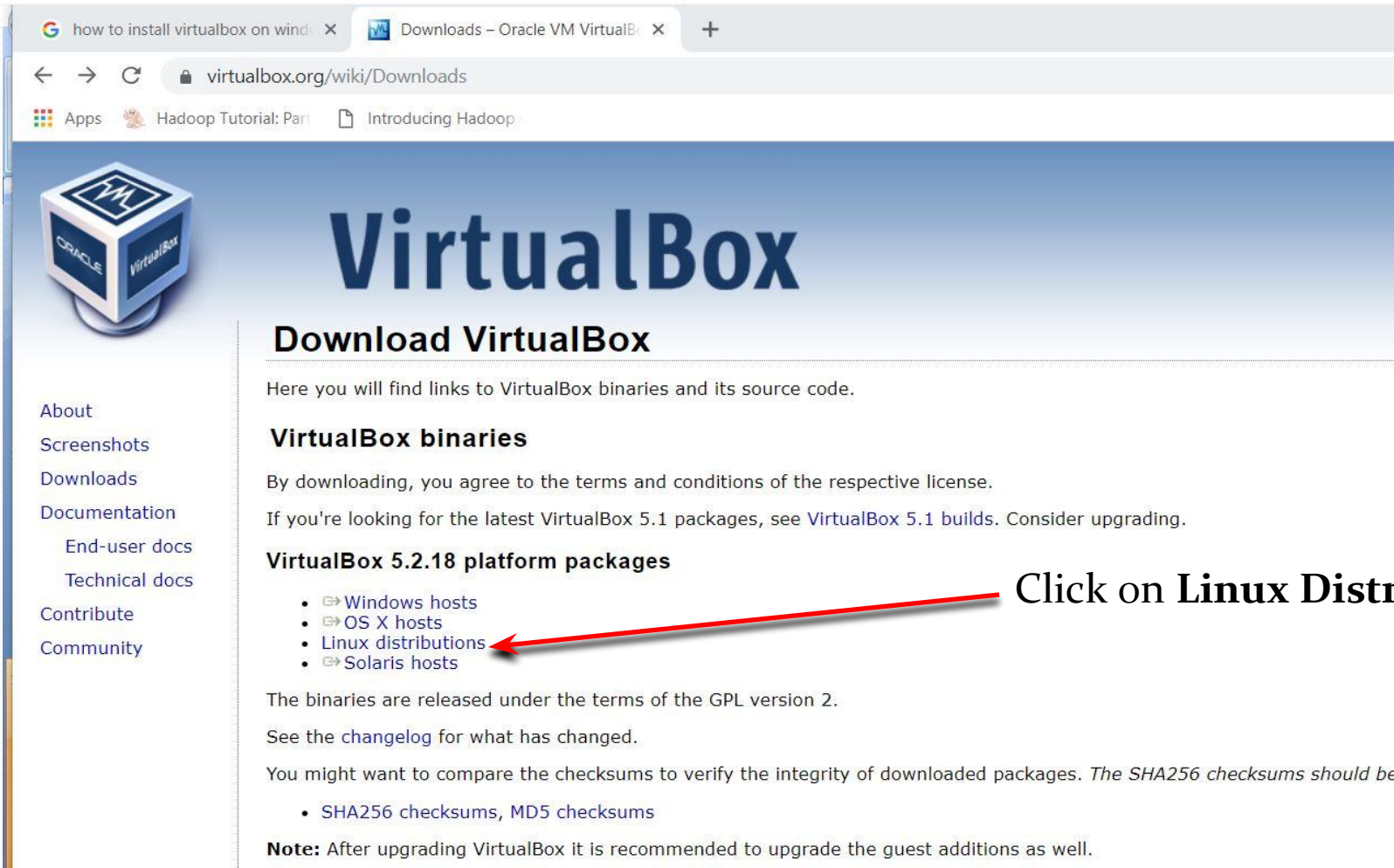
Desktop Icon



# CentOS

# Oracle VM VirtualBox - Download

- <https://www.virtualbox.org/wiki/Downloads>




The screenshot shows the Oracle VM VirtualBox Downloads page. The browser's address bar displays [virtualbox.org/wiki/Downloads](https://www.virtualbox.org/wiki/Downloads). The page features the VirtualBox logo on the left and a large heading "VirtualBox" in the center. Below the heading is the section "Download VirtualBox". A sidebar on the left contains links: About, Screenshots, Downloads, Documentation (with sub-links for End-user docs and Technical docs), Contribute, and Community. The main content area includes the text "Here you will find links to VirtualBox binaries and its source code.", followed by the section "VirtualBox binaries". Below this, it states "By downloading, you agree to the terms and conditions of the respective license." and "If you're looking for the latest VirtualBox 5.1 packages, see [VirtualBox 5.1 builds](#). Consider upgrading." The section "VirtualBox 5.2.18 platform packages" lists four options: Windows hosts, OS X hosts, Linux distributions, and Solaris hosts. A red arrow points from the text "Click on Linux Distributions" to the "Linux distributions" link. Below the list, it says "The binaries are released under the terms of the GPL version 2." and "See the [changelog](#) for what has changed." It also mentions "You might want to compare the checksums to verify the integrity of downloaded packages. *The SHA256 checksums should be*" followed by a list of "SHA256 checksums, MD5 checksums". A "Note" at the bottom states: "After upgrading VirtualBox it is recommended to upgrade the guest additions as well."

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virtualbox.org/wiki/Downloads

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## VirtualBox

### Download VirtualBox

Here you will find links to VirtualBox binaries and its source code.

#### VirtualBox binaries

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If you're looking for the latest VirtualBox 5.1 packages, see [VirtualBox 5.1 builds](#). Consider upgrading.

#### VirtualBox 5.2.18 platform packages

- [Windows hosts](#)
- [OS X hosts](#)
- [Linux distributions](#)
- [Solaris hosts](#)

The binaries are released under the terms of the GPL version 2.

See the [changelog](#) for what has changed.

You might want to compare the checksums to verify the integrity of downloaded packages. *The SHA256 checksums should be*

- [SHA256 checksums](#), [MD5 checksums](#)

**Note:** After upgrading VirtualBox it is recommended to upgrade the guest additions as well.

Click on Linux Distributions



# CentOS 7

[https://www.virtualbox.org/wiki/Linux\\_Downloads](https://www.virtualbox.org/wiki/Linux_Downloads)



← ⓘ | [https://www.virtualbox.org/wiki/Linux\\_Downloads](https://www.virtualbox.org/wiki/Linux_Downloads) ⓘ | ↻



## VirtualBox

### Download VirtualBox for Linux Hosts

**Note:** The package architecture has to match the Linux kernel architecture, that is, if you are running a 64 bit system (regardless of whether you have an Intel or an AMD CPU). Mixed installations (e.g. Debian/Lenny ships an AMD64 kernel anyway) you need to setup a 64-bit chroot environment.

The VirtualBox base package binaries are released under the terms of the [GPL version 2](#).

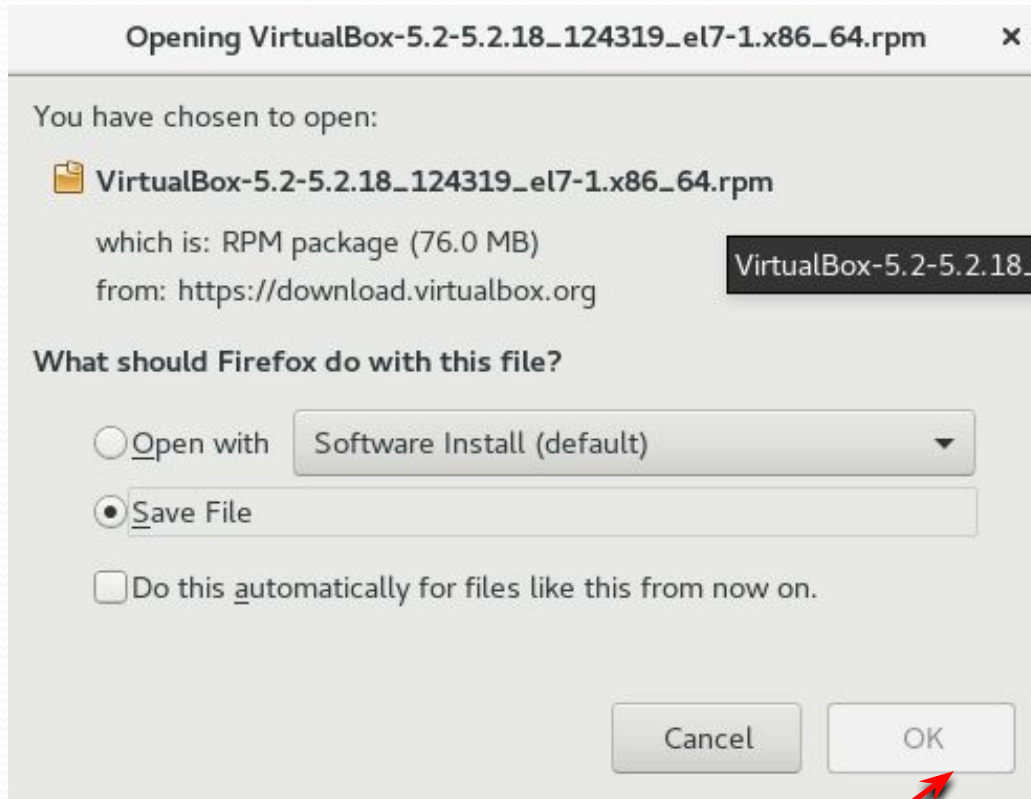
Please choose the appropriate package for your Linux distribution.

#### VirtualBox 5.2.18 for Linux

- Ubuntu 18.04 / Debian 10 ➞ [AMD64](#)
- Ubuntu 17.04 / 17.10 ➞ [i386](#) | ➞ [AMD64](#)
- Ubuntu 16.04 ➞ [i386](#) | ➞ [AMD64](#)
- Ubuntu 14.04 / 14.10 / 15.04 ➞ [i386](#) | ➞ [AMD64](#)
- Debian 9 ➞ [i386](#) | ➞ [AMD64](#)
- Debian 8 ➞ [i386](#) | ➞ [AMD64](#)
- openSUSE 15.0 ➞ [AMD64](#)
- openSUSE 13.2 / Leap 42 ➞ [i386](#) | ➞ [AMD64](#)
- Fedora 26 / 27 / 28 ➞ [i386](#) | ➞ [AMD64](#)
- **Oracle Linux 7 / Red Hat Enterprise Linux 7 / CentOS 7 ➞ [AMD64](#)**
- Oracle Linux 6 / Red Hat Enterprise Linux 6 / CentOS 6 ➞ [i386](#) | ➞ [AMD64](#)
- All distributions (built on EL5 and therefore do not require recent system libraries) ➞ [i386](#) ➞ [AMD64](#)

Select the version

# Installation Steps - CentOS 7



# Installation Steps

- 1) Open the Terminal
  - Application(top-left corner) → Terminal
- 2) Check the current directory
  - `$ pwd`
    - For example,
      - Output: /home/dbpsysads
- 3) Move to Downloads folder
  - `$ cd Downloads/`

# Installation Steps

- 4) Command to install the package .rpm
  - `$ sudo rpm -ivh VirtualBox-5.2_5.2.18-124319_el7-1.x86_64.rpm`

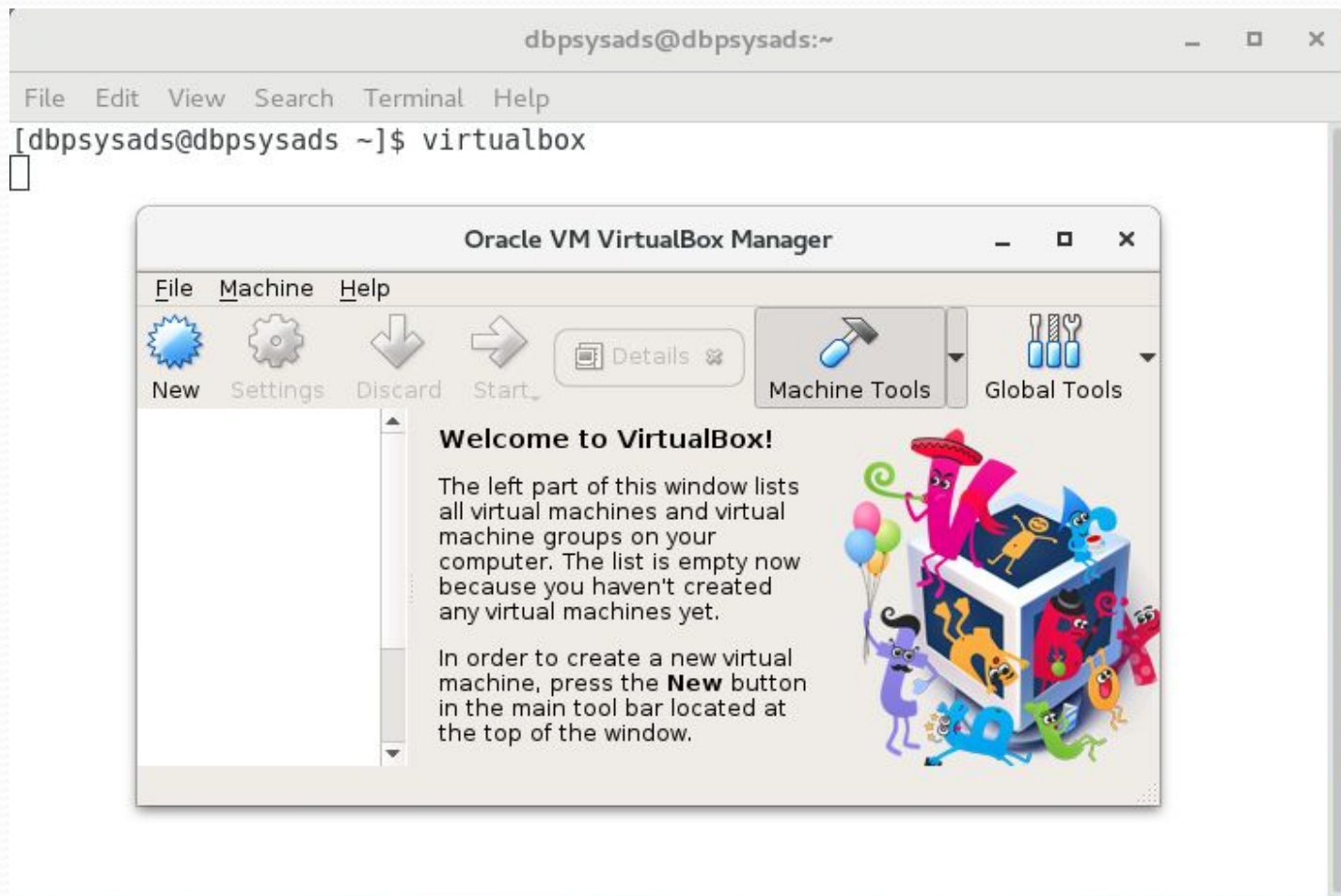
```
dbpsysads@dbpsysads:~/Downloads
File Edit View Search Terminal Help
[dbpsysads@dbpsysads ~]$ pwd
/home/dbpsysads
[dbpsysads@dbpsysads ~]$ cd Downloads/
[dbpsysads@dbpsysads Downloads]$ ls
ubuntu-16.04.5-desktop-amd64.iso VirtualBox-5.2-5.2.18_124319_el7-1.x86_64.rpm
[dbpsysads@dbpsysads Downloads]$ sudo rpm -ivh VirtualBox-5.2-5.2.18_124319_el7-1.x86_64.rpm
[sudo] password for dbpsysads:
warning: VirtualBox-5.2-5.2.18_124319_el7-1.x86_64.rpm: Header V4 DSA/SHA1 Signature, key ID 98ab5139: NOKEY
Preparing... ##### [100%]
Updating / installing...
 1:VirtualBox-5.2-5.2.18_124319_el7-##### [100%]

Creating group 'vboxusers'. VM users must be member of that group!

[dbpsysads@dbpsysads Downloads]$
```

# Oracle VM VirtualBox – CentOS 7

- 5) **\$ virtualbox**





# Ubuntu

# Installation Steps – Ubuntu 16.04

- 1) Open the Terminal
  - Keyboard Shortcut → **Ctrl + Alt + T**
- 2) Add VirtualBox Repository Key
  - `$ wget -q https://www.virtualbox.org/download/oracle_vbox_2016.asc -O- | sudo apt-key add -`
  - `$ wget -q https://www.virtualbox.org/download/oracle_vbox.asc -O- | sudo apt-key add -`



# Installation Steps

- 3) Add VirtualBox Repository

```
sudo sh -c 'echo "deb http://download.virtualbox.org/virtualbox/debian $(lsb_release -sc) contrib" >>  
/etc/apt/sources.list.d/virtualbox.list'
```

```
dbpsysads@dbpsysads-ThinkPad-T440:~$ sudo apt-get update  
[sudo] password for dbpsysads:  
Get:1 http://security.ubuntu.com/ubuntu xenial-security InRelease [107 kB]  
Hit:2 http://in.archive.ubuntu.com/ubuntu xenial InRelease  
Get:3 http://in.archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]  
Get:4 http://in.archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]  
Fetched 323 kB in 2s (159 kB/s)  
Reading package lists... Done  
dbpsysads@dbpsysads-ThinkPad-T440:~$ wget -q https://www.virtualbox.org/download/oracle_vbox_2016.asc -O- | sudo apt-key add -  
[sudo] password for dbpsysads:  
OK  
dbpsysads@dbpsysads-ThinkPad-T440:~$ wget -q https://www.virtualbox.org/download/oracle_vbox.asc -O- | sudo apt-key add -  
OK  
dbpsysads@dbpsysads-ThinkPad-T440:~$ sudo sh -c 'echo "deb http://download.virtualbox.org/virtualbox/debian $(lsb_release -sc) contrib" >> /etc  
/apt/sources.list.d/virtualbox.list'  
dbpsysads@dbpsysads-ThinkPad-T440:~$ sudo apt update
```

# Installation Steps

- 4) `$ sudo apt-get update`
- 5) `$ sudo apt-get -y install gcc make linux-headers-$(uname -r) dkms`
- 6) `$ sudo apt-get update`

```
dbpsysads@dbpsysads-ThinkPad-T440:~$ sudo apt-get -y install gcc make linux-headers-$(uname -r) dkms
Reading package lists... Done
Building dependency tree
Reading state information... Done
gcc is already the newest version (4:5.3.1-1ubuntu1).
make is already the newest version (4.1-6).
linux-headers-4.15.0-29-generic is already the newest version (4.15.0-29.31~16.04.1).
linux-headers-4.15.0-29-generic set to manually installed.
The following NEW packages will be installed:
  dkms
0 upgraded, 1 newly installed, 0 to remove and 85 not upgraded.
Need to get 66.3 kB of archives.
After this operation, 265 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu xenial-updates/main amd64 dkms all 2.2.0.3-2ubuntu11.5 [66.3 kB]
Fetched 66.3 kB in 0s (75.7 kB/s)
Selecting previously unselected package dkms.
(Reading database ... 177097 files and directories currently installed.)
Preparing to unpack .../dkms_2.2.0.3-2ubuntu11.5_all.deb ...
Unpacking dkms (2.2.0.3-2ubuntu11.5) ...
Processing triggers for man-db (2.7.5-1) ...
Setting up dkms (2.2.0.3-2ubuntu11.5) ...
dbpsysads@dbpsysads-ThinkPad-T440:~$ sudo apt update
```

# Installation Steps

- `$ sudo apt-get install virtualbox-5.2`

```
dbpsysads@dbpsysads-ThinkPad-T440:~$ sudo apt-get install virtualbox-5.2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libstdc++6 libstdc++6
The following NEW packages will be installed:
  libstdc++6 libstdc++6 virtualbox-5.2
0 upgraded, 3 newly installed, 0 to remove and 85 not upgraded.
Need to get 73.7 MB of archives.
After this operation, 188 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu xenial/main amd64 libstdc++6 amd64 1.2.15+dfsg-1 [1,151 kB]
Get:2 http://download.virtualbox.org/virtualbox/debian xenial/contrib amd64 virtualbox-5.2 [72,500 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu xenial/universe amd64 libstdc++6 amd64 2.0.11-1 [1,151 kB]
Fetched 73.7 MB in 44s (1,651 kB/s)
```



# Oracle VM VirtualBox – Ubuntu16.04

- 5) **\$ virtualbox**





**Thank You!**