

### Machine Minimum Requirements:

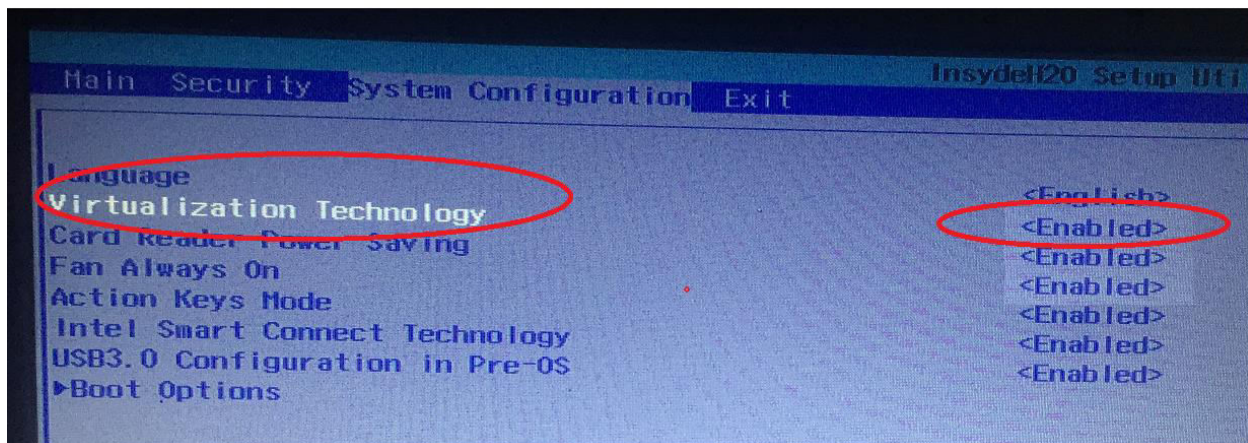
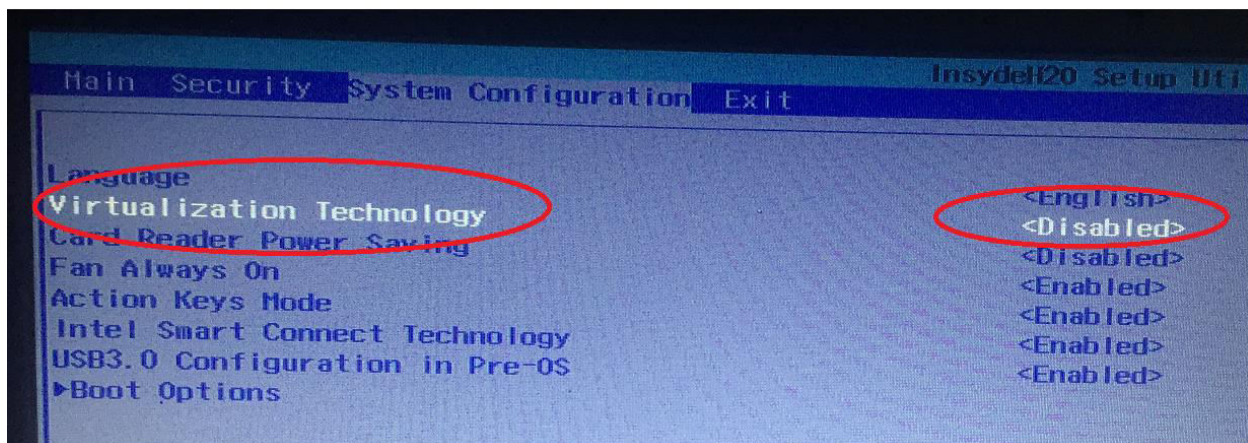
**CPU** : 64 Bit machine.  
**OS** : 64 Bit Windows OS  
**RAM** : At least 8 GB RAM (We suggest 16GB for smooth run)

### Enabling Virtualization in BIOS

Host OS must be able to Support Hardware Virtualization. (In next step, you will get to know how to enable Virtualization enabled. It might already be enabled on your machine.

**Step 1:** Go to your windows machine Bios setting and enable the virtualization as shown in below. (Your machine could have little different way to do this)

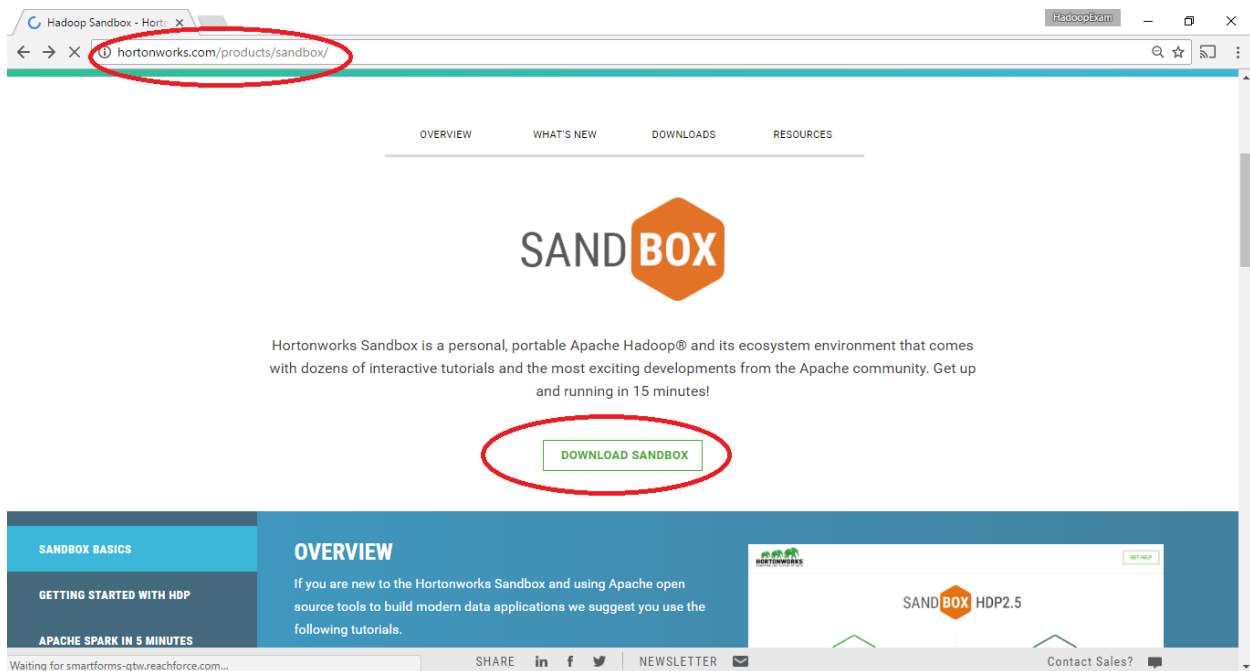
To enter in BIOS, while starting your machine use F10 key (Its for my HP Laptop, you can find according to your machine)



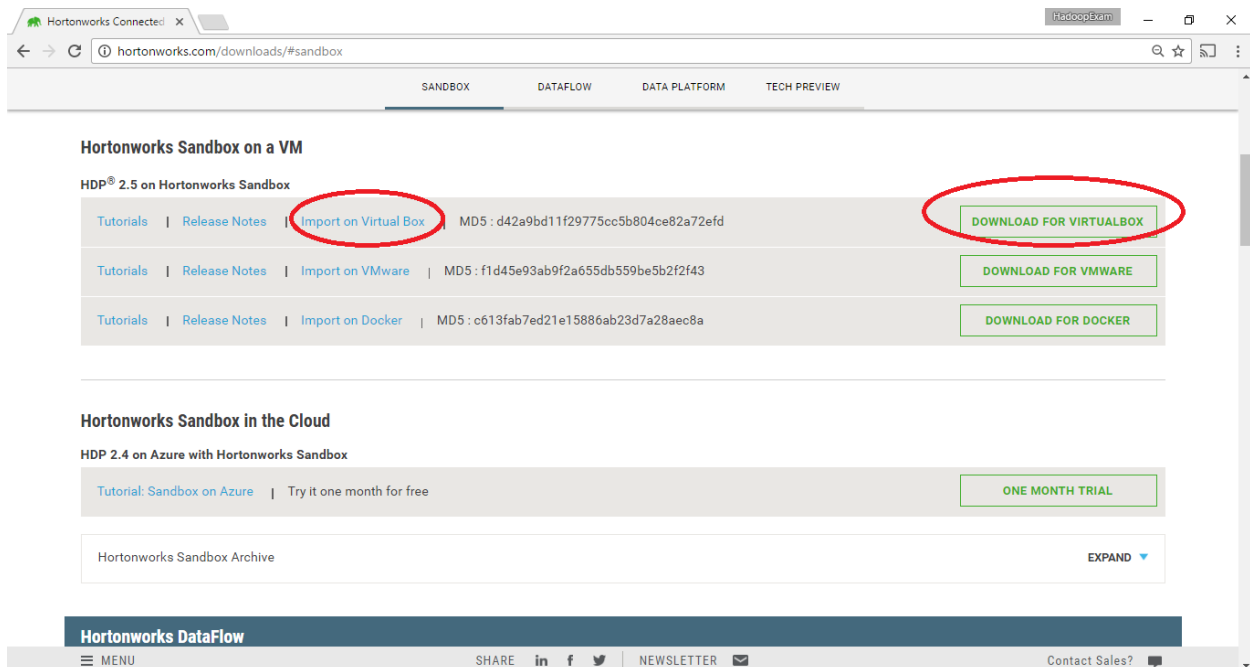
### Download Hortonworks Sanbox

**Step 2:** Download Hortonworks Sandbox for windows from below location

http://hortonworks.com/products/sandbox/

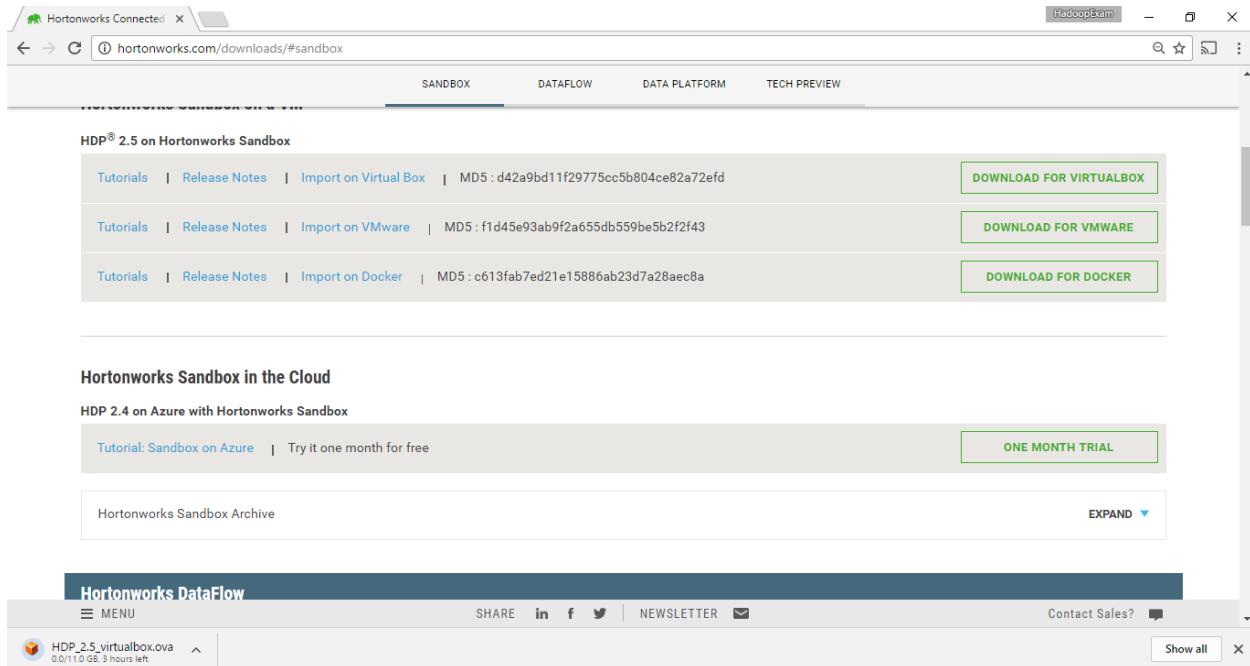


**Step 3:** Select VM for Windows (Make sure you download only for VirtualBox, its huge image take long time to download)



**Step 4:** Fill in the form and start downloading. It is an 11 GB file.

Name: **HDP\_2.5\_virtualbox.ova**



The screenshot shows the Hortonworks website with the following content:

- HDP® 2.5 on Hortonworks Sandbox**
  - Tutorials | Release Notes | Import on Virtual Box | MD5 : d42a9bd11f29775cc5b804ce82a72efd | [DOWNLOAD FOR VIRTUALBOX](#)
  - Tutorials | Release Notes | Import on VMware | MD5 : f1d45e93ab9f2a655db559be5b2f2f43 | [DOWNLOAD FOR VMWARE](#)
  - Tutorials | Release Notes | Import on Docker | MD5 : c613fab7ed21e15886ab23d7a28aec8a | [DOWNLOAD FOR DOCKER](#)
- Hortonworks Sandbox in the Cloud**
  - HDP 2.4 on Azure with Hortonworks Sandbox
    - Tutorial: [Sandbox on Azure](#) | Try it one month for free | [ONE MONTH TRIAL](#)
  - Hortonworks Sandbox Archive | [EXPAND](#)
- Hortonworks DataFlow**

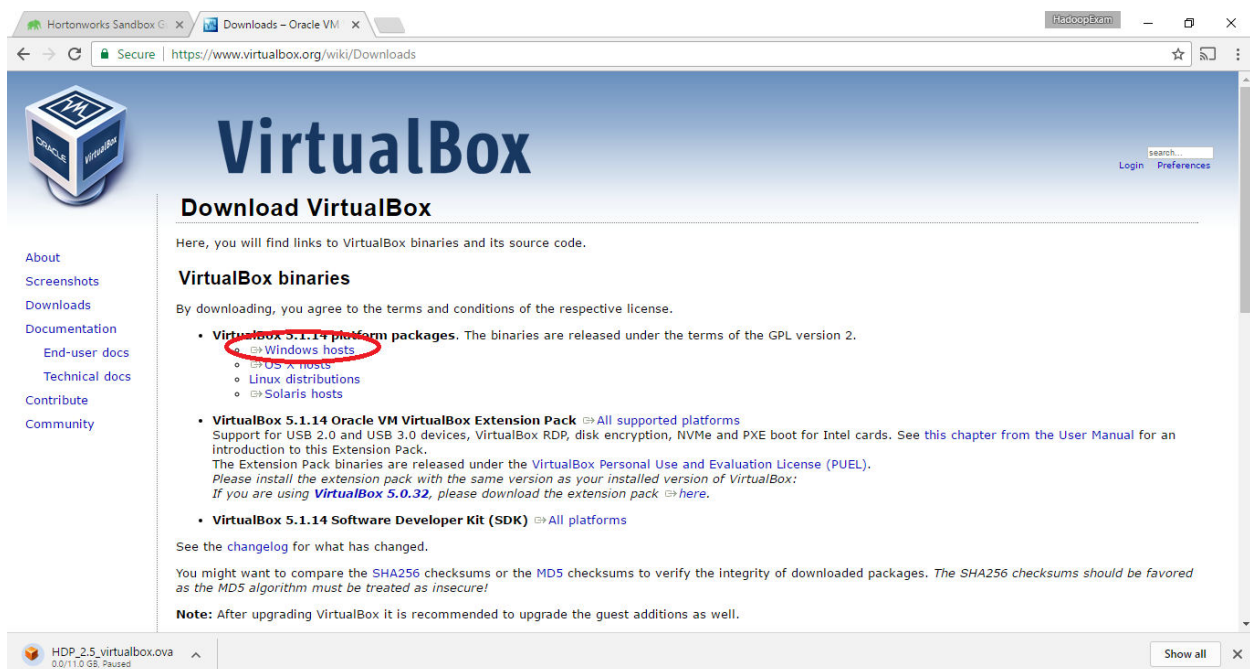
The bottom of the page shows a navigation bar with 'MENU', 'SHARE', 'in', 'f', 't', 'NEWSLETTER', and 'Contact Sales?'. A taskbar at the bottom shows 'HDP\_2.5\_virtualbox.ova' with a status of '0.0/11.0 GB, 3 hours left'.

## Download the Oracle Virtual Box

**Step 5:** Now Download the Oracle Virtual Box

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

Name: VirtualBox-5.1.14-112924-Win.exe (It could be different as per latest version)



The screenshot shows the VirtualBox website with the following content:

- VirtualBox**
  - [About](#)
  - [Screenshots](#)
  - [Downloads](#)
  - [Documentation](#)
    - [End-user docs](#)
    - [Technical docs](#)
  - [Contribute](#)
  - [Community](#)
- 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.

  - VirtualBox 5.1.14 platform packages.** The binaries are released under the terms of the GPL version 2.
    - [Windows hosts](#)
    - [OS X hosts](#)
    - [Linux distributions](#)
    - [Solaris hosts](#)
  - VirtualBox 5.1.14 Oracle VM VirtualBox Extension Pack** [All supported platforms](#)

Support for USB 2.0 and USB 3.0 devices, VirtualBox RDP, disk encryption, NVMe and PXE boot for Intel cards. See [this chapter from the User Manual](#) for an introduction to this Extension Pack.

The Extension Pack binaries are released under the [VirtualBox Personal Use and Evaluation License \(PUEL\)](#).

Please install the extension pack with the same version as your installed version of VirtualBox:

If you are using **VirtualBox 5.0.32**, please download the extension pack [here](#).
  - VirtualBox 5.1.14 Software Developer Kit (SDK)** [All platforms](#)

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

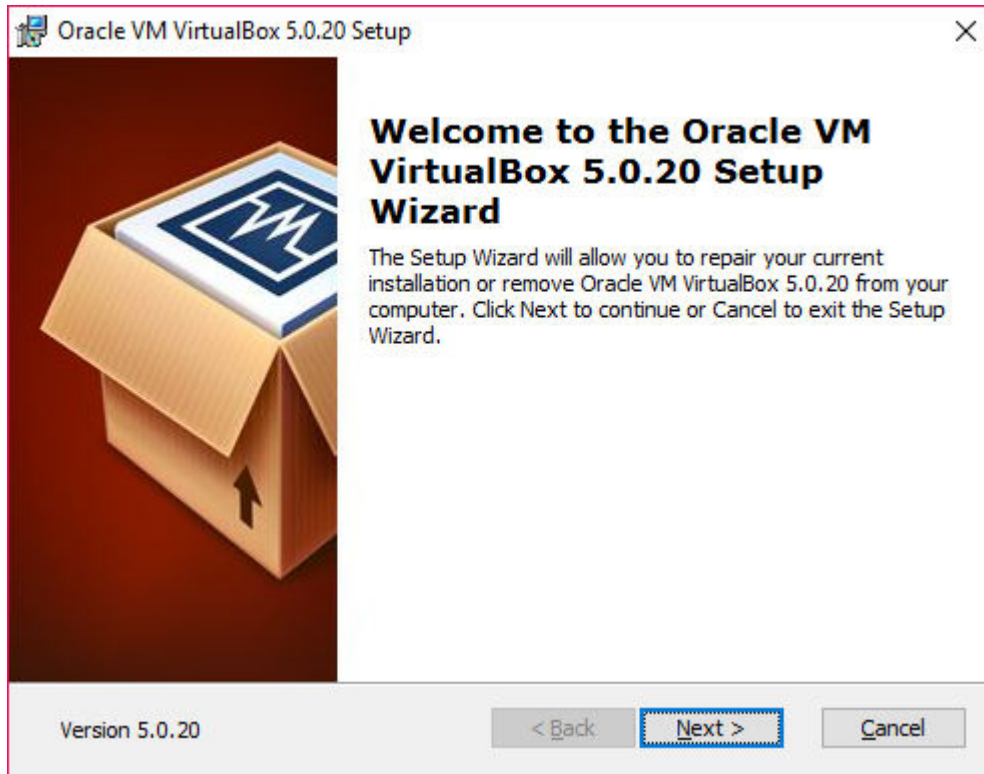
You might want to compare the [SHA256](#) checksums or the [MD5](#) checksums to verify the integrity of downloaded packages. *The SHA256 checksums should be favored as the MD5 algorithm must be treated as insecure!*

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

The bottom of the page shows a taskbar with 'HDP\_2.5\_virtualbox.ova' and a status of '0.0/11.0 GB, Paused'.

**Step 6:** Installation of Oracle Virtual Box

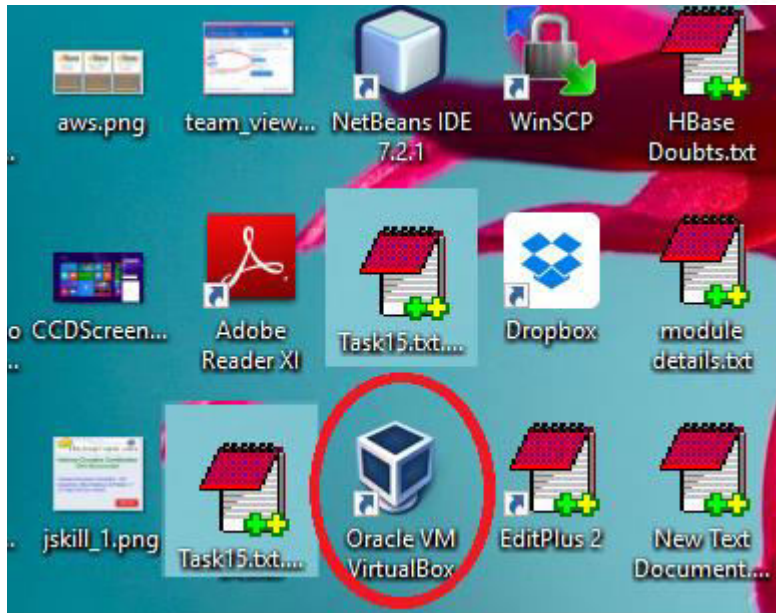
- Double click on exe. You should see following popup. (As per your version)



Just Click next -> next as it is simple installation. Once installation is finished, you are done with installation of VirtualBox, and we need to install Hortonworks Sandbox in this virtual box.

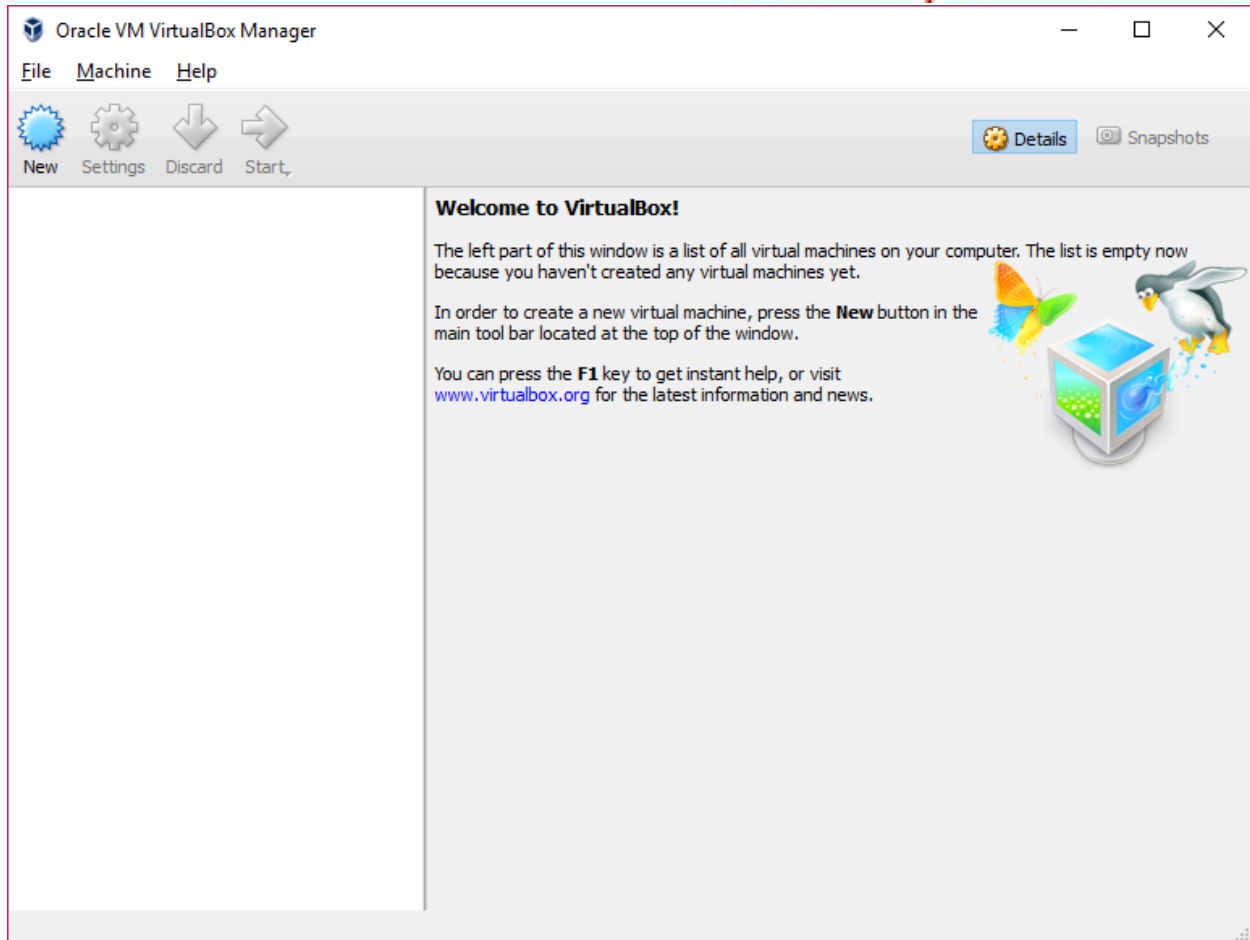
**Step 7:** Once installation is finished, you must see shortcut on desktop as below.



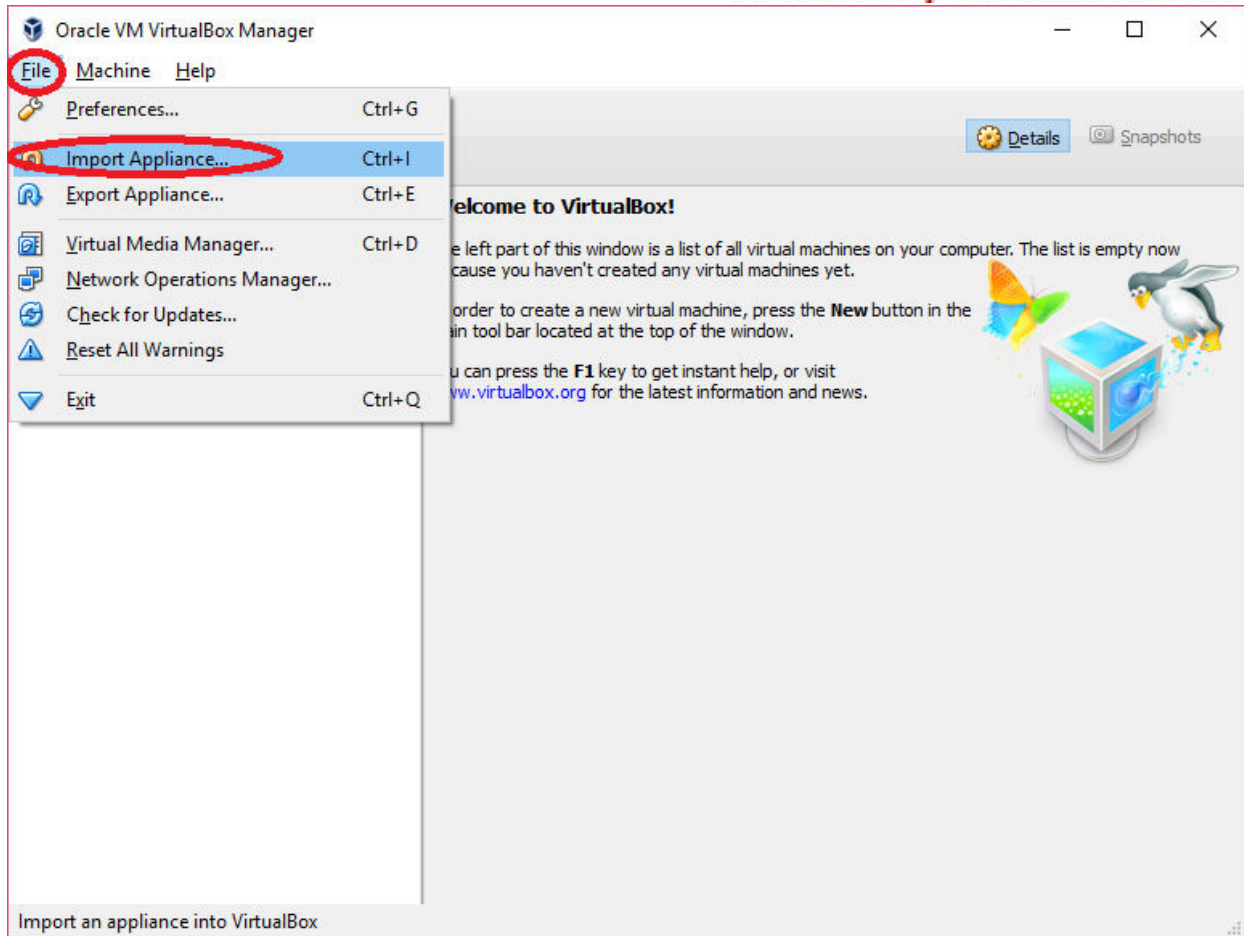


**Now Install Sandbox on this virtual box.**

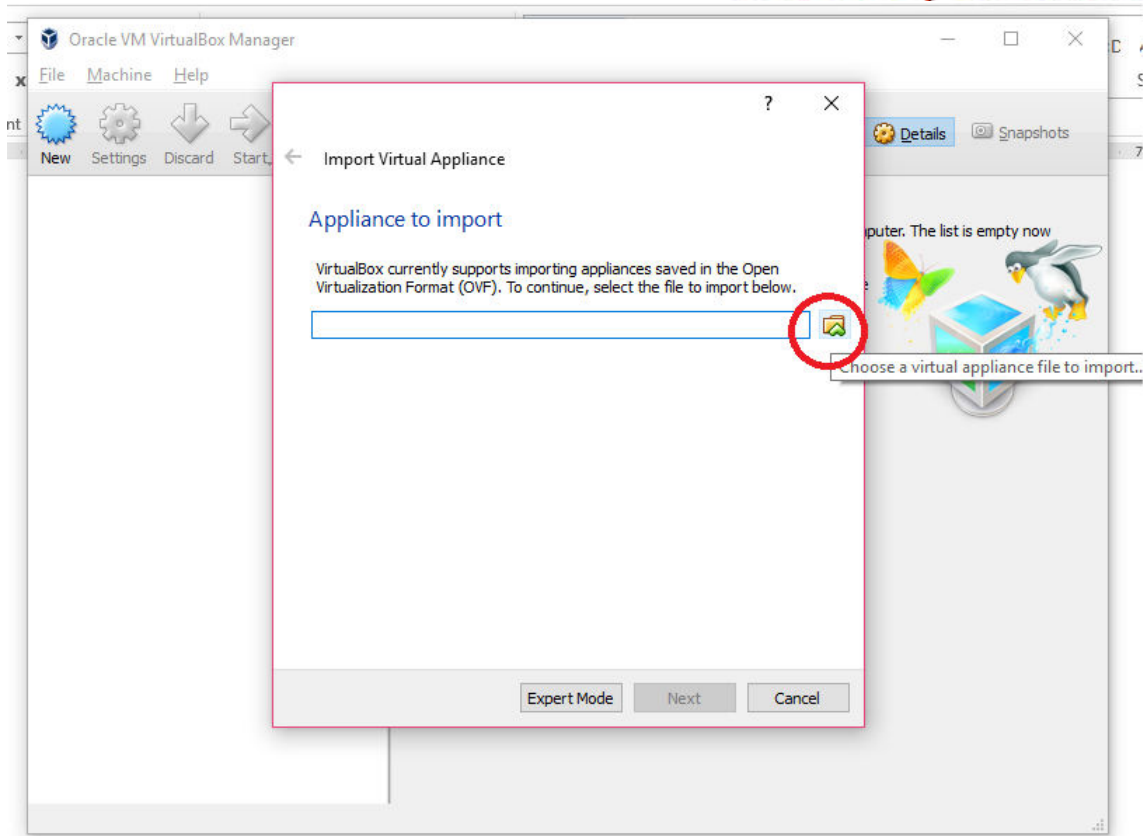
**Step 8:** Once you start Oracle Virtual Box, you should see following screen.



**Step 9:** Now import the Virtual Box, which we have downloaded from Hortonworks (11GB+ File)

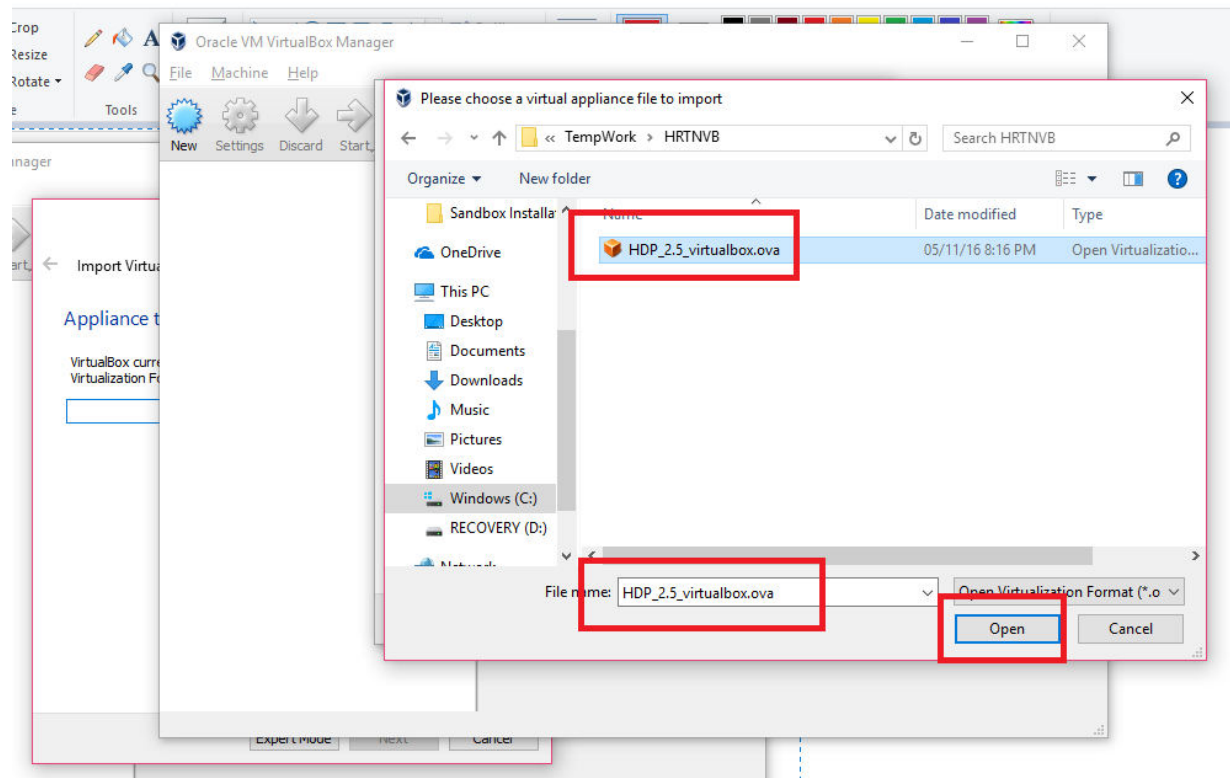


**Step 10:** Select the Sandbox image.

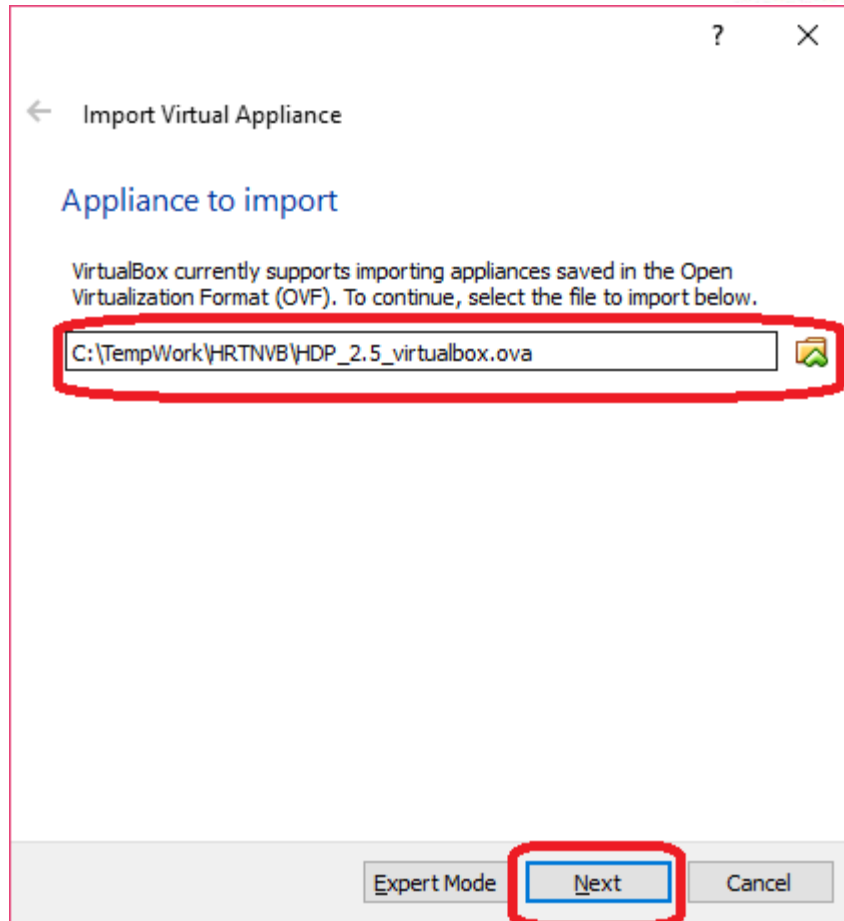


Click Open

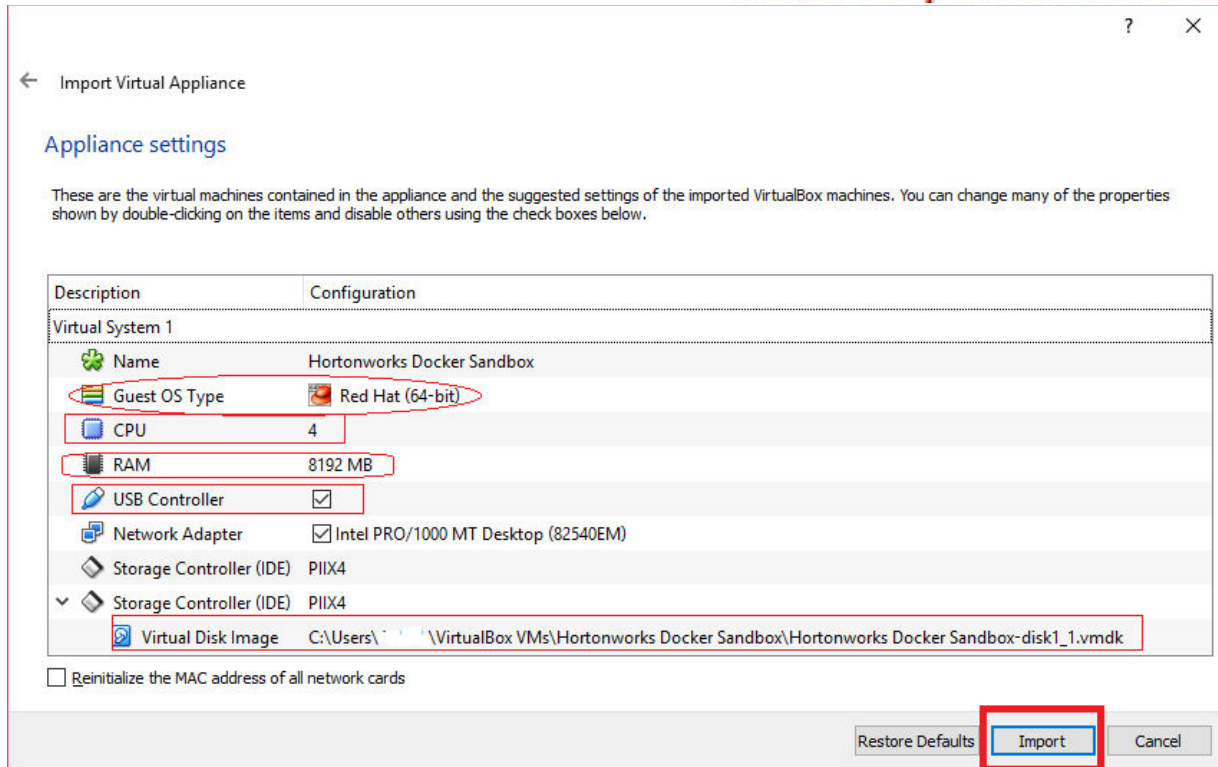




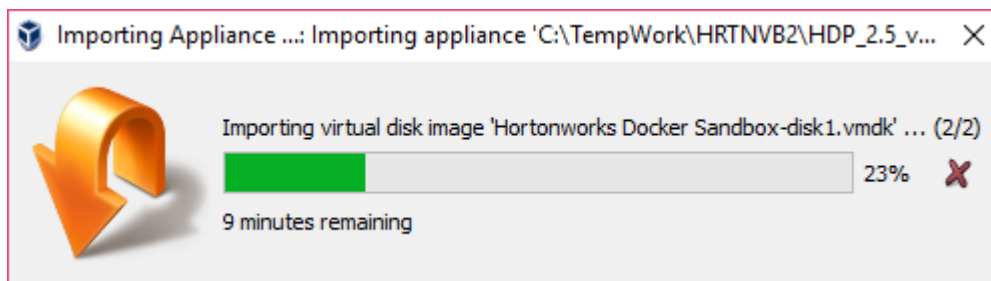
Click Next



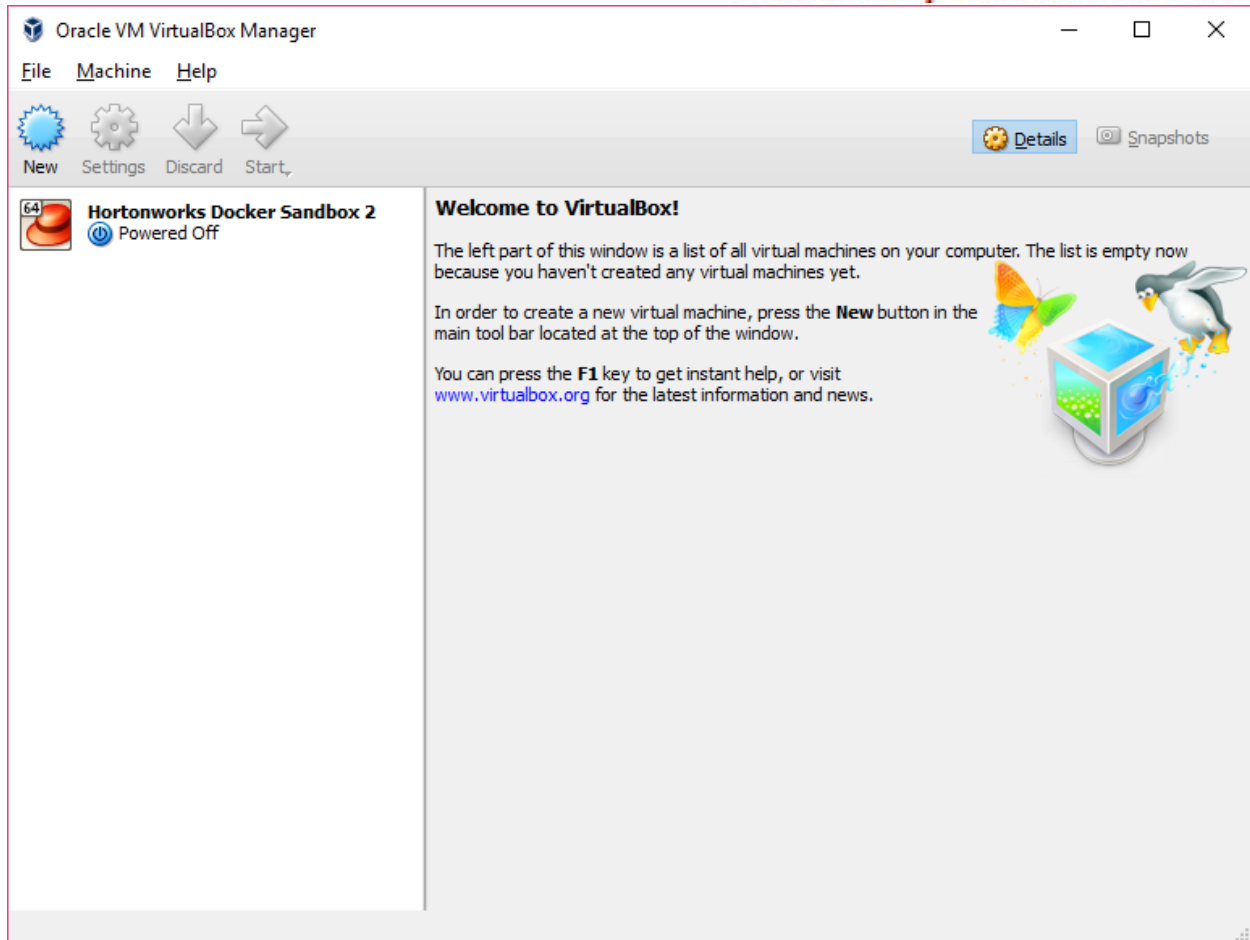
See Image Detail : You can change accordingly. Once done click import



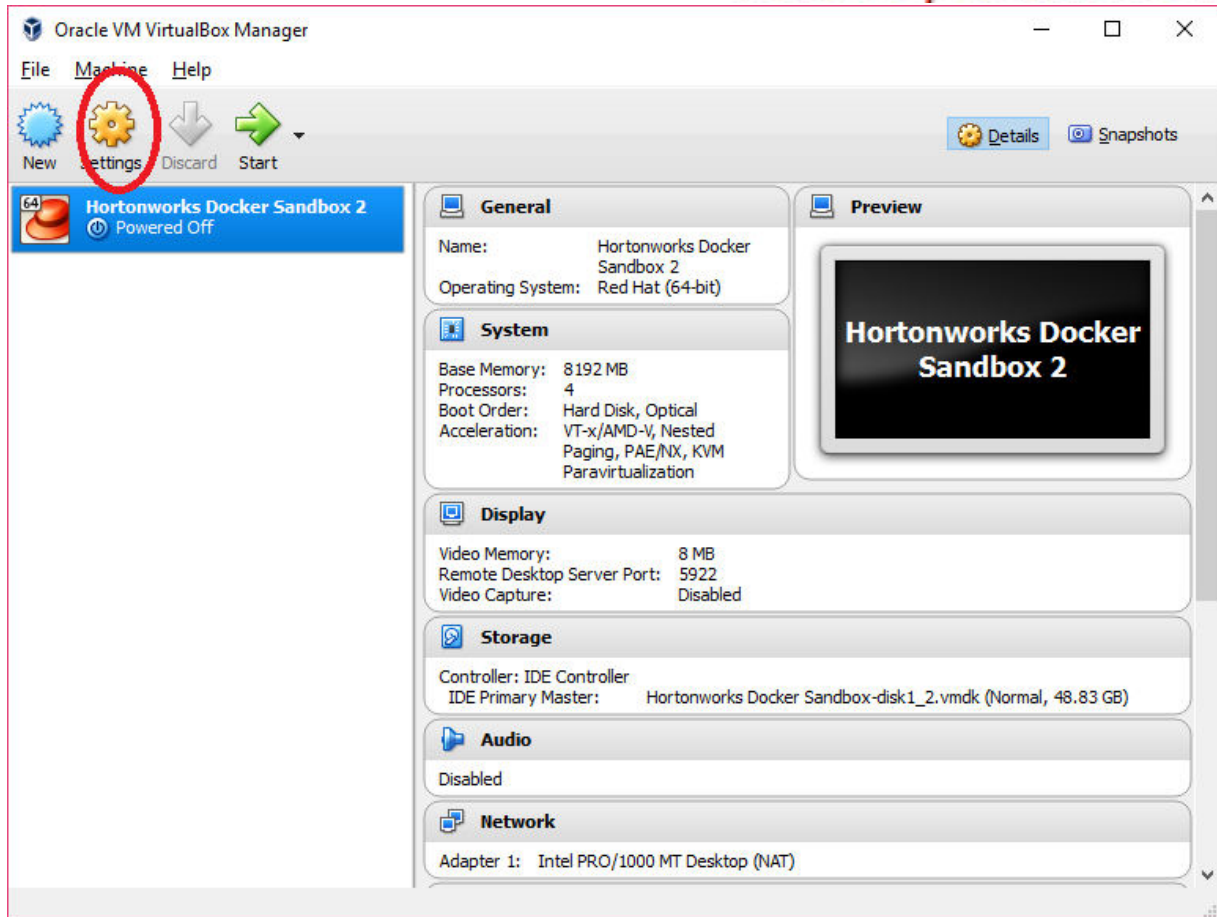
**Step 11:** After During import, you should see following progress bar. It will take 10-15 minutes to import the image. Wait till it get finished.



**Step 12:** Once imported you will see screen similar to below.

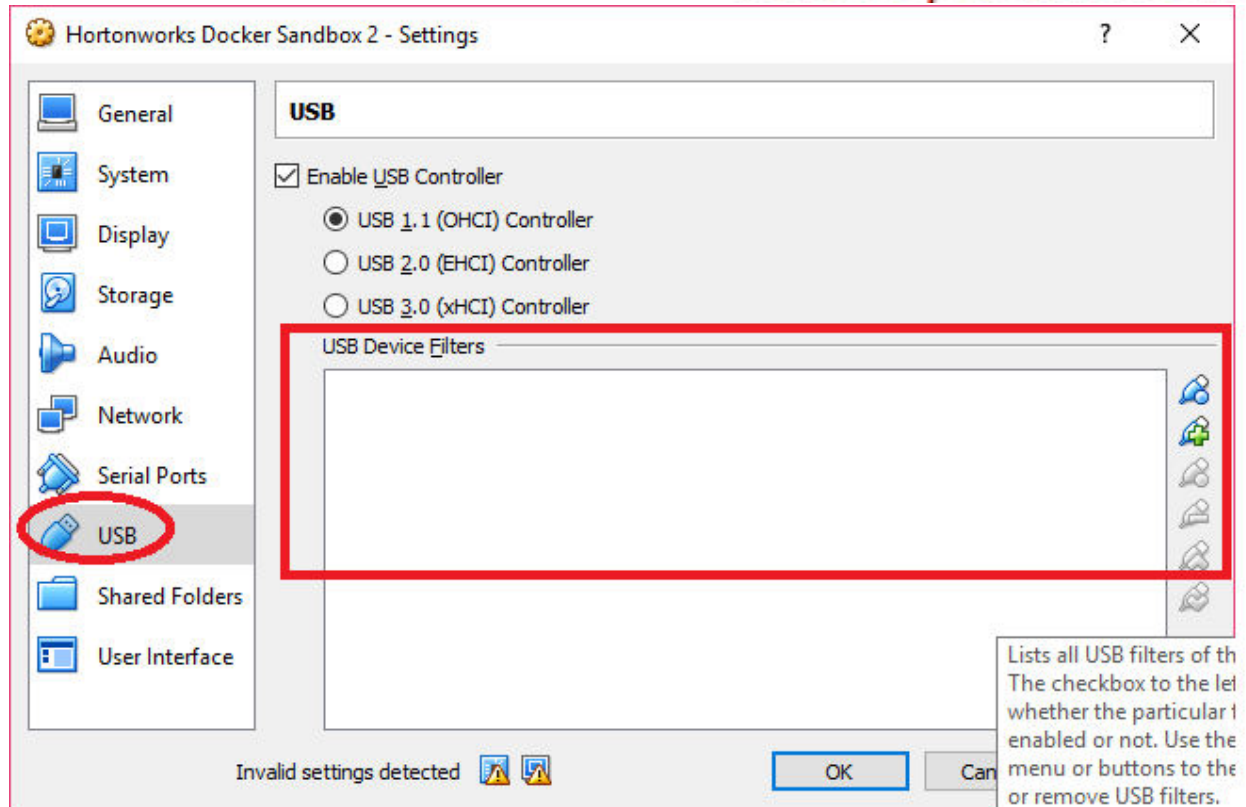


Step 13: Now do some of the settings as below. (Very important for smooth working). Click on setting

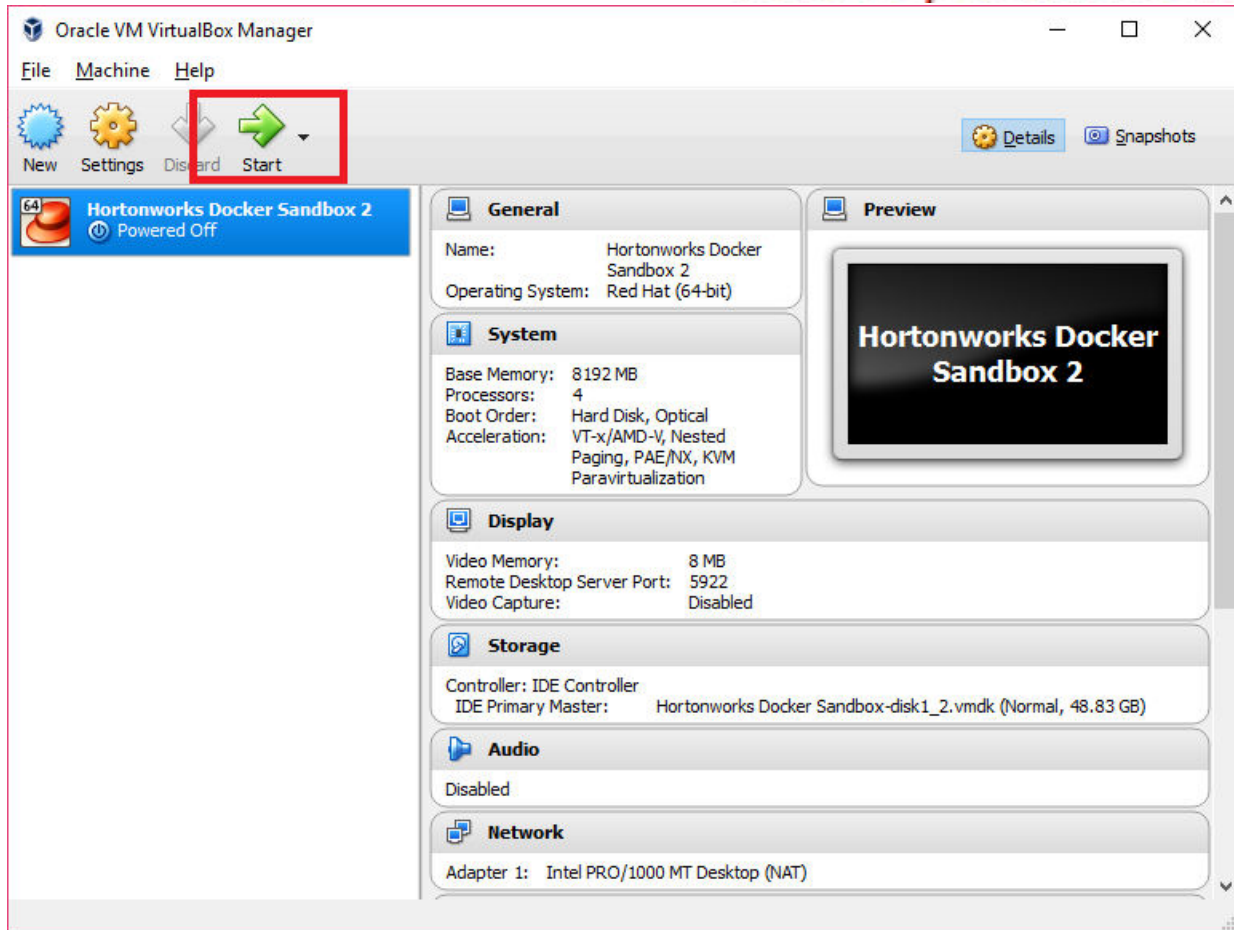


Select USB : USB Device filter should be blank as shown below.

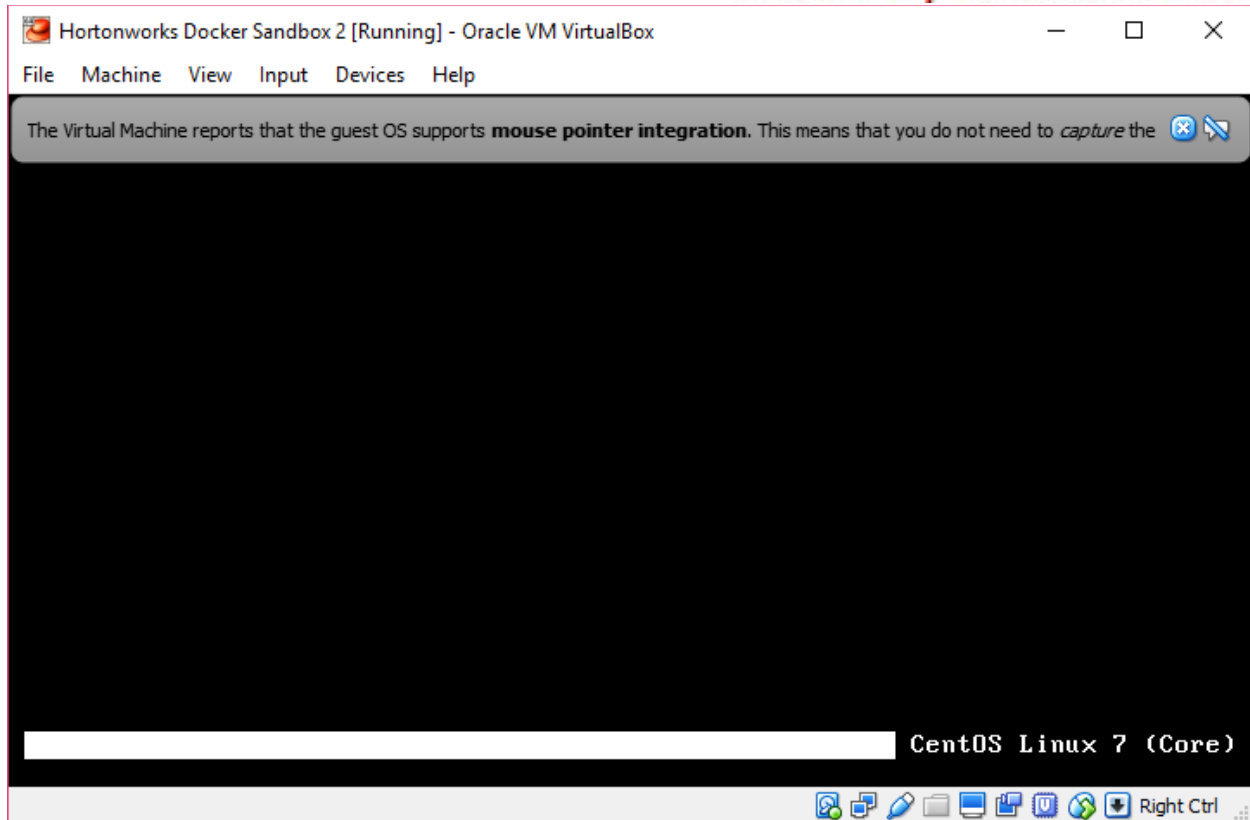




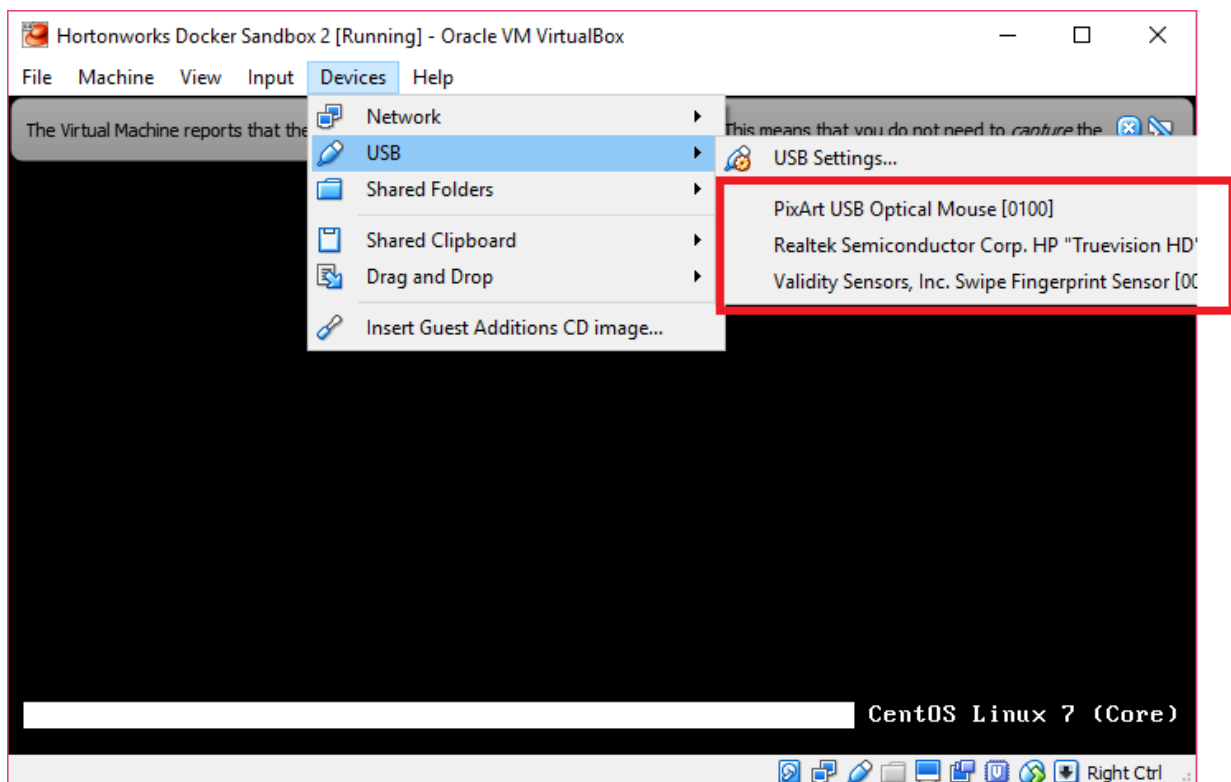
Now start the sandbox, as it is imported.



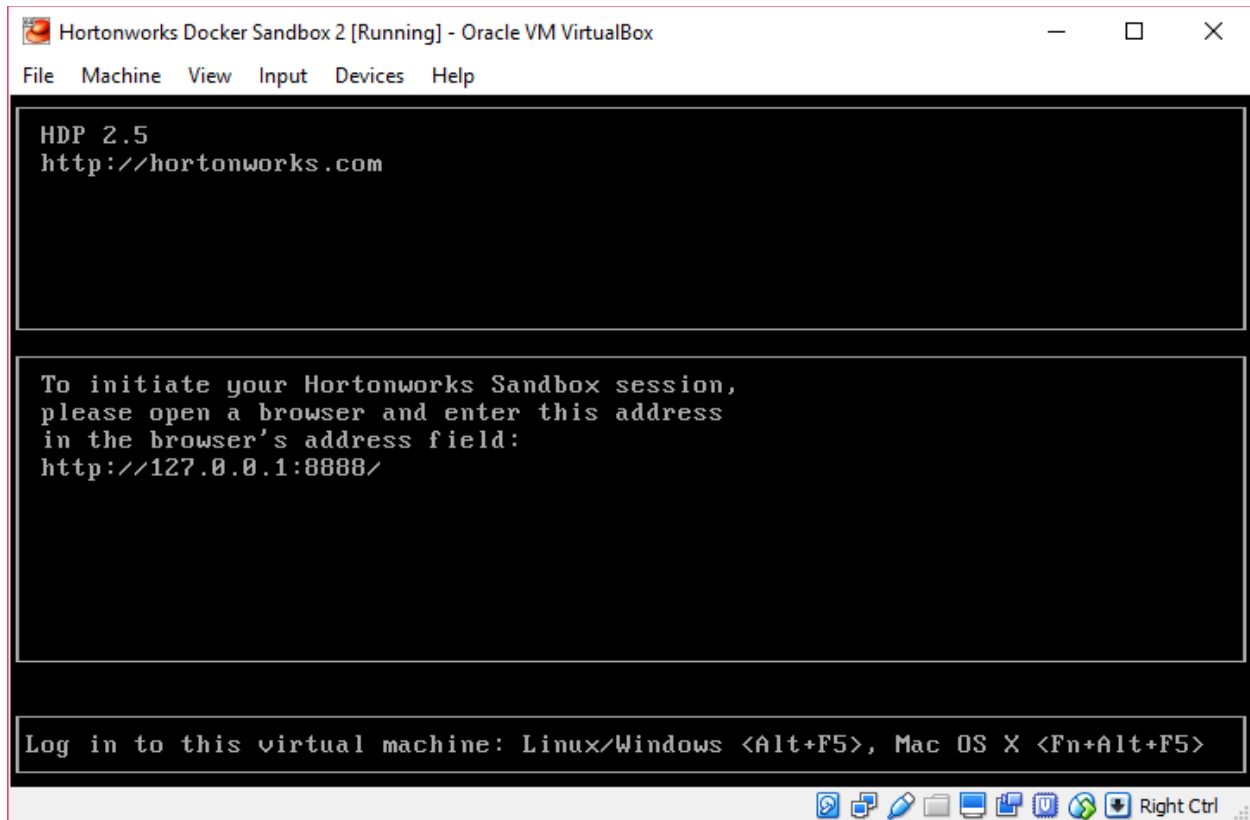
You will see below screen



Now once again, check for USB settings (Else you will fight how your mouse will work)

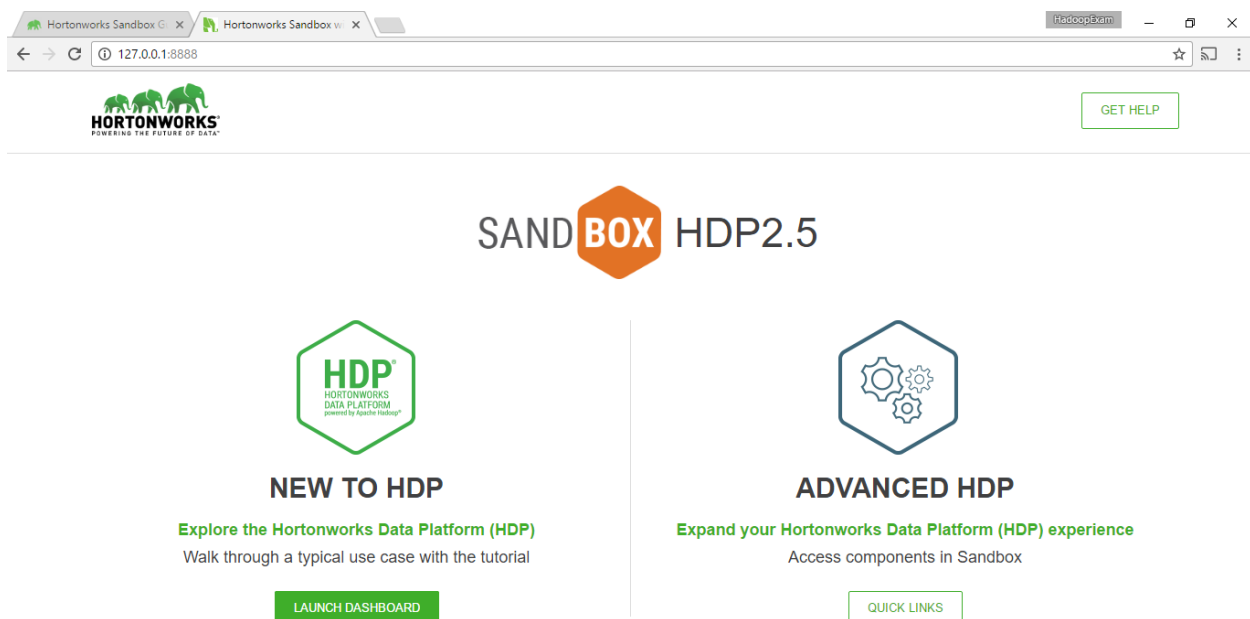


Wait till you see below screen (It will take around 10-15 mins)



**Step 14:** Now start the Ambari, and you should see below page.

URL: <http://127.0.0.1:8888/>



**Step 15:** Some settings before start working on Sandbox.

**Regarding Mouse** (Very common issue)

- 1. You have to check your laptops cursor will work.
- 2. Now unselect the mouse pixArt USB.

**Regarding User:**

The user behavior in the sandbox was changed due to security considerations. User maria\_dev is the default user is read-only ( cannot affect services in ambari ).

**User :** maria\_dev

**Password :** maria\_dev

However, we will not use this user.

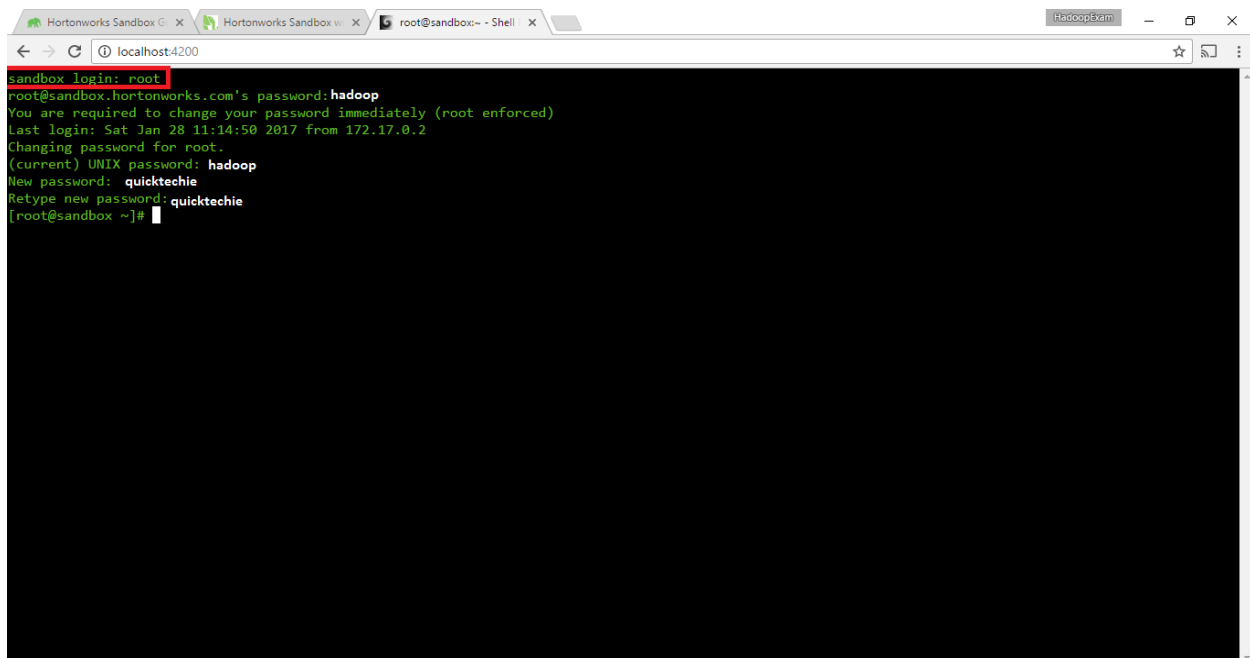
**Step 16:** Reset the password for admin user. It will ask you to change the password for root user as well.

Go to: **Web client for shell :** <http://localhost:4200/>

**User name:** root

**Existing Password:** hadoop

**New Password:** quicktechie



```

Hortonworks Sandbox G x Hortonworks Sandbox w x root@sandbox: ~ - Shell x HadoopExam
localhost:4200
sandbox login: root
root@sandbox.hortonworks.com's password: hadoop
You are required to change your password immediately (root enforced)
Last login: Sat Jan 28 11:14:50 2017 from 172.17.0.2
Changing password for root.
(current) UNIX password: hadoop
New password: quicktechie
Retype new password: quicktechie
[root@sandbox ~]#
```

**Step 17 :** set the password for ambari as below.

ambari-admin-password-reset



```

Hortonworks Sandbox G... Hortonworks Sandbox w... root@sandbox: ~ - Shell x
localhost:4200
sandbox login: root
root@sandbox.hortonworks.com's password:
You are required to change your password immediately (root enforced)
Last login: Sat Jan 28 11:14:50 2017 from 172.17.0.2
Changing password for root.
(current) UNIX password:
New password:
Retype new password:
[root@sandbox ~]# ambari-admin-password-reset
Please set the password for admin: admin
Please retype the password for admin: admin
The admin password has been set.
Restarting ambari-server to make the password change effective...

Using python /usr/bin/python
Restarting ambari-server
Using python /usr/bin/python
Stopping ambari-server
Ambari Server stopped
Using python /usr/bin/python
Starting ambari-server
Ambari Server running with administrator privileges.
Organizing resource files at /var/lib/ambari-server/resources...
Ambari database consistency check started...

```

**User:** admin

**Password:** admin

**Note:** It is re-starting Ambari. (It will take some time). Once re-started you see below screen.

```

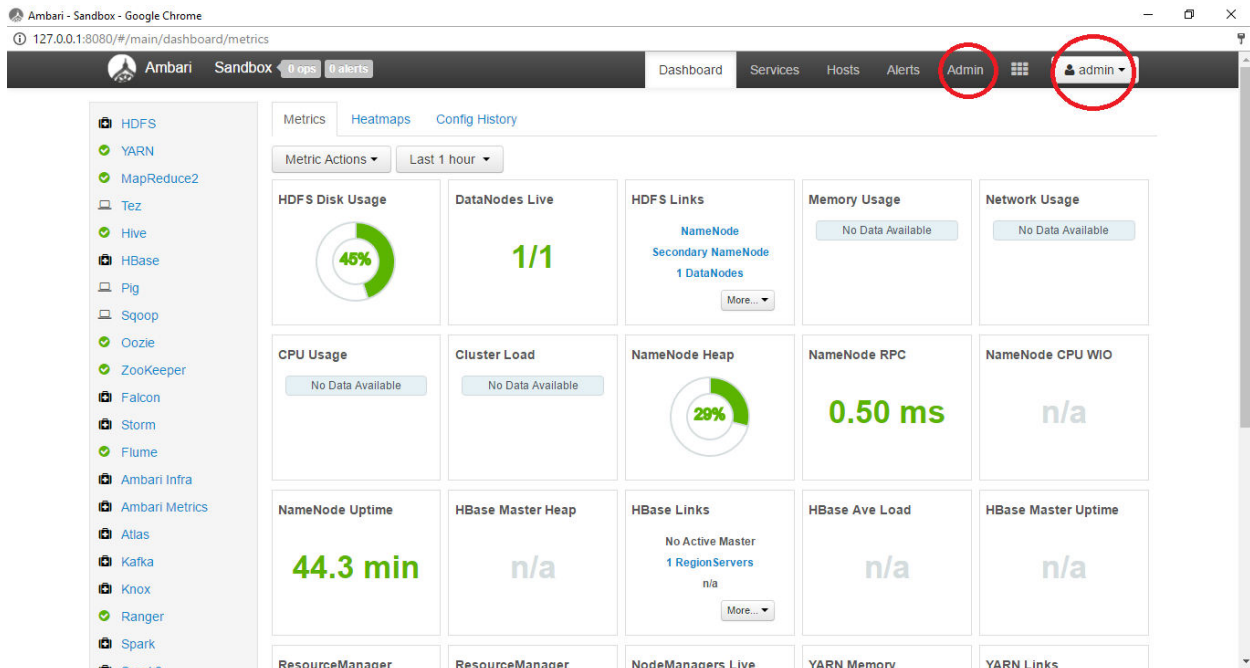
Hortonworks Sandbox w... root@sandbox: ~ - Shell x
localhost:4200
Using python /usr/bin/python
Restarting ambari-server
Using python /usr/bin/python
Stopping ambari-server
Ambari Server is not running
Using python /usr/bin/python
Starting ambari-server
Ambari Server running with administrator privileges.
Organizing resource files at /var/lib/ambari-server/resources...
Ambari database consistency check started...

No errors were found.
Ambari database consistency check finished
Server PID at: /var/run/ambari-server/ambari-server.pid
Server out at: /var/log/ambari-server/ambari-server.out
Server log at: /var/log/ambari-server/ambari-server.log
Waiting for server start.....
Ambari Server 'start' completed successfully.
[root@sandbox ~]#
[root@sandbox ~]#
[root@sandbox ~]#
[root@sandbox ~]#
[root@sandbox ~]#
[root@sandbox ~]#
[root@sandbox ~]#

```

**Step 18:** Now login to ambari at <http://localhost:8080/#/login> (So now we have admin permissions for Ambari user)

**URL:** <http://localhost:8080/#/login>



**Next Session:**

**Accessing Sandbox using Putty:** This is the best way we consider to access sandbox on windows.