

1. Download Required Files

You'll need to download three components from the Google Drive link:

Google Drive Link:

https://drive.google.com/drive/folders/1afZ0xGt5ClXy8ZeMSnzuhVjGG4IBWhCB?usp=drive_link

Download the following files:

1. VirtualBox Installer

- o File name: `VirtualBox-7.0.12-159484-Win.exe`
- o Used to create and manage virtual machines on your computer.

2. HDP Sandbox Image

- o File name: `HDP_2.6.5_virtualbox_180626.ova`
- o This is the Hadoop environment (Hortonworks Sandbox) that contains all Hadoop ecosystem tools preinstalled.

3. MobaXterm

- o File name: `MobaXterm_Installer_v25.2.exe`
- o Used to connect to the sandbox using SSH and run Linux commands easily.

2. Install VirtualBox

1. Locate the downloaded file `VirtualBox-7.0.12-159484-Win.exe`.
2. Double-click to start the installation.
3. Follow the on-screen steps:
 - o Accept the license agreement.
 - o Keep default installation options.
 - o Allow the installer to add VirtualBox network interfaces (click **Yes** if prompted by Windows).
4. Click **Finish** when done.

3. Import the HDP Sandbox (.ova file)

1. Open **VirtualBox**.
2. Click **File → Import Appliance...**
3. Browse to the downloaded `HDP_2.6.5_virtualbox_180626.ova` file.
4. Click **Next**, then **Import**.
5. Wait until the import completes (this may take several minutes).

After importing, you should see a new virtual machine named something like:

Hortonworks Sandbox with HDP 2.6.5

3.1 System Requirements for HDP 2.6.5 Sandbox (VirtualBox)

Before starting the virtual machine, make sure your computer meets at least these minimum specs:

Component	Minimum	Recommended
RAM (Memory)	8 GB	16 GB (so you can allocate ~9 GB to the VM)
CPU	Dual-core 2.0 GHz	Quad-core or higher
Disk Space	30 GB free	50 GB+ free
Host OS	Windows 10/11 (64-bit)	Windows 10/11 (64-bit)

3.2 Adjusting Virtual Machine Settings in VirtualBox

After importing the `HDP_2.6.5_virtualbox_180626.ova`, you should **increase the RAM allocation** before starting the VM.

Steps:

1. Open **VirtualBox**.
2. Select the imported **Hortonworks Sandbox** VM.
3. Click **Settings** → **System** → **Motherboard** tab.
4. Under **Base Memory**, move the slider to **at least 9216 MB (~9 GB)**.
 - If your PC only has 8 GB of RAM, set it to 6144 MB (6 GB) — but note that the sandbox may run very slowly or fail to start certain services.
5. (Optional but recommended) In **Processor** tab → allocate **2 CPUs** if available.
6. Click **OK** to save settings.

3.3 Important Notes

- If your computer has **less than 12 GB RAM total**, you may experience performance issues.
- You can stop unnecessary background applications to free up memory before running the sandbox.
- Never allocate *all* your RAM to the VM — leave at least 2–3 GB for Windows to run properly.

4. Start the Virtual Machine

1. In VirtualBox, select the **Hortonworks Sandbox** VM.

2. Click **Start**.
3. Wait for the virtual machine to boot up (it can take a few minutes).

When the system is ready, you'll see login text like:

```
CentOS Linux release 7.x
sandbox login:
```

Default Credentials:

- **Username:** root
- **Password:** hadoop

Upon your first login, you'll be prompted to **change the root password** — choose a simple one you can remember (e.g., hadoop123).

5. Install MobaXterm

1. Locate and run `MobaXterm_Installer_v25.2.exe`.
2. Follow the installation wizard (you can keep all default settings).
3. Launch **MobaXterm** after installation.

6. Connect to the Sandbox via SSH (Using MobaXterm)

1. In MobaXterm, click **Session → SSH**.
2. In the **Remote host** field, enter:
3. 127.0.0.1
4. Check the box **Specify port** and enter:
5. 2222
6. Click **OK**.

When prompted:

- **Username:** root
- **Password:** hadoop (or your new password if changed)

You should now have a Linux terminal session connected to the sandbox.

7. Access the Ambari Web Interface

1. Open a web browser on your host machine.
2. Enter the following URL:
3. `http://127.0.0.1:8080`
4. Log in using the default Ambari credentials:
 - o **Username:** `maria_dev`
 - o **Password:** `maria_dev`

You'll then see the Ambari dashboard, which lets you monitor and manage Hadoop services like HDFS, YARN, Hive, Pig, and others.

8. Summary of Credentials

Purpose	Username	Password	Port/URL
Virtual Machine Login	root	hadoop (change after first login)	via VirtualBox console
SSH Access (MobaXterm)	root	hadoop	127.0.0.1:2222
Ambari Web Interface	<code>maria_dev</code>	<code>maria_dev</code>	<code>http://127.0.0.1:8080</code>

9. Stopping and Restarting

- To **shut down** the sandbox safely:
 - `poweroff`

or close it via VirtualBox interface → “Send the shutdown signal.”
- To **start** it again:
 Open VirtualBox → select the HDP VM → click **Start**.