

Instructions for Downloading and Installing the Exercise Environment

To use the hands-on environment for this course, you need to download and install a virtual machine (supplied by Cloudera) and the software on which to run it. Before continuing, be sure that you have access to a computer that meets the following hardware and software requirements.

Hardware and Software Requirements

- Windows, macOS, or Linux operating system (iPads and Android tablets will *not* work)
- 64-bit operating system (32-bit operating systems will *not* work)
- 8 GB RAM or more
- 25GB free disk space or more
- Intel VT-x or AMD-V virtualization support enabled (on Mac computers with Intel processors, this is always enabled; on Windows and Linux computers, you might need to enable it in the BIOS)
- *For Windows XP computers only:* You must have an unzip utility such as 7-Zip or WinZip installed (Windows XP's built-in unzip utility will *not* work)

Installing the Environment

Installing the hands-on environment has three major steps: First, download and install the software that runs the virtual machine (VM)—there are two choices, as noted below. Then download the VM that you will be using. Finally, install the VM. You can then adjust your settings as needed.

The VM can run using products from VMware or Oracle's VirtualBox. For Mac systems, VirtualBox is free but VMware requires a license; for other systems, free versions are available for both. The VM tends to run a bit faster on VMware, so we recommend choosing VMware if you can.

NOTE: These instructions appear in each of the courses in this specialization. If you have already installed the VM for a previous course, you do not need to reinstall. If something goes wrong with your VM, you can delete it and reinstall, but any work you have done inside the VM will be lost.

A. Download and Install the Software

Choose the software you wish to use, VMware or VirtualBox, and follow the appropriate instructions.

VMware

For Linux systems, download the [VMware Workstation Player](#). For Windows, download [VMware Workstation Player 15](#). (We have had many issues with version 16 downloaded from the VMware site, so please use version 15.) For Mac systems, download [VMware Fusion](#). Open the downloaded file and following the instructions provided, but please *decline all updates and upgrades*.

For Windows and Linux:

- Decline the upgrade to the Pro version. The free version is sufficient for this course and this specialization.
- Decline to enter a license key. The license allows you to use VMware Player for free without a license key as long as it's for non-commercial purposes.

VirtualBox

On the [VirtualBox downloads page](#), click to download the platform package for the system you are using. Open the downloaded file and follow the instructions provided, but please note: The installer might prompt you to accept that the network may be disconnected during the installation, and to install USB device software. Accept both of these prompts.

B. Download the VM

We have created a VM specially for this course. You need to download this VM by clicking one of the following links, depending on which software you are using (VMware or VirtualBox). These two VMs themselves are identical, and they include the data and the applications you will need for this course. The only difference between them is which software they run in (VMware or VirtualBox).

NOTE: The VM is large and might take a long time to download.

- [VirtualBox VM](#)
- [VMware VM](#)

Open the downloaded file to unzip it. You will now have a folder with several files within it.

We recommend that you also keep the downloaded zip file in case you need to reinstall a fresh copy of the VM. You can also come back here and download it again if needed.

C. Install and Start the VM

Follow the appropriate instructions below depending on which software you chose to use.

VMware

To start the VM in VMware:

1. Open the VMware software.
2. In the File menu, click Open. (You might need to click Player to see to the File menu.)
3. Navigate to the directory where you unzipped the VM file.
4. Select the file named Cloudera-Training-CourseraDataAnalyst-VM-cdh5.13.3c.vmx and click Open. (Mac users who get the error message "Could not open /dev/vmmon: Broken pipe" should follow the instructions [here](#) to correct that issue.)
5. The VM will appear in the list of virtual machines in the VMware window. (A new window might also pop displaying the VM.)
6. With the VM selected (or in the window that popped up), click the Play button to start the VM.
7. When the VM starts up, VMware might display prompts to update VMware Tools. Click No or Never to decline these updates.
8. Move the VM window and resize it by dragging the corners as needed.

VirtualBox

To install and start the VM in VirtualBox:

1. Open the VirtualBox software.
2. In the File menu, click Import Appliance...
3. Under Appliance to import, click the folder icon and navigate to the directory where you unzipped the VM file.
4. Select Cloudera-Training-CourseraDataAnalyst-VM-cdh5.13.3c.ovf and click Open.
5. If you see a Continue button, click it.
6. Under Appliance settings, do not make any changes.
7. Click Import.
8. Wait for the import process to finish.

9. The VM will appear in the left panel of the VirtualBox window. Double click it to start, then give it a few minutes to fully start.
10. When the VM starts up, VirtualBox will display messages about keyboard capture and mouse pointer capture. Click x to dismiss these messages.
11. Move the VM window and resize it by dragging the corners as needed.
12. In the View menu, adjust the scale factor to make the VM display as desired. For example, if you are using a Mac with a Retina screen, select View > Virtual Screen 1 > Resize to 200% (autoscaled output).

D. Connect the VM to the Internet

First, ensure that your computer is connected to the internet. Then, in the upper right corner of the VM, look for an icon like this:



If the icon appears just like in this image above, then the VM should already be connected to the internet.

But if the icon appears with a red x, then the VM is not yet connected to the internet:



If you see this icon with the red x, click the icon and choose Auto Ethernet to connect to the internet.

Changing Settings on the VM

You can change the settings inside your VM to your liking using System > Preferences.

A common setting to change is the keyboard. The default keyboard layout is English (US). If you use a different keyboard, you will need to set it in the VM, even if it is already set on your computer. Use System > Preferences > Keyboard to add another keyboard layout and set it as the default. After setting the keyboard to another default, you can remove the English (US) keyboard, if you like.

Logging into Hue

Throughout this course, you will use a browser-based interface called Hue. Hue is installed in the VM; although it's accessed using a web browser, you don't need to be connected to the internet to use most commands on Hue.

To log into Hue:

1. In the VM, open Firefox by clicking the Firefox Web Browser icon in the menu bar..
2. Click the Hue bookmark or go to <http://localhost:8888/hue/home>. (For this training, you *must* use the browser within the VM. Do not try to use the browser outside the VM on your computer.)
3. Sign in using username training and password training. You can agree to remembering your username and password if you like. You also can go through the tour of Hue 4.0 if you like, but these courses introduce all the parts of Hue that you will need, when you need them, so you can click the X and ignore the tour.