Note: Windows OS 7 and 32 bit systems are not supported by MongoDB University curriculum team.

Download/Install VirtualBox:

1. Go to the [VirtualBox Downloads page](#) and click the "Windows hosts" link from the "platform packages" section of the site. Once you click on "Windows hosts", VirtualBox will start downloading.

2. Once the download completes, navigate to the directory where the file has been downloaded and run the VirtualBox .exe file.

3. In the VirtualBox Setup Wizard, click "Next" in the Custom Setup until you reach the "Ready to Install" window. Click on "Install" and allow any permissions for VirtualBox making any changes to the device (Note: Sometimes due to slow internet connection, it might take some time for VirtualBox to install).

4. Check the "Start VirtualBox" after Installation option and click finish.

5. To verify the installation of the VirtualBox, run the following command in Command Prompt:
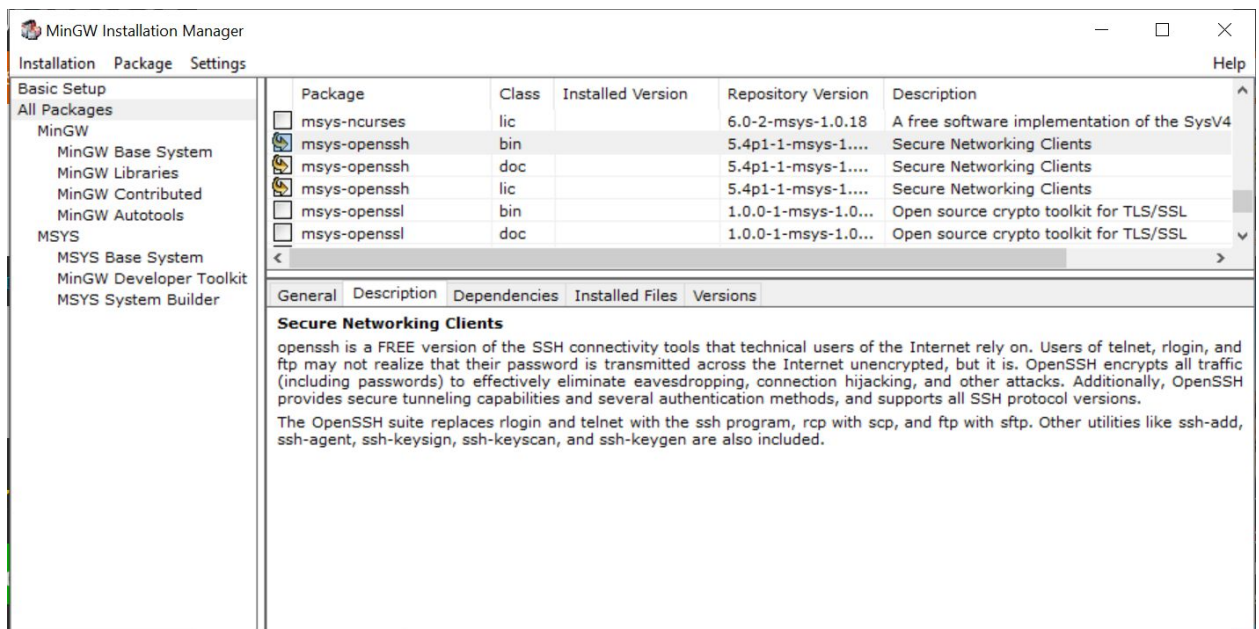
   cd C:\Program Files\Oracle\VirtualBox
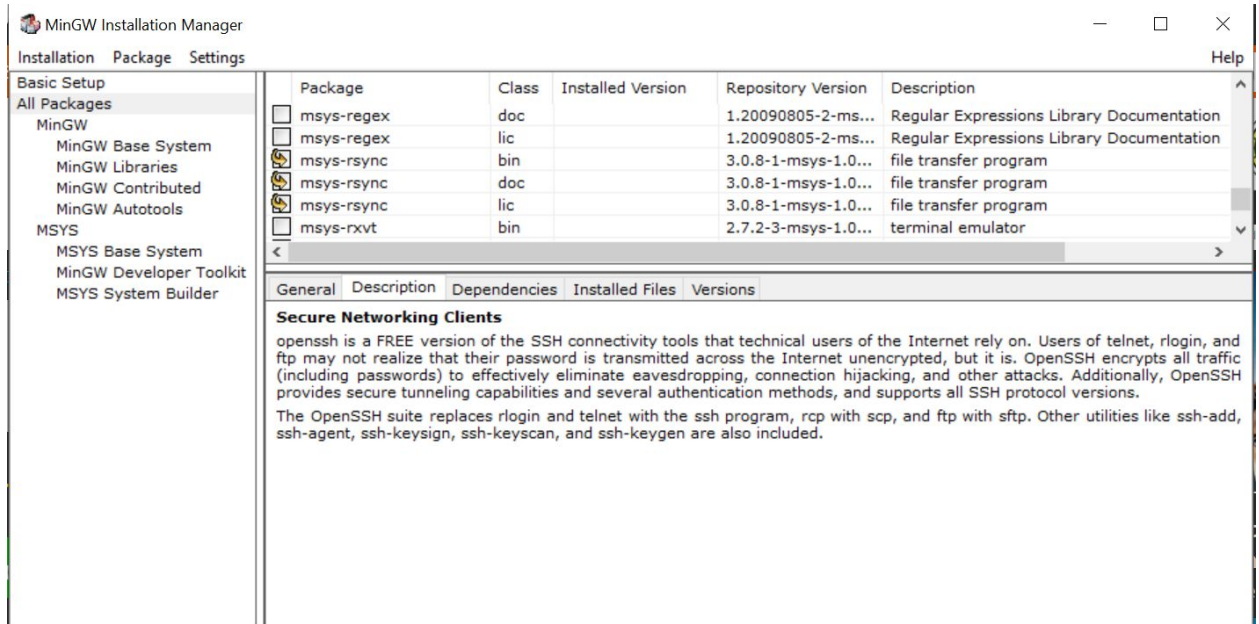   **vboxmanage --version**

   A number, representing the version of VirtualBox, should be printed as output if the installation was successful.
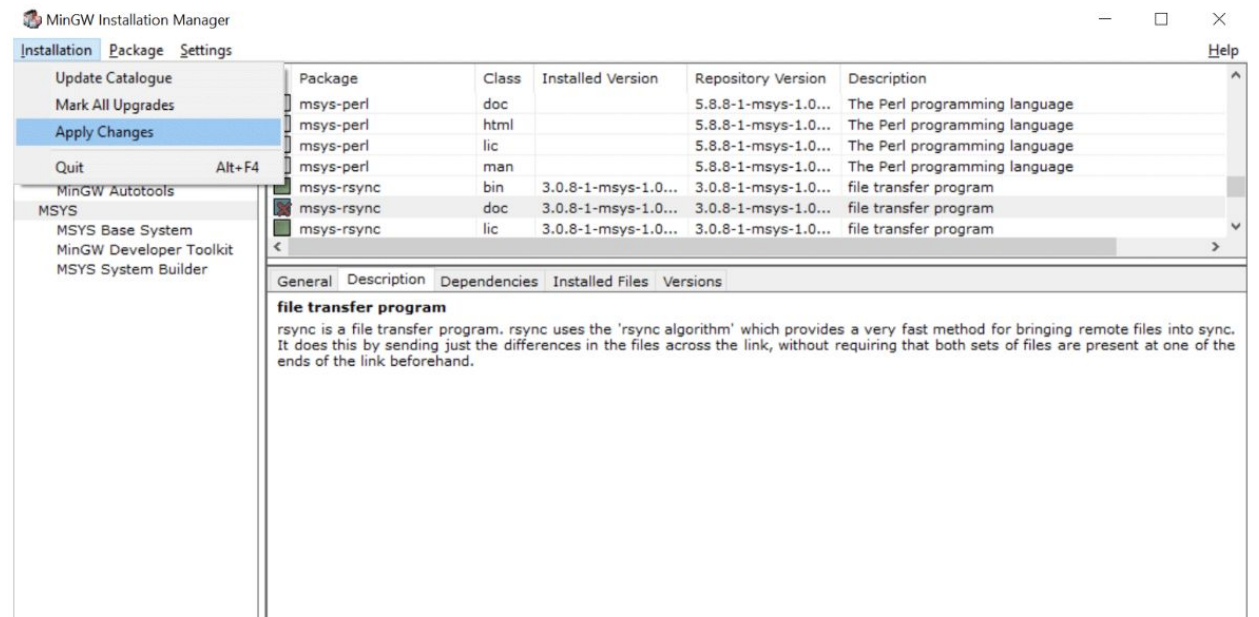
Download/Install MinGW:

Vagrant requires two important command-line tools: **rsync** and **ssh**. These command-line tools allow us to connect to our virtual machine and to sync files between our host and virtual machines. MinGW is a set of GNU utilities for software development on Windows. We'll use MinGW to install both rysnc and ssh into our Windows machine.

1. Download MinGW Installer (mingw-get-setup.exe) from [here](#).

2. Open the MinGW Installation Manager Setup Tool and click Install.

3. In the "Specify Installation Preferences" screen, click Continue without changing any default installation.

4. Download and Set Up "MinGW Installation Manager" screen will take some time, until the download completes. Click Continue, when it is done.

5. In the next step, click on All Packages and select rsync and ssh for installation like shown in the following screenshots:
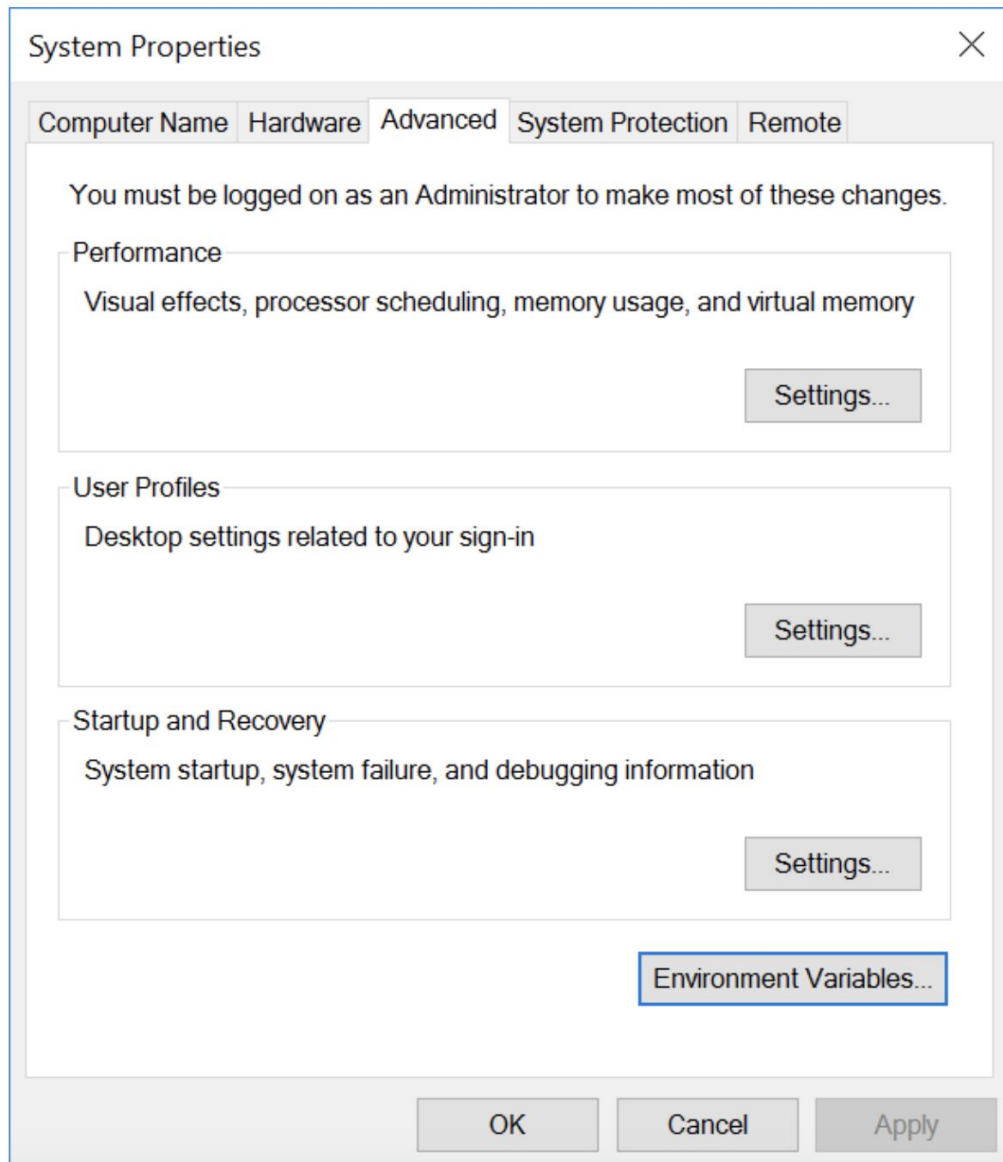
6. After marking the packages for installation you can go ahead and apply the changes:
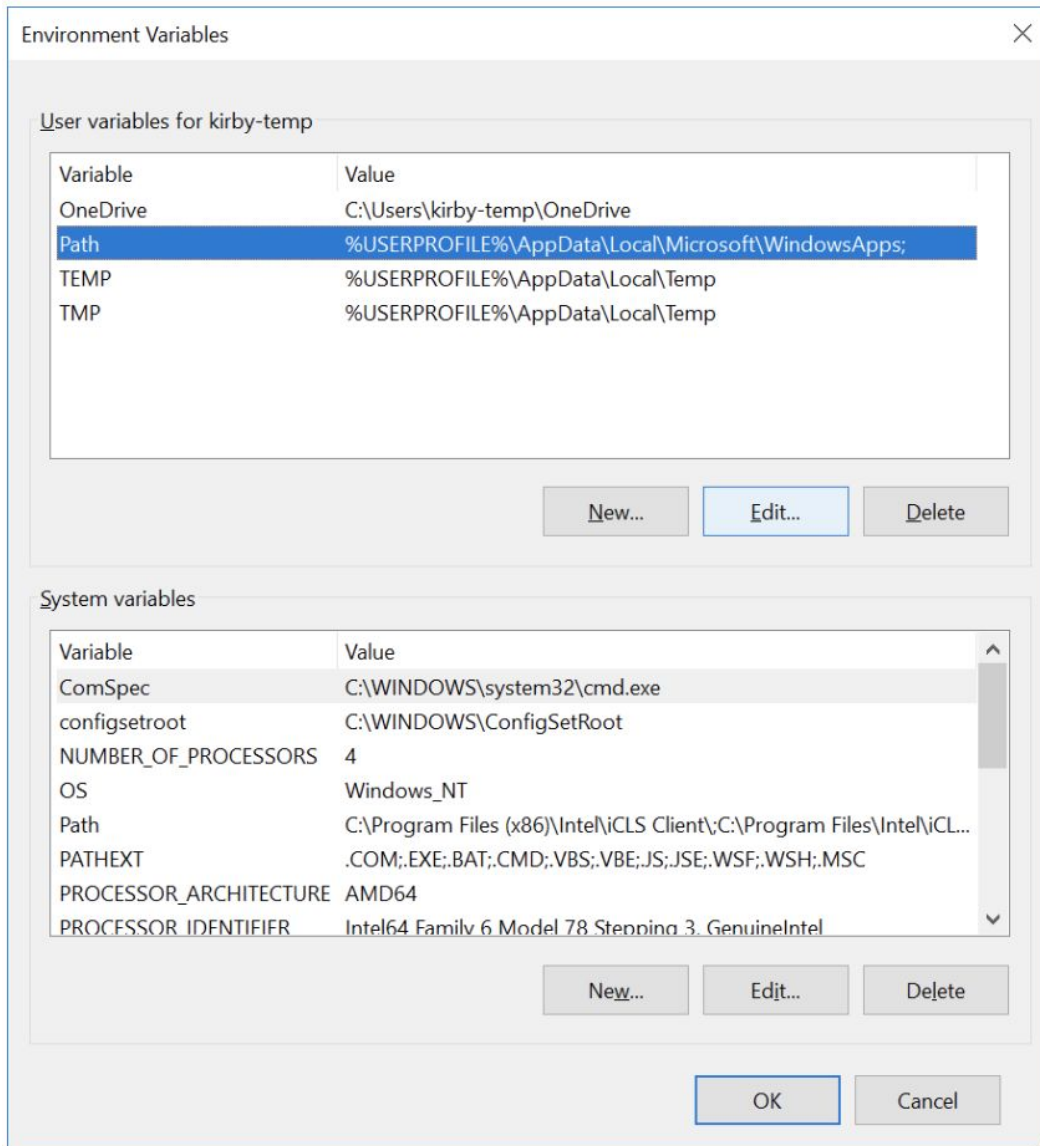
Updating PATH Environment Variable:

Assuming you've kept the default installation path, rsync and ssh should be installed to the C:\MinGW\msys\1.0\bin directory. In order for these tools to be accessible via the command-line (and Vagrant) you'll need to add this directory to your PATH environment variable.
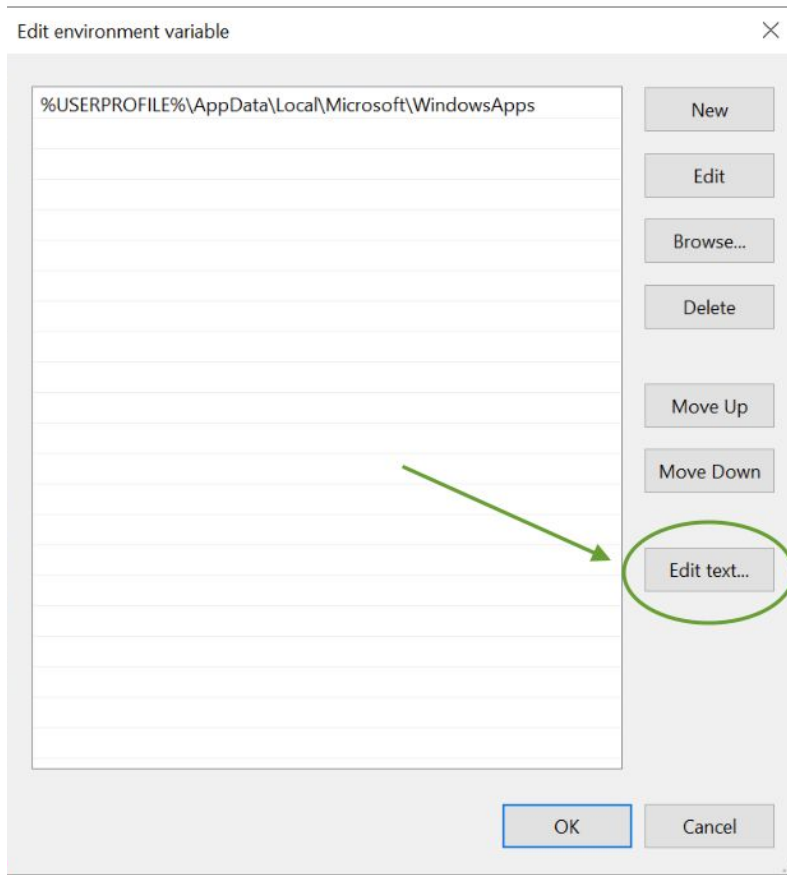
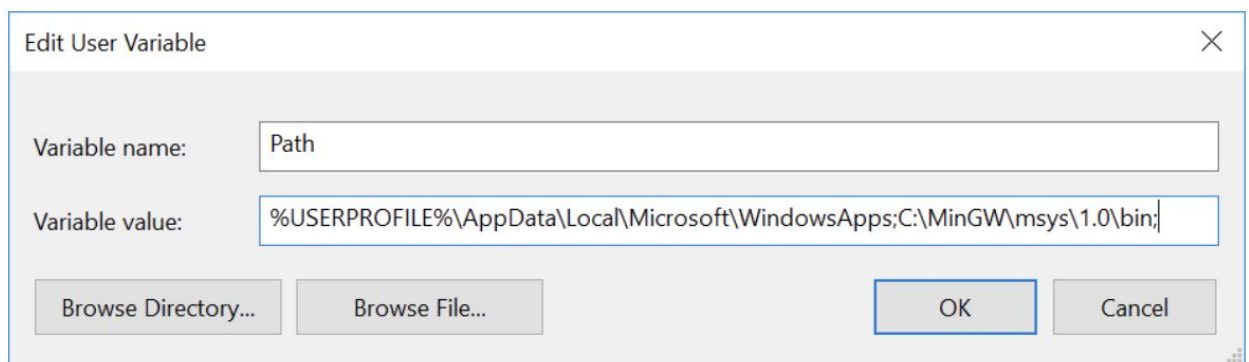1. Go to "Advanced" system settings under "System Properties" and click "Environment Variables…":

2. From there select the "Path" variable and click "Edit…".

3. In the Edit environment variable window, click "Edit text…":

4. Directories in the PATH environment variable are delimited by semicolons. You can now append the **C:\MinGW\msys\1.0\bin** directory to the end of the "Variable Value".

You can confirm that rsync and ssh are both successfully installed and accessible via your PATH by launching the command prompt (cmd) and running rsync and ssh respectively. Both commands should output usage information. If you receive an error about not being recognized as an internal or external command then you'll need revisit the steps above.

Download/Install Vagrant:

1. Go to the [Vagrant Download Page](#) and click on the Windows 64-bit link. Upon clicking the link, the Vagrant installation package will start downloading.

2. Once the download completes, navigate to the directory where the file has been downloaded and double click the Vagrant .msi file.

3. Click Next on the Welcome to the Vagrant Setup Wizard and accept the "End User Agreement". Choose the Destination Folder for Vagrant installation and click the "Install" button (Note: It might take a few minutes before the installation is completed).

4. There will be a Vagrant Setup pop up for system restart after the installation is completed. Restart the system and complete the installation process.

5. To verify the installation of Vagrant, run the following command in Command Prompt:

   vagrant --version

   A number, representing the current version of Vagrant, should be printed as output if the installation was successful.

Setting up the Vagrant Environment:

1. Download the **m103-vagrant-env.zip** from the handouts section of this page. Create a folder in your home directory called **m103** and copy **m103-vagrant-env.zip** into the **m103** folder.

2. Extract the contents of the zip file in the m103 folder by double-clicking the file. Your directory structure should now look like this:

   Home → m103 → m103-vagrant-env → provision-mongod, **Vagrantfile**

3. Then in Command Prompt navigate to m103-vagrant-env using the following commands:

   cd C:\\<users>\m103\m103-vagrant-env

4. Bring up the vagrant environment by running the following command:

   vagrant up --provision

5. It might take a few minutes to complete as it builds directories in the virtual machine and downloads all the software and validation scripts necessary to complete this course.

6. Then to connect to your vagrant instance using ssh, run the following command:

   vagrant ssh

7. If it prompts you for username/password, use the following:

   Username: vagrant

   Password: vagrant