# CKCS145: Lab 1 – Setting up a Virtual Machine using a Virtual Box

In this lab, you will set up a virtual machine (VM) that will be your development environment. The VM hypervisor will be Virtual Box and the guest operating system will be Ubuntu Desktop 22.04. This VM will contain all software needed for completing required labs, assignments and the project for this course. All software that is required for your VM is open-source; hence it may be freely distributed.

VirtualBox runs on Linux, MS Windows 10/11 and OS/X. Your computer needs to support Virtual Box with a minimum of 8 GB RAM where 4 GB are available/free. A VirtualBox image will be installed that will use approximately 24 GB of disk space. The VirtualBox image is based on Ubuntu 22.04 LTS and will be provided for you via Google Drive.

1. Open a web browser and navigate to https://www.virtualbox.org and download the latest version of Virtual Box. You should download the platform that matches the operating system that runs on your desktop/notebook.
2. Install Virtual Box on your host operating system. Note: the host operating system is the operating system that runs on your desktop/notebook. Once Virtual Box has been installed, a reboot may be required.
3. From Google Drive, download the VM. Note: to reduce download times, the VM has been compressed using ZIP. This is a large file: about 5.5 GB. Depending on your internet connection, it may take a while to download. To download the VM, you will have to log onto Google Drive using your TorontoMet/Ryerson credentials, same as for D2L.
4. To uncompress the zip file, you will need 7ZIP. Download it from https://www.7-zip.org.
5. Install 7ZIP on your machine.
6. Using 7ZIP, uncompress your VM. You will need to uncompress your zip file to the “VirtualBox VMs” directory. This directory resides within your home folder.
7. Start your VM VirtualBox Manager. From the menu, select “Machine” followed by “Add” sub menu. A folder dialog will open. You will have to navigate to the “TorontoMet-Ubuntu-Dev-Desktop” folder. Then you will have to select “TorontoMet-Ubuntu-De-Desktop.vbox”.
8. Now your VM has been set up. To start the VM, you will have to select it and click on the “Start” button. To log onto the guest OS, you will use the username “TorontoMet” and password “torontomet123”.
9. Once logged in into your guest OS, you may adjust your screen resolution from the settings menu. Note: the guest OS is Ubuntu Desktop 22.04.
10. To verify that Python is installed, you may start the interpreter using the “python3” command from the terminal.