Homework #0 – Introduction to Linux

Due date: see course website

Note: this assignment is adapted from ECE250 (Computer Architecture). If you've already completed this assignment in that class, just login to the training and screenshot the already-finished course result. Note that unlike in ECE250, we will *not* be using the Duke Linux Cluster (login.oit.duke.edu).

Introduction

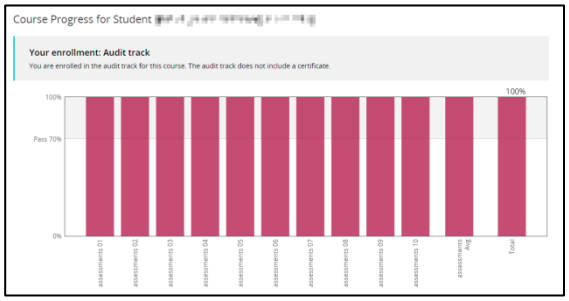
The purpose of this assignment is to build skill in the Linux/UNIX command line, an essential skill in computing. Basic competency with it is necessary to this and many other courses at Duke, and mastery of it will simplify your computing life immensely. To build these skills, you'll be learning the basics right at the start of the course. The mechanism for doing so will be a Duke OIT online course which incorporates video lessons and interactive exercises, as well as a few supplemental tasks later in this document.

A note on the environment you'll be using

In this assignment, you'll create your own *Ubuntu Linux* virtual machine (VM) in the Virtual Computing Manager (VCM). This can be useful as you have administrator ("root") access on this machine to configure it as you please. You can keep this VM around, as we'll use it in many subsequent assignments, and will refer to it as your "Linux VM".

NOTE: The process for reserving VMs has changed since this training material was developed. For an updated procedure, see **Appendix A** in this document.

1. Find the course materials on the Duke Extend site: https://extend.duke.edu/courses/course-v1:InnovationCoLab+996010+2017/about
2. Sign in with your Duke NetID to gain access, then enroll in the course to access the content. NOTE: To get credit, be sure to use your Duke NetID rather than a personal account.
3. Watch the videos and answer the assessment questions.
4. Upon completion, the system will have a screen to review your evaluation scores (example shown to right). Screencap this view, including your name/email shown at the top, and submit to the Sakai assignment locker for Homework 0.



Appendix A: Reserving a VM with the updated Virtual Compute Manager (VCM)

The web-based training from Part 1 was developed around the now-defunct "VM Manage" tool; the instructions below are updated for the currently deployed "Virtual Compute Manager" (VCM). Everything you actually *do* with the VM in Part 1 should work without change, this is just how to reserve the right VM in the new system.

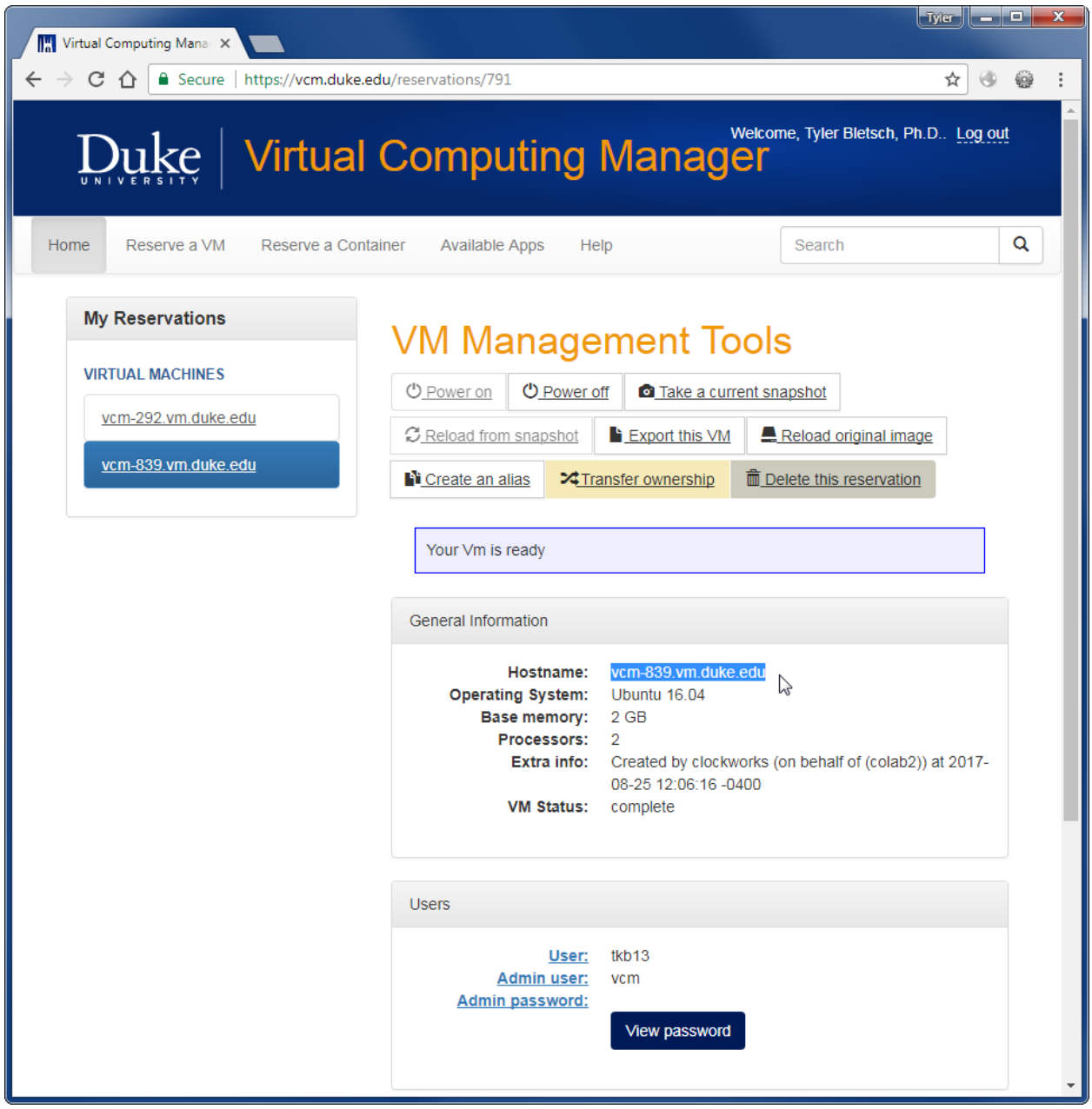
To reserve an appropriate VCM VM:

1. Visit https://vcm.duke.edu/
2. Click "Reserve a VM":

3. Log in using your NetID if needed.
4. Pick *Ubuntu 18.04*.

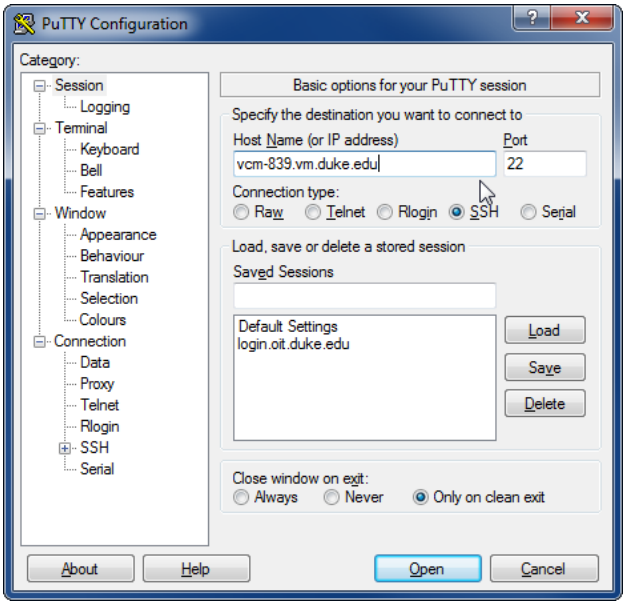
5. Agree to the Terms of Use.

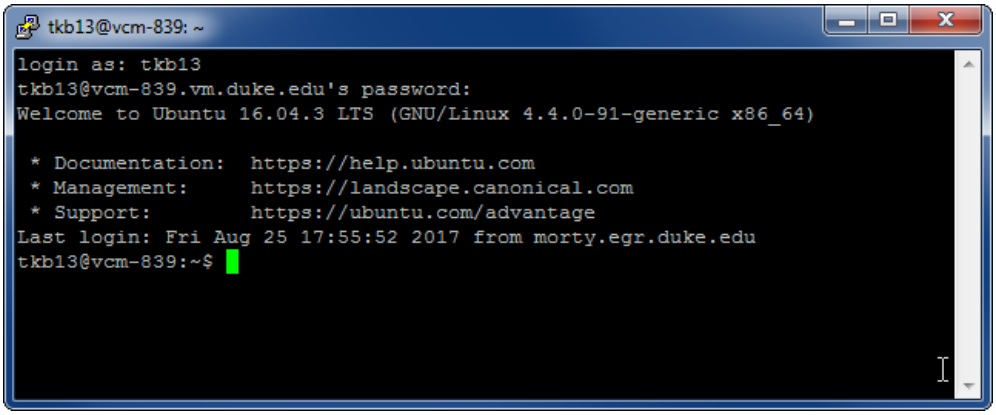
6. Your VM is created. Note its hostname:



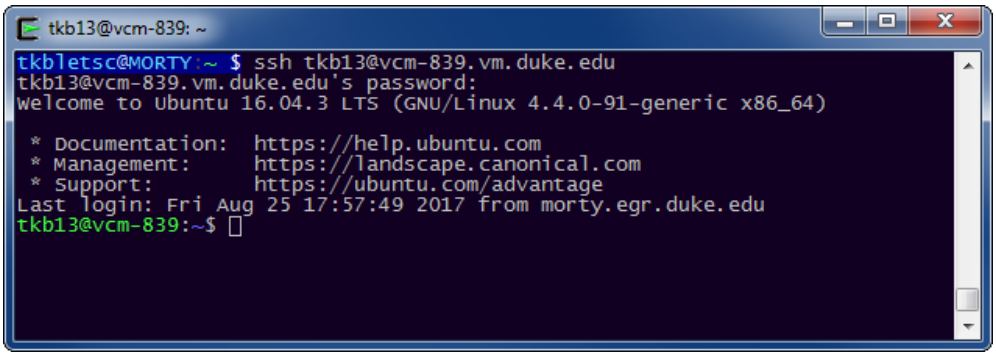
7. Connect to the given hostname using PuTTY (for Windows) or ssh (for Mac). Login with your NetID. You do not need to worry about the "admin password" shown in the web interface.

Windows example:





Linux/Mac-style example[1]:



[1] Technically this is on UNIX-style terminal I have on my Windows machine, but it works the same way.