CST8202 – Windows Desktop Support

Lab 1 – System Setup and Organisation

Purpose: To prepare your laptop with the software environment for completing future labs.

Equipment/Resources:

- College Approved BYOD Laptop
- Access To Brightspace
- Access to the Digital Resource Portal
- VMWare Workstation Install Files
- Access to the Azure Portal
- Windows 11 ISO

Objectives:

Follow the directions below, it is strongly recommended that you read this document completely prior to attending your lab:

> **NOTE:** % indicates a screen shot. # indicates a written answer.

All lab submissions must meet the requirements, and follow the format, listed in the lab instructions posted on Brightspace. Also refer to the example found there. **Marks will be deducted for not following these instructions.**

Procedure:

Organize File System Structure

1. Open File Explorer.
2. Select a Disk that is directly attached to your host system. Do not select a network Drive or Cloud Storage
3. Create a Directory called "Algonquin"
4. Within the Algonquin directory create four (4) directories called ISO Images, Software Virtual Machines, and one that represents the current term i.e. Spring 2025

5. In the current term directory, create a directory for each of your classes. Ie. Windows Desktop Support, Network Fundamentals, Linux, Communications, etc.
6. The result should resemble the diagram in Figure 1 but should contain your own courses.
7. **%1** Capture a screenshot of your newly created file organization. Include a figure heading under your screenshot describing what the image is showing.
8. Download a copy of each of your Course Outlines and move them into the correct course directory. Course outlines can be found in Brightspace.
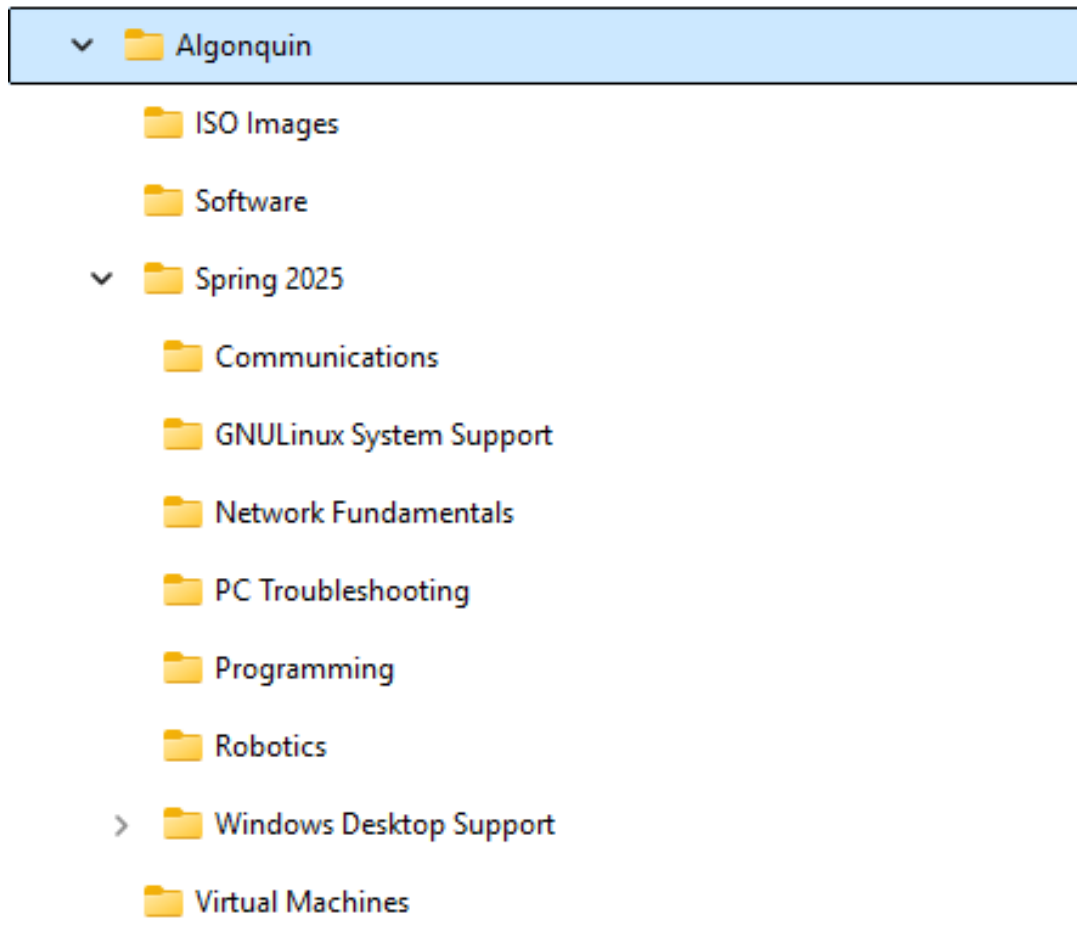

Figure 1: File System Organisation

Download Windows 11

9. Use an internet browser to navigate to the Azure Portal
10. Sign-in using your college credentials (same credentials you use for Brightspace)
11. Use the Azure Portal search bar to search for "Education"
12. Select Software from the navigation panel on the left-hand side.

13. Look for and then select "Windows 11 Education". You should choose the latest version available. Avoid the "N" version as it may cause issues with future labs.
14. Click the Download button found at the bottom of the information pane.
15. Click on "View Key" and copy the key that is generated for you. Do **NOT** share license keys with anyone. They are required for you to complete coursework in this course and others.
16. Open a text editor. (notepad, Word etc.)
17. Paste the license key into this file. Include the product name for which the license is for and the date you downloaded the product. IF this product has an expiry, include the expiry date as well.
18. Save this file in your Algonquin Directory.
19. Close the license file.
20. Once the Windows ISO image file has downloaded successfully; move this file into the ISO Images directory.

Download VMware

21. Navigate to the Digital Resource Portal. (Accessible through Brightspace -> Resources -> Software), or other shared link provided by your instructor.
22. Log in using your college credentials.
23. Click Continue to Digital Resource Portal.
24. Select the "Your Software" Tab.
25. Select the VMWare Tab.
26. Select the latest version of "VMWare Workstation Pro".
27. Add the software to your cart and then proceed to Checkout
28. A licence key is no more required for the latest versions of VMWare.
29. Save this file in your Algonquin Directory.
30. Close the license file.
31. Click "Download" in your browser to download the install files for VMWare Workstation Pro.
32. Once the executable file for VMWare Workstation Pro has downloaded successfully; move this file into the Software directory.

Install VMware Workstation Pro

NOTE: If you have already installed VMware Workstation Pro jump to step #56 under "Modify VMWare Workstation Settings"

33. Log on to your Microsoft Windows host as the Administrator user or as a user who is a member of the Windows Administrators group.

Note: To install VMware Workstation on a Windows 7 or Windows 8/8.1/10/11 host computer, you must log on as local administrator (that is, not be logged on to the domain, unless your domain account is also a local administrator).

Although an administrator must install VMware Workstation on Windows 7 or Windows 8/8.1/10/11, a normal user — without administrative privileges — can run the program after it is installed.

34. Open File explorer and browse to your Software Directory located within the Algonquin Directory
35. If you are using an Administrator account double-click the install file for VMWare Workstation Pro.

    If you are not using an Administrator account right-click the install file for VMWare Workstation Pro and select "Run As Administrator" (The filename is similar to VMwareWorkstation.exe, where there is a series of numbers representing the version and build numbers.)
36. Acknowledge the end user license agreement (EULA).
37. Select the I accept the terms in the license agreement option, then click Next.
38. Choose a Typical installation, then click Next
39. Choose the directory in which to install VMware Workstation.
40. Accept the default location for installation.
    Do not install VMware Workstation on a **network drive** or **external drive**.

Note: Windows and the Microsoft Installer limit the length of a path to a file/folder on a local drive to 255 characters. For a path to a folder on a mapped or shared drive, the limit is 240 characters. If the path to the VMware Workstation program folder exceeds this limit, an error message appears. You must select or enter a shorter path.

41. The next dialog box asks you to allow VMware to check for updates for the program. Check or uncheck as desired and then click Next.

Caution: Upgrading VWware Workstation during the semester may cause undesirable results. Upgrades may be best applied between semesters.

42. Select whether to participate in the User Experience Improvement Program, then click **Next**
43. Select the shortcuts that you want the installer to create.

44. Choices include Desktop and Start menu. Deselect any shortcuts you do not want the installer to create.
45. If the installer detects that the Windows CD-ROM autorun feature is enabled, you see a message that gives you the option to disable this feature. Disabling autorun prevents undesirable interactions with the virtual machines you install on this system.
46. The installer has gathered the necessary information and is ready to begin installing the software.
47. If you want to change any settings or information you provided, now is the time to make those changes. Click **Back** until you reach the dialog box containing the information you want to change.
48. If you do not need to make any changes, click **Install**. The installer begins copying files to your computer.
49. Click **Finish**. The VMware Workstation software is installed.
50. Some installations may require that you reboot your PC. Reboot now to allow VMware Workstation to complete the installation correctly.
51. You may now need to enter your VMware Workstation license key. This could be found under **Help > Enter License Key…** Enter the key you put in your license file for VMware Workstation Pro (if you were provided).
52. Start VMware to verify the installation was successful. Record the following:
53. **%2:** Screen shot of the VMware started on the home folder/page.
54. **%3:** Screen shot of VMware installation information (Help > About VMware Workstation).
55. Spend some time navigating through the various screens, but do not make any changes.

Modify the VMware Workstation Settings:

56. Modify the default location for new VMs
57. Edit > Preferences
58. On the right, modify the location by browsing to, and selecting, the location designated in the class instructions: \Algonquin\Virtual Machines
59. Apply the changes
60. Record the following for your lab notes:
    a. **%4:** Screenshot of modified default location for virtual machines.
    b. **#5:** Which version of VMware did you install?
61. Minimize VMWare Workstation

Show File Extensions

In reference to the information in the Course Introduction lecture, modify the settings on your HOST to make all file extensions visible.

Windows 8/8.1/10/11 HOST Only:

62. Open File Explorer
63. Select the View tab > Show. If necessary, add a checkmark to "File name extensions"
64. **%6**: File extensions shown
65. Close File Explorer

Antivirus/Malware Software

66. College policy requires that all student laptops be equipped with up-to-date Antivirus/Malware software. Student laptops, if new, will have come with a trial version of some product. This is not adequate. Students need to take responsibility for their equipment by ensuring that they an up-to-date subscription for their Antivirus software or are using a free, not trial, version of an appropriate product.
67. **%7** Take a screenshot that verifies that your laptop meets this requirement and include it in your lab report.

Office 365 Calendar

68. Time management is critical to succeed in the Computer Systems Technician program. Update your calendar to show ALL of your scheduled Theory and Lab classes for all courses on your Timetable (Consult ACSIS). Also include scheduled time to accommodate the extra hours required for success, as per the Course Map.
69. Include your work schedule (if applicable)
70. **%8:** Screenshot of your populated calendar for a full week.

File Structure Listing

71. Open Powershell
72. Type:

    Get-ChildItem -Recurse <yourdrive:>\Algonquin
73. **%9** Screenshot of the result from the command above.