# VCloud setup LAB

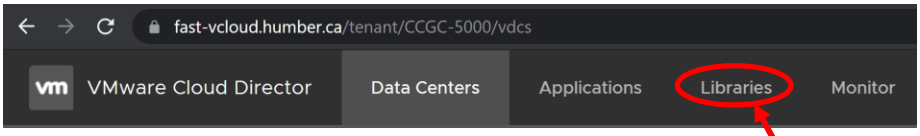
- ☐ **All screenshots, must have your username at command prompt and screenshot should be legible.** Snipping tool is advised for the screen shots, no full page screenshot.
- ☐ **For LAB REPORT, The screenshots should be pasted in Word Document in order of the lab questions and submitted in Blackboard as a single document only. Plagiarism is awarded zero.**
- ☐ Refer to course details posted in BB for more info on Lab report and screenshots.
- ☐ **Do NOT login as root or user with UID=0 to do the lab, use sudo ONLY when required.**
- ☐ **Do not use changeme username** to do the lab, the lab(s) MUST be done using your own username as specified in PART-B of LAB-01
- ☐ **Strictly NO screenshots with full screen of terminal or desktop or partly taken screenshots**
- ☐ **It is highly required to following naming conventions and instructions and it would affect evaluation.**

## IN-CLASS Activity: Q1 to Q18

**PART-A : CREATE vApp in VCloud** *(VCloud link is available in Blackboard)*

**VApp Naming:** Your **VApp name** should be named with **your SECTION-FIRSTNAME** followed by **last four digits of your Humber Number** that starts with n. *(for example, John Smith with humber number n01234567 of Section RNA, the VApp name should be A-John4567) non compliance -1 negative marks*

1. **Login to VCloud** and Create VApp using template **CCGC5000lab** as given below




2. **After logging into VCLoud,** *to create VApp, click on* LIBRARIES *->vAppTemplates-> Select vApp* ***CCGC5000lab*** *->CREATE VAPP->**Enter VApp Name as specified above**->NEXT->Select the only available VirtualDataCentre(VDC) and click NEXT>Click NEXT for other options(Do not modify any information) and then Click FINISH.*
3. It is **mandatory** to add-in your name to the VM names(negative -4 marks for non compliance) in your vApp created. The steps are as below:

   *Click on Datacenters->fast-vcloud.humber.ca, VMs **WS2019, DC2022, toronto** and **montreal** should be available ->in **WS2019** VM click on DETAILS->Click GENERAL->click EDIT->in NAME, to existing VM Name **WS2019** add your firstname with last four digits of your Humber number that starts with n (for example, John Smith with humber number n01234567, WS2019 VM name should be **WS2019-john4567**)->click SAVE.*
4. *On the left side, click on VirtualMachines and similarly for **DC2022** VM name also add in your firstname with your last four digits of your Humber number and save it*
5. *On the left side, click on VirtualMachines and similarly for **toronto** VM name also add in your firstname with your last four digits of your Humber number and save it.*
6. *On the left side, click on VirtualMachines and similarly for **montreal** VM name also add in your firstname with your last four digits of your Humber number and save it.*

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## PART-B : USER CONFIGURATION in VMs

**NOTE:** In VCloud, click on DataCenters->fast-vcloud.humber.ca->VirtualMachines. Click on ACTIONS under VM to view various optoins available, for example Power ON, Power OFF, Launch Web Console, etc.*(some features would be enabled only when VM is Powered ON)*

7. Power on the **toronto VM**, Launch Web Console, then login as **changeme** and password is **changeme**
8. In **toronto VM**, *(Ignore the Registration notification, close the window)* create a username with **yyz***yourfirstname (example for John Smith the username is yyzjohn)* and make the user **supplementary** member of **wheel** group and **assign a password**. **Your username should be in lower case**

   To create user: **sudo useradd -c "***yourfirstname yourlastname***" -G wheel yyz***yourfirstname*

   To assign password: **sudo passwd yyz***yourfirstname*
9. Click on the power button on the top right corner and then click on **changeme** and then click on **logout** and then login with your own username. *(DO NOT su or switch user)*
10. Power on the **montreal VM,** Launch Web Console, then login as **changeme** and password is **changeme**
11. In **montreal VM**, *(Ignore the Registration notification, close the window)* create a username **yul***yourfirstname (example for John Smith the username is yuljohn)* and make the user **supplementary** member of **wheel** group and **assign a password**. *(Refer to usercreation, password assignment commands given above)* **Your username should be in lower case**
12. Click on powerbutton on top left and select **PowerOff/Logout** ->Logout as **changeme** *(DO NOT su or switch user)* and login with your own username.

**SCREENSHOTS: a)** In VCloud, click on DataCenters->fast-vcloud.humber.ca->VirtualMachines->click on in the top right corner *(take one screenshot such that all four VMs names are clearly visible)*
**b)** In **toronto VM**, at command prompt type **grep** *yourusername* **/etc/passwd /etc/group** and press enter (take screenshot)

**c)** In **montreal VM**, at command prompt, type **grep** *yourusername* **/etc/passwd /etc/group** and press enter (take screenshot)

***Windows VMs will be required from Lab-10, until then shut down both Windows VM to save VCloud resources.**

***replace nnnn* with your last four digits of your HumberID which starts with n**

## PART-C : CONFIGURE HOSTNAME

13. In **Toronto** VM, Change hostname to **toronto***yourlast4digitsofHumberID***.ccgc5000.net** using the following command

    **sudo hostnamectl set-hostname toronto***nnnn***.ccgc5000.net**

    and type exit to close the terminal and then open the terminal again to view the newly changed hostname. To display hostname in command prompt type **hostname (SCREENSHOT)**
14. In **Montreal** VM, Change the hostname to **montreal***nnnn***.ccgc5000.net** and display it. **(SCREENSHOT)** *(Refer to the steps for toronto vm for hostname configuration)*

## PART-D: SYSTEM INFORMATION

In **toronto** VM, click on Activities and click on Terminal and following activities need to be done.

15. Display in command prompt with following information
    a. Current directory type **pwd**

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**b.** Current date and time type **date**
**c.** Currently logged in user type **who, whoami, echo $USER, echo $LOGNAME, echo $USERNAME**
**d.** Shell you are logged in **echo $SHELL**
**e.** Listing of files in your home directory **ls**
**f.** kernel name, version **uname, uname -r**
**g.** Display text "Hello, This is my CCGC5000's first lab" **echo "***type the text given***"**
**h.** system information in single command - hostname, machineID, BootID, OS, Kernel, Architecture **hostnamectl**

**(SCREENSHOT : history |grep -E 'date|pwd|whoami|echo|ls|name')**

**PART-E: LINUX HELP**

16. Try **man man** and **info info**
17. Use **man** and **info** command for **cat**, **vim**, **dnf**, **rpm**, **ls, mkdir** to learn about the help available in linux
18. Use --help with commands **ls**, **dnf**, **rpm**, **cp** and **date** to view the options available with the command

**(SCREENSHOT : history |grep -E 'man|info|help')**

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