CS350 Lab01

VM Assignment
Process Creation
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CS350 Course Website

- https://oscourse.github.io

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VMWare vSphere and vSphere Client

- VMWare vSphere aggregates and virtualizes the underlying physical resources. It provides the virtual resources to the VMware vSphere datacenter.
- Users can access the VMWare vSphere datacenter through vSphere Client.

How to Connect to VM in CSVB?

- Web Console in vSphere Client.
- SSH.
- TeamViewer.

Connect to the VM Using Web Console

1. Open a web browser.
2. If a student is connecting from the off-campus, he should establish the SSL connection via Binghamton University SSL VPN (https://ssl.binghamton.edu).
3. Go to this URL: https://csvb-html5.pods.bu.int/ui/
4. Login with the PODS username and password. Enter PODS\ before the user name. For example, PODS\wick.
5. Click on the “Menu” drop down.
6. Select VM and Templates.
7. Expand the tree on the left panel.
8. Find the VM, whose name is based on the PODS ID.
9. Open a remote console to access the VM.

Connect to the VM Using SSH Client

1. Open an SSH client.
2. [Optional, if SSL connection to campus doesn't work] First, we need to connect any on-campus server, such as bingsuns.cc.binghamton.edu or remote.cs.binghamton.edu
   a. **$ ssh username@bingsuns.cc.binghamton.edu**
3. Connect using this address and format, you will use your PODS ID for username
   a. **$ ssh username@csvb-access.pods.bu.int**
4. Use your PODS Password to login
5. You can then SSH to your VM using it's IP address that you can get from the "Summary" page in the vSphere-Client.
   a. **ssh csvb@192.168.0.x** or **ssh root@192.168.0.x**
   b. Once logged in, **CHANGE THE PASSWORD** for both the root and csvb accounts.

Connect to the VM Using TeamViewer

1. To use TeamViewer, we need to have a TeamViewer Account.
2. Check if TeamViewer is installed: **$ which teamviewer**
   a. If TeamViewer is installed, please skip to “Setup the TeamViewer”
   b. If TeamViewer is not installed, please start the installation process.
3. Download the TeamViewer installation file from the Teamviewer Website. From the terminal, we can issue the wget command to download the installation file.
   $ wget https://download.teamviewer.com/download/teamviewer_i386.deb
4. Start the installation.
   a. **$ sudo dpkg -i teamviewer_i386.deb**
   b. If there are missing dependencies, please issue the following command.
      $ sudo apt-get install -f
5. Setup the TeamViewer: **$ teamviewer setup.**
6. Accept the licence agreement.
7. Enter the Login credentials for your TeamViewer Account.
8. Confirm the assignment.
9. The assigned device will appear in Computer & Contacts on the local TeamViewer.

Create a child process for a specific task

- man 2 fork
- man exec
- man 2 wait