

Linux Howtos

Remote Access to the CIS VLab (304) CIS 90 – Spring 2012

Remote Access to the CIS VLab (304)

This Howto shows to remotely access the CIS 90 VMs in the CIS Virtual Lab (VLab). The CIS VLab was developed to remotely provide Distance Education students with the same resources found in the physical CIS Lab on campus. The CIS VLab provides current CIS students with a number of Linux and Windows virtual machines (VMs) that can be accessed remotely for doing lab assignments.

Supplies

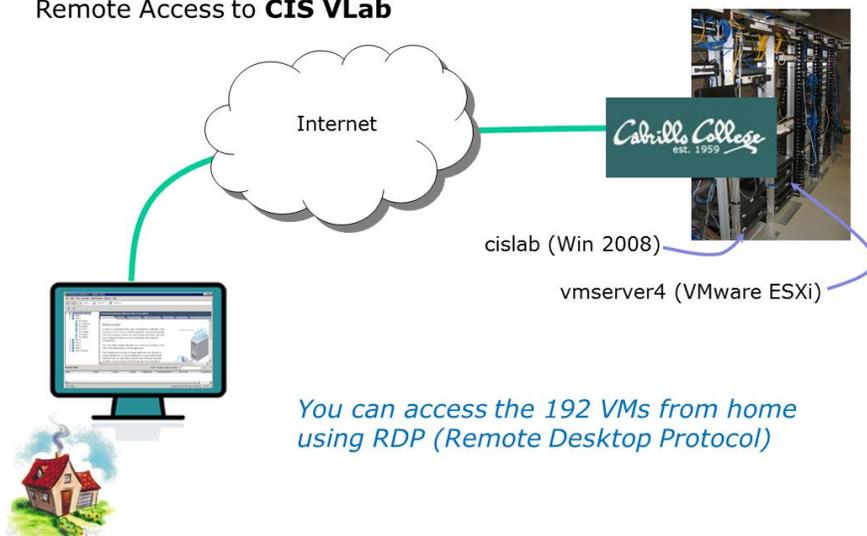
- A reasonably fast computer running Windows
 - or a Windows virtual machine on a Mac computer
 - or using the CoRD: Simple RDP Remote Desktop on a Mac (download from <http://cord.sourceforge.net/>)
- A reasonably fast Internet connection

Overview

Lab Resources

Remote Access to **CIS VLab**

Room 1403 on Aptos Campus



You can access the 192 VMs from home using RDP (Remote Desktop Protocol)

From home you will use a Remote Desktop Protocol (RDP) file to first connect to the Windows 2008 server named **cislab** on the Aptos campus, from there you will use the VMware vSphere Client and a vCenter server to access the VMware ESXi server named **vmserver4**. The VMs used for CIS 90 are on that ESXi server.

The following VMs available for use by CIS 90 students:

VM	Operating System
Fang	Linux (OpenSUSE)
Mr-Eko	Linux (Ubuntu)
Kate	Linux (Debian)
Not-Opus	Linux (CentOS)

Each VM is a fully functional computer system that can be powered up, connected to networks, used to complete lab assignments, and then powered down. All VMs are connected to the CIS Lab network.

To meet the needs of multiple students wanting to use VLab at the same time, the VMs have been cloned and placed into eight virtual pods. Each pod has one Mr-Eko, one Kate and one Not-Opus VM. The VM named Fang has a spreadsheet where students can reserve a pod for their own use.

Step 1 – Download and unzip the RDP file

Go to the CIS 192 Calendar page on the course website at <http://simms-teach.com/> and in Lesson 1 locate the link for the “CIS VLab RDP File.”

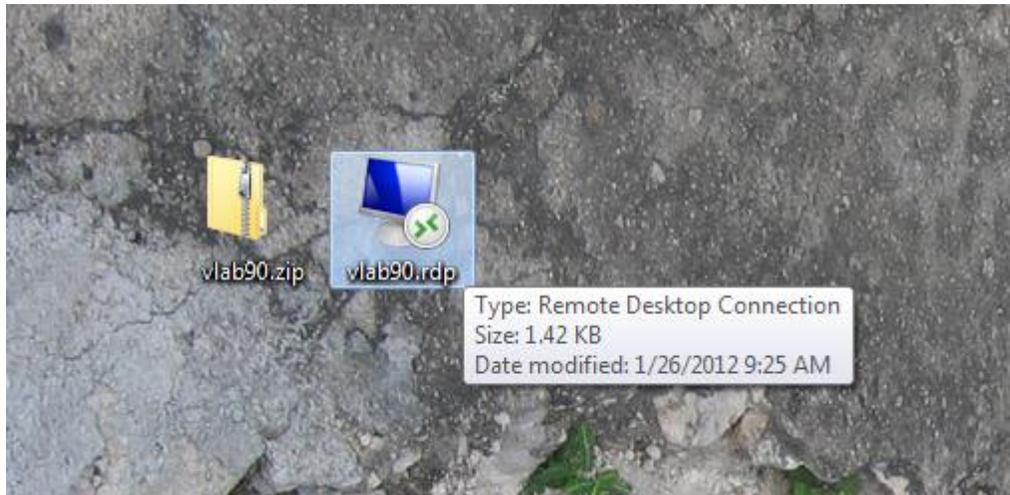
Lesson	Date	Topics	Chapter	Due
1	2/8	<p>Class and Linux Overview</p> <ul style="list-style-type: none"> Understand how this course will work High-level overview of computers, operating systems and virtual machines Overview of UNIX/Linux market and architecture Learn first commands and how to navigate between terminals Use a remote Linux server Use Linux running on a local virtual machine <p>Materials</p> <ul style="list-style-type: none"> Presentation slides (download) Logins Sheet (download) CIS VLab RDP file: (download) <p>Supplemental</p> <ul style="list-style-type: none"> Howto #103: Installing PuTTY (download) Video #100: Remote Putty login to Opus (view) <p>Assignment</p> <ul style="list-style-type: none"> Student Survey Lab 1 <p>CCC Confer</p> <ul style="list-style-type: none"> Enter virtual classroom Class archives 	1.1-1.15 (Gillay) 2,4,5, p113-115, p164-172 (Hahn)	

Download this zipped file to your computer and extract the file named “vlab90.rdp” to your Desktop so you can easily find it again.

You only download this RDP file once. It can be used over and over whenever you want to connect to VLab. You can delete the zipped file if you wish.

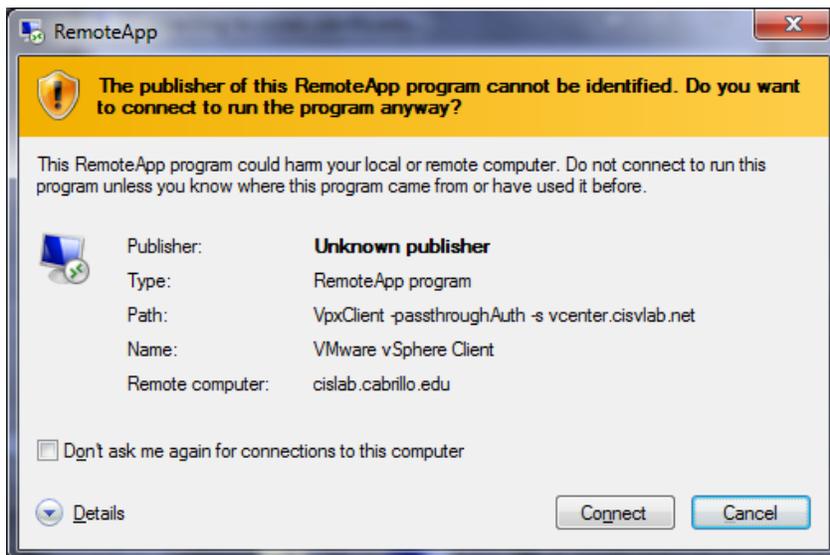
Step 2 – Connect to VLab using the RDP file

Locate the new RDP file on your Desktop and double click, or Right-Click > Connect, to start the connection.



The zipped and extracted RDP files shown on the Desktop.

You may see this warning:



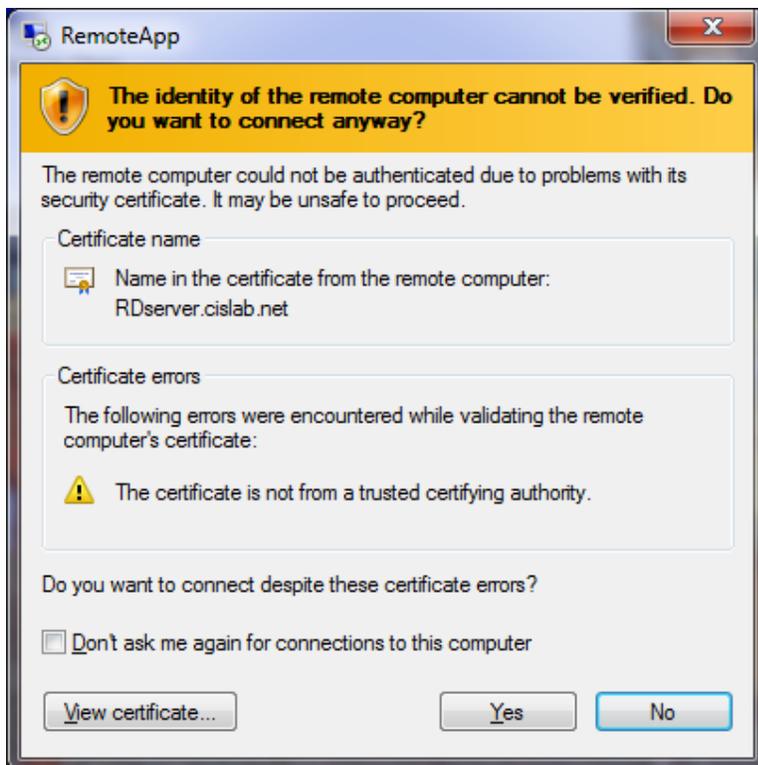
Go ahead and Click on Connect button

When prompted for credentials, use `cislab\xxxxxxxx` (where `xxxxxxxx` is your vlab account name) in the first field. Type your password into the second field.



Click OK to continue

You may get this warning:

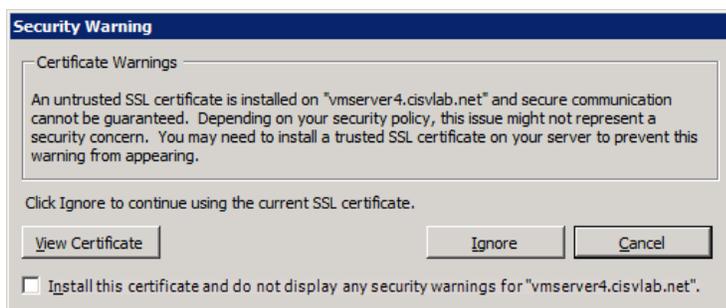


Click Yes to continue

The connection process will automatically start up the vSphere Client using your VLab credentials:

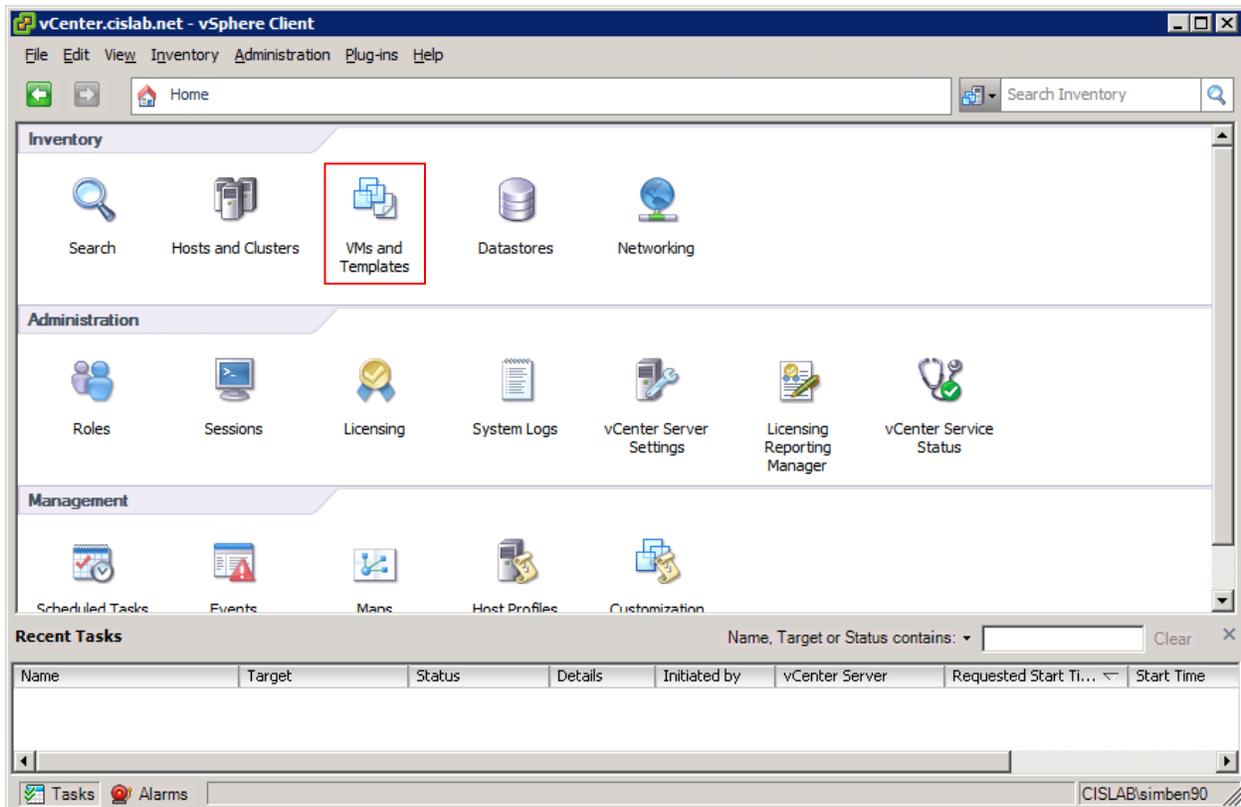


You may get this warning:



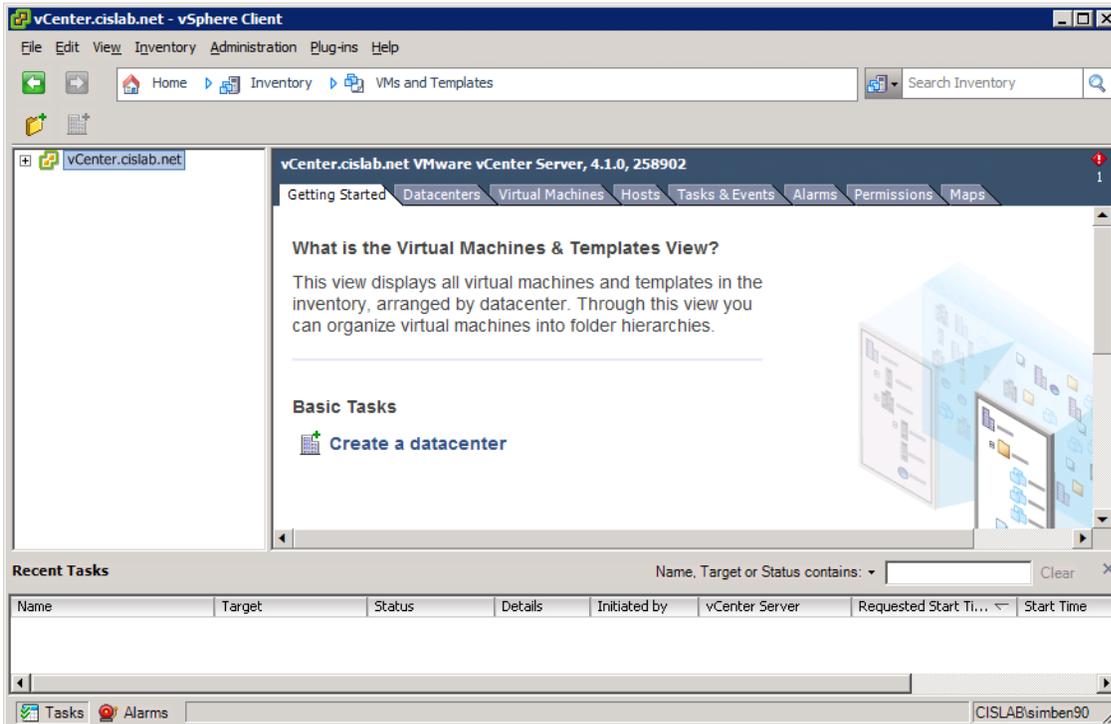
Click Ignore to continue

After the connection is complete you will have successfully logged into VLab! At this point you will be running the vSphere Client and attached to the vCenter server:



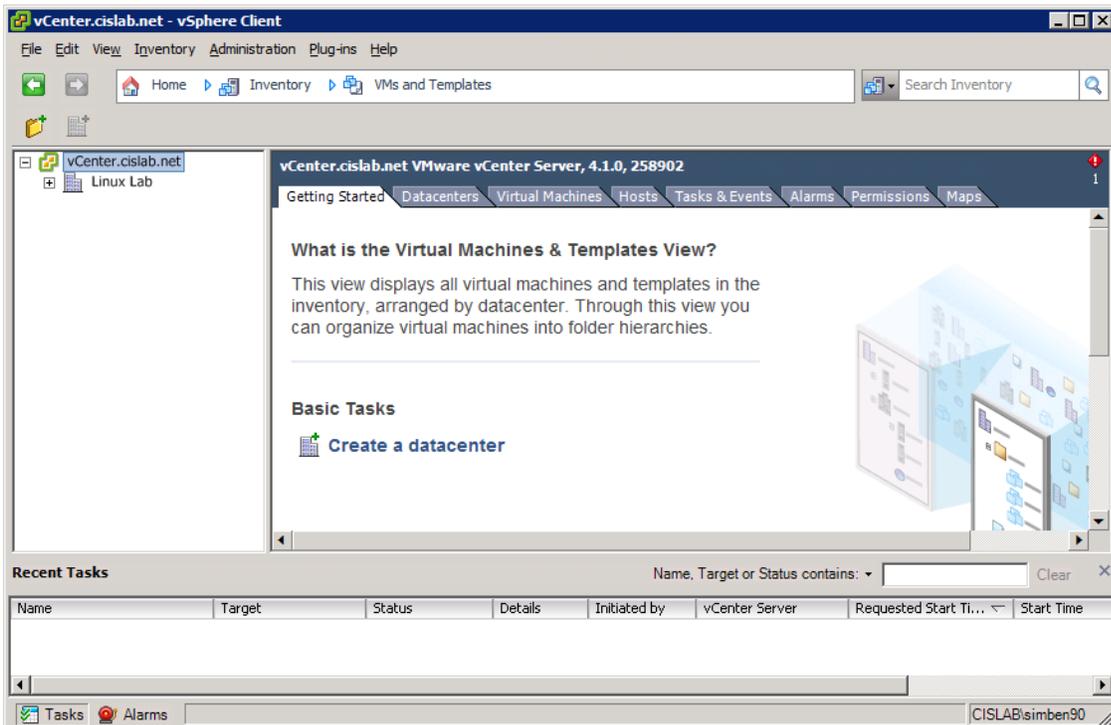
Click the VMs and Templates icon to continue.

Use the left panel in the VM and Templates view to navigate to VMs:



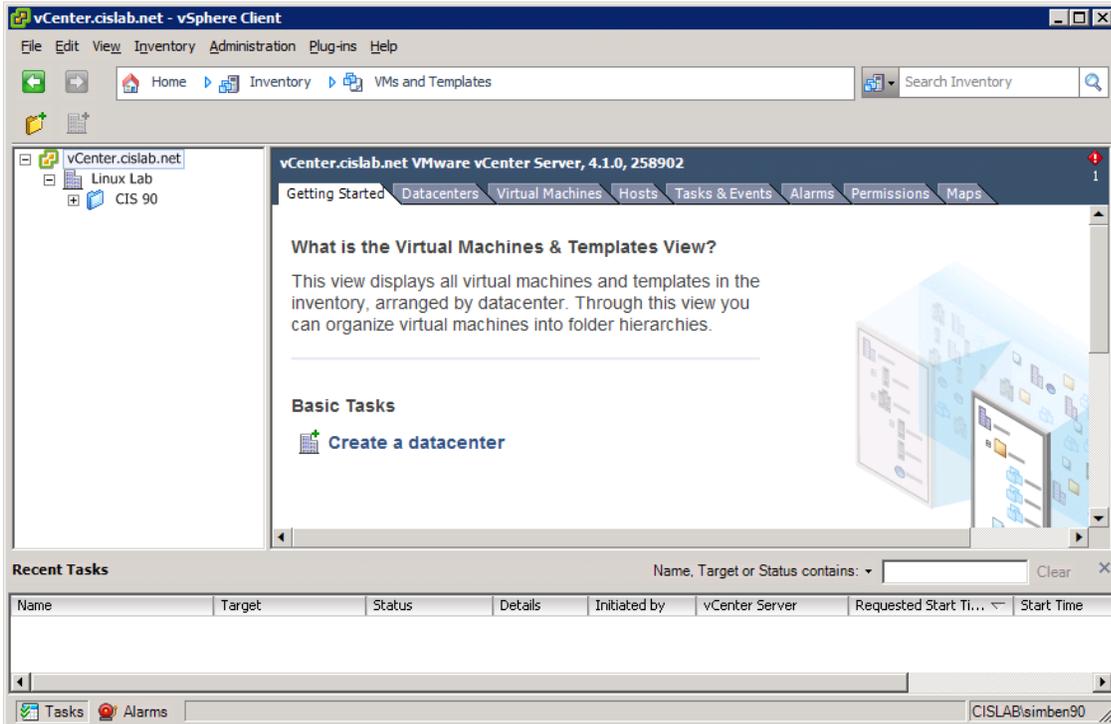
Click the small "x" if necessary to open vCenter VM folders

Keep clicking as necessary the "+" to expand folders and sub-folders:



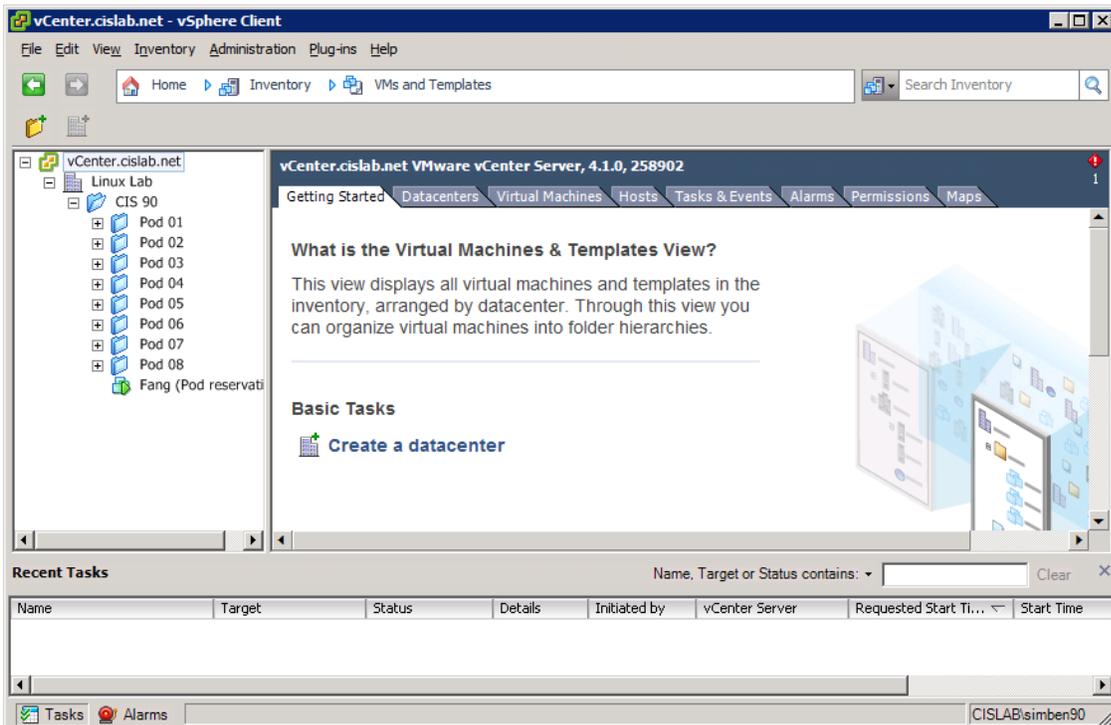
Click the small "x" if necessary to open the Linux Lab folder

Keep clicking as necessary the "+" to expand folders and sub-folders:



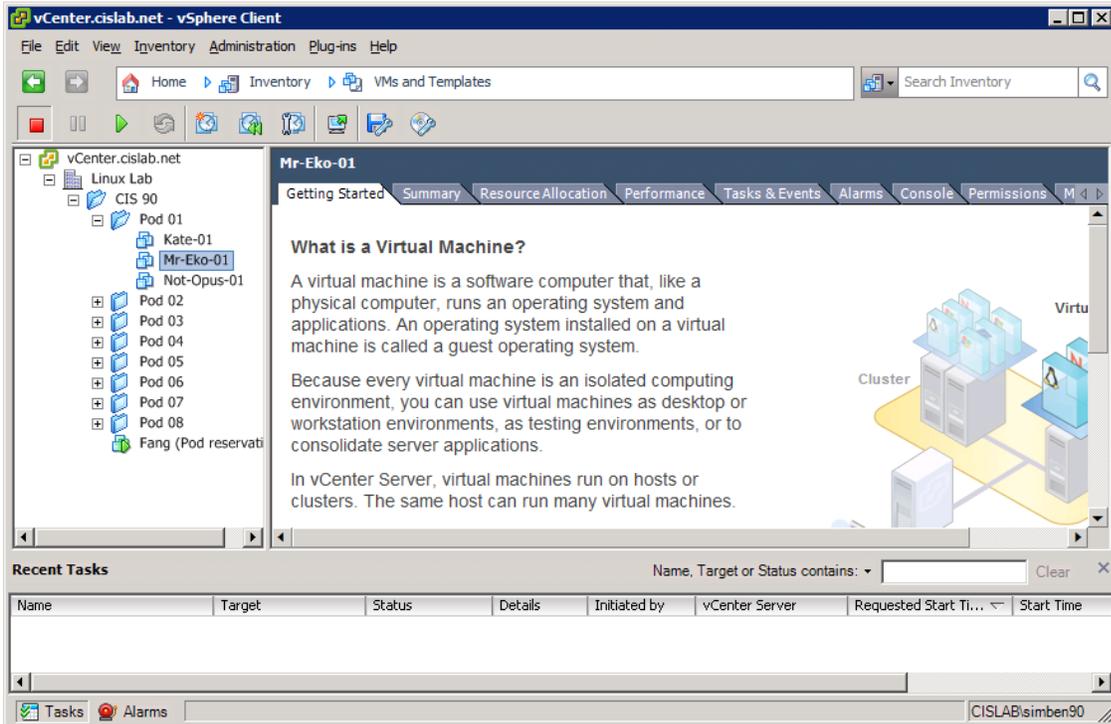
Click the small "x" if necessary to open the CIS 90 folder

Keep clicking as necessary the "+" to expand folders and sub-folders:



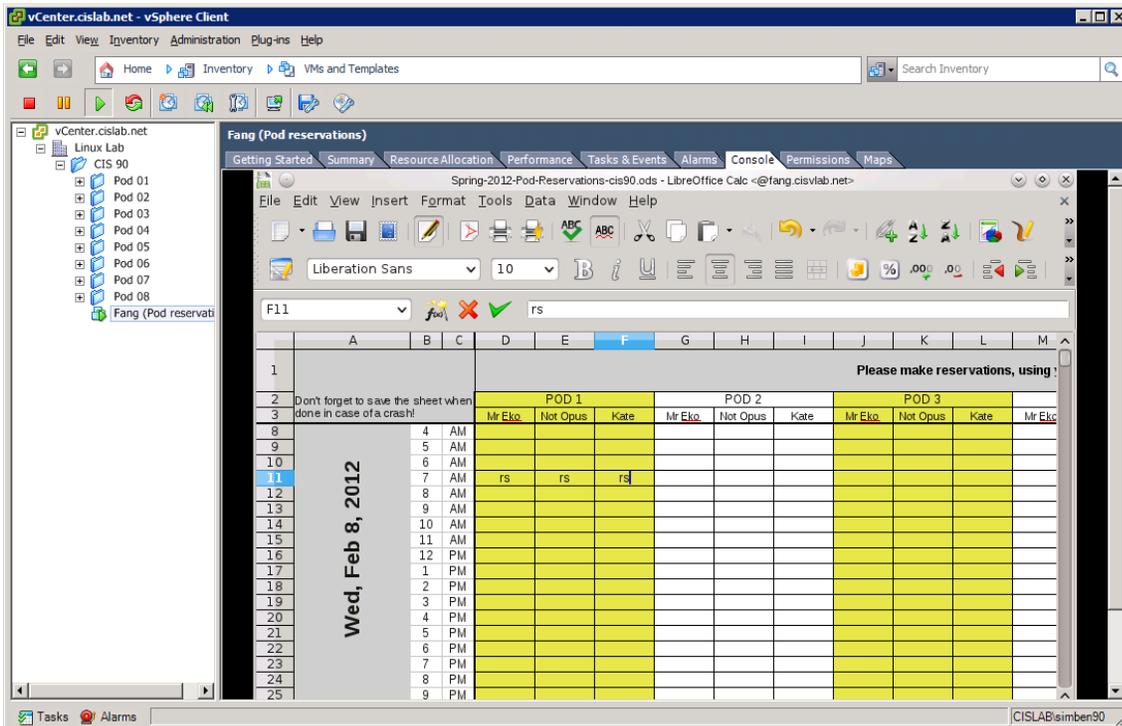
Click the small "x" if necessary to open one of the pod folders

Locate an available VM (powered off) for use:



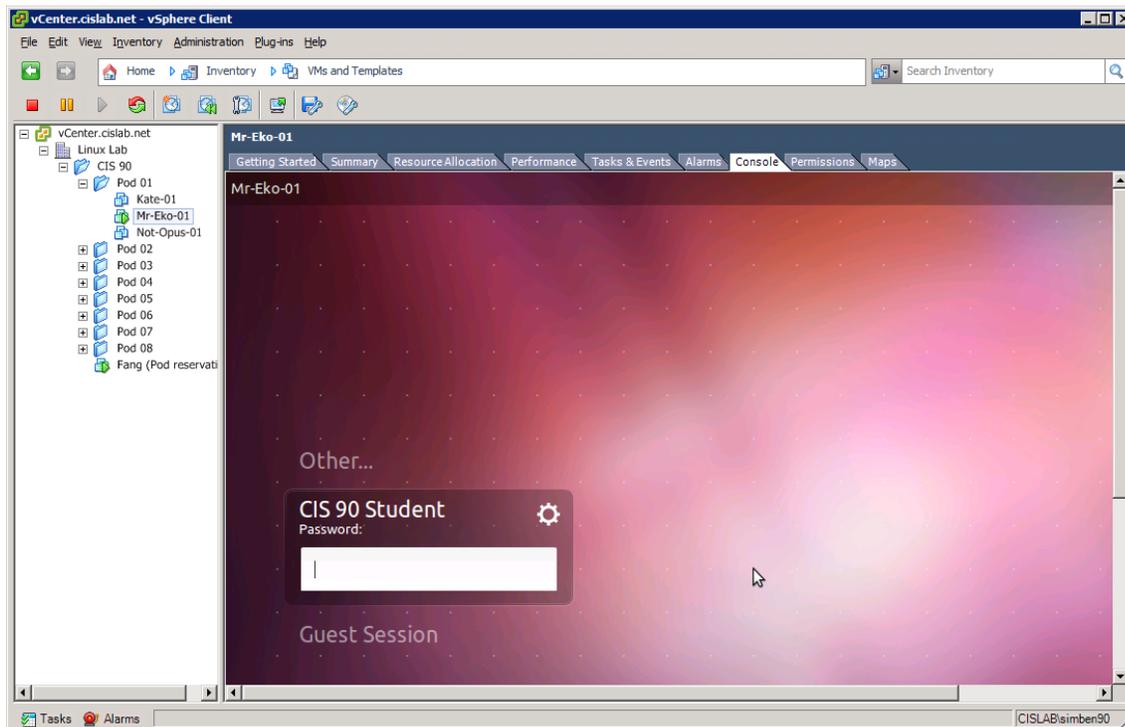
Note the tabs. Use the Console tab to interact with VMs. The Recent Tasks log at the bottom can be closed to make more room for VM consoles.

Use the Fang VM to reserve a free pod before you start using any VMs:



Put your initials into the spreadsheet cells to reserve VMs in a pod for a specific period of time.

Power up the VM you wish to use:



Select a VM, and click the green triangle icon to power it up.

Step 3 – Disconnect from VLab

Please remember to shut down (not power off) VMs when finished:

- Select VM on left panel and use Ctrl-D
- or use Shutdown option in Operating system
- or use **init 0** in shell if logged in as root

To disconnect, use File > Exit or just click the upper-right "X" to close the VMware vSphere Client. You will then be disconnected from VLab. Any VMs that you did not shutdown will continue to run.