

# Introduction to vSphere

## **Overview**

This document is meant to give you some helpful tips when using vSphere virtual machines for your classes. Professors will give you specific instructions for your labs, but these tips will make it easier to navigate some of vSphere's complex layouts, and move in and out of your virtual machine with ease.

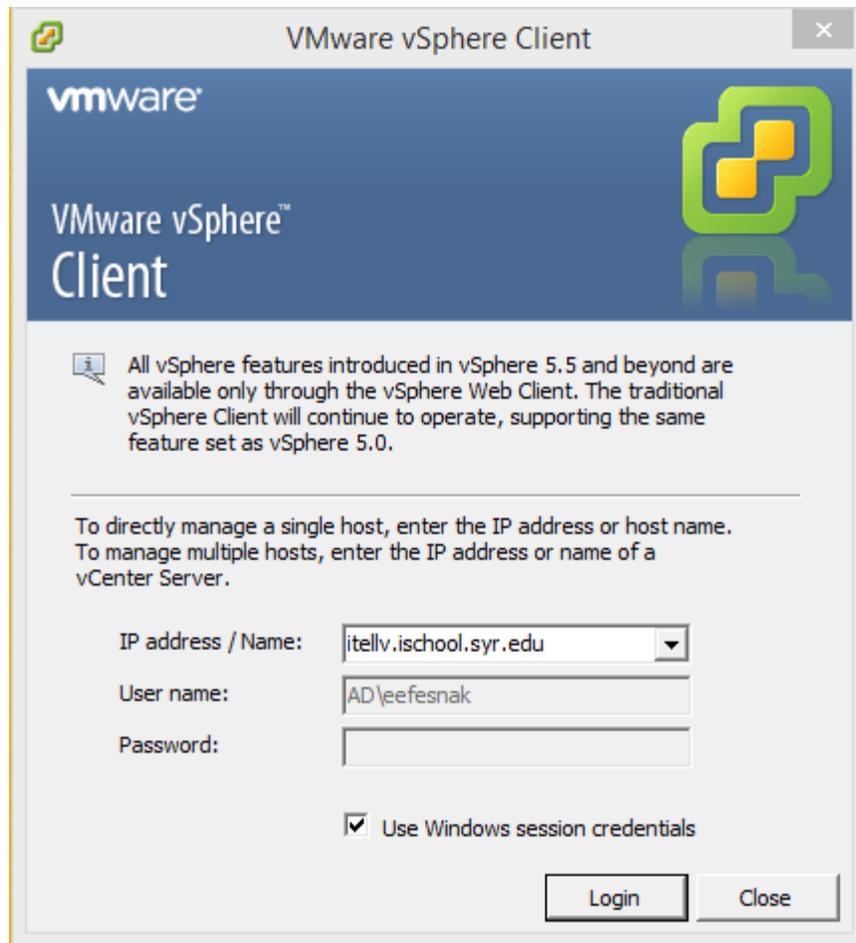
After reading through this document, you should be able to complete your labs more efficiently, focusing on the lab assignment without stressing over minor inconveniences. Topics covered in this document are: logging into vSphere, turning your virtual machine on and off, resizing your machine's screen within its window, and releasing your mouse from your virtual machine.

## **I. Logging into vSphere**

1. Select the VMware vSphere Client on your Desktop. It is the icon that looks like this:



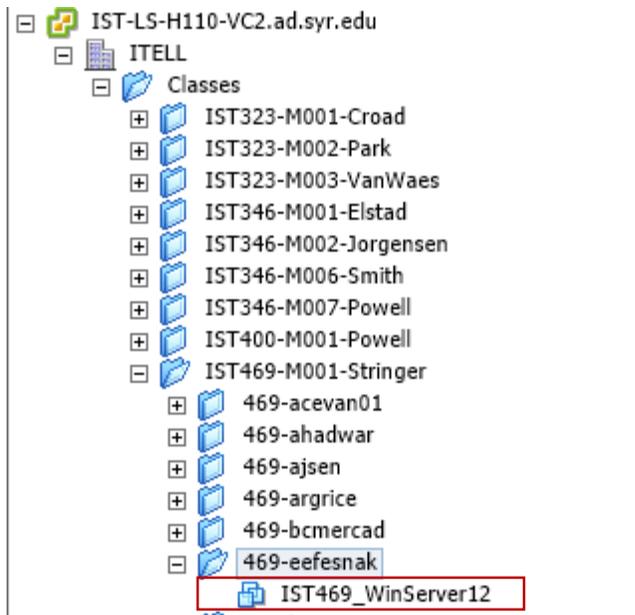
2. In the window, you'll be prompted to enter an IP address, username, and password. Enter the information as follows and log in:
  - a. IP address: itellv.ischool.syr.edu
  - b. Check the box "Use Windows session credentials"



3. Select **Ignore** when the Certificate window appears.

## II. Turning Your Virtual Machine On

1. On the home page, select **VMs and Templates**, and on the left-hand side, expand **IST-LS-H110-VC2.ad.syr.edu**. Keep expanding the branches until you see your course folder, and open your netid folder within that course.



2. You'll notice that you have one or more virtual machines in your folder. To turn your machine on, right-click the machine and select **power on**.
  - a. Note: you can also turn on your machine by clicking on the machine and selecting **Power on the virtual machine** under "Basic Tasks" within the "Getting Started" tab.

IST469\_WinServer12

Getting Started
Summary
Resource Allocation
Performance
Tasks & Events
Alarms
Console
Permissions
Maps

close tab X

### What is a Virtual Machine?

A virtual machine is a software computer that, like a physical computer, runs an operating system and applications. An operating system installed on a virtual machine is called a guest operating system.

Because every virtual machine is an isolated computing environment, you can use virtual machines as desktop or workstation environments, as testing environments, or to consolidate server applications.

In vCenter Server, virtual machines run on hosts or clusters. The same host can run many virtual machines.

### Basic Tasks

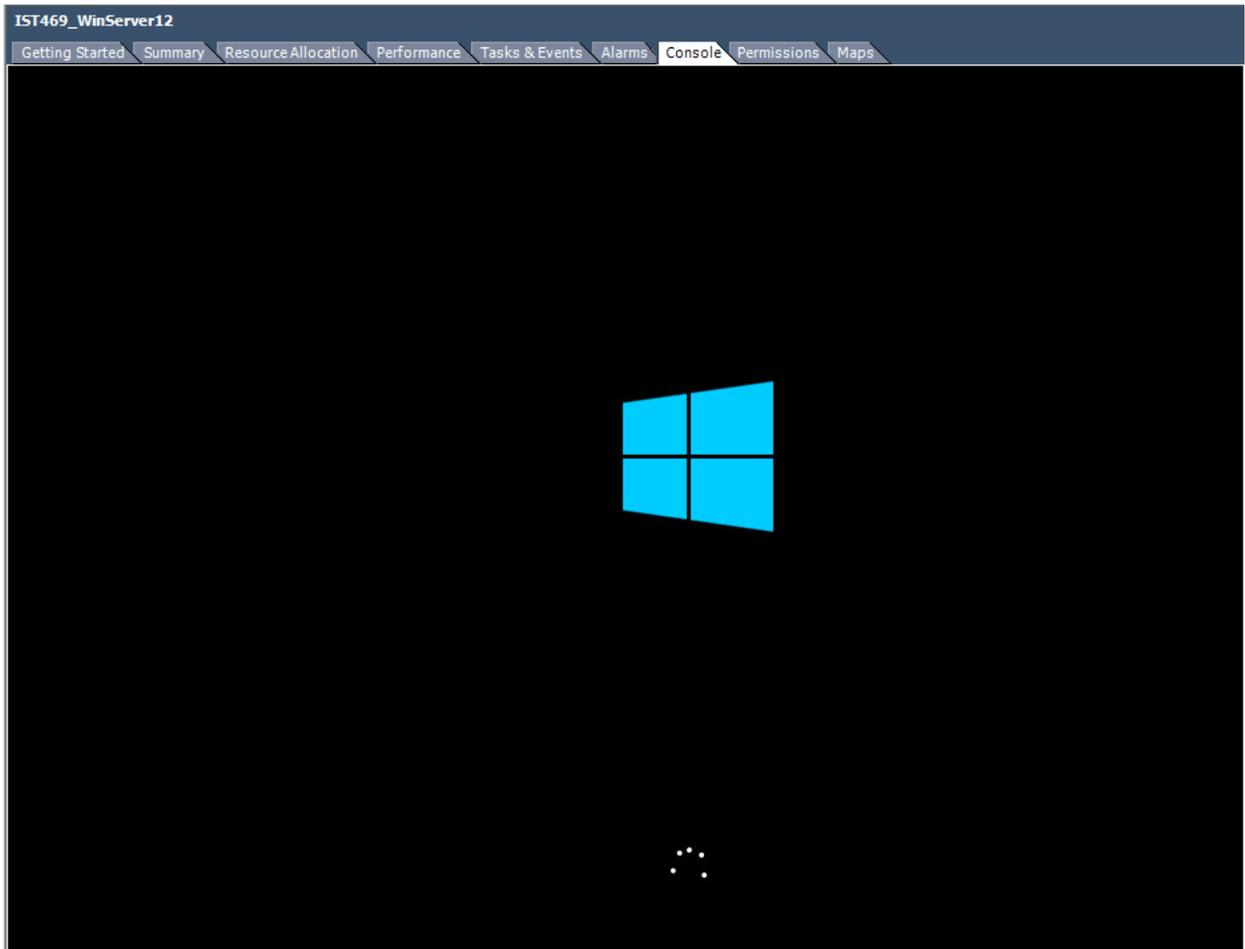
- ▶ Power on the virtual machine
- Edit virtual machine settings
- Convert to a template

### Explore Further

- [Learn more about virtual machines](#)
- [Learn about templates](#)
- [Learn how to install an operating system](#)

The diagram illustrates the vSphere architecture. On the left, a 'vSphere Client' is connected to a 'vCenter Server'. The 'vCenter Server' is connected to a 'Datacenter'. Inside the 'Datacenter', there are 'Host' and 'Cluster' components. 'Virtual Machines' are shown running on the 'Host' and 'Cluster'.

3. Now that the machine is turned on, you can open it up to begin working within the machine. Do this by right-clicking the virtual machine in your folder and selecting **Open Console**.
  - a. This will open your virtual machine in a new window. However, you can view your console within the vSphere Client window by entering the “Console” tab and clicking into the screen. Opening the machine in a new window is preferred because it gives you more control.

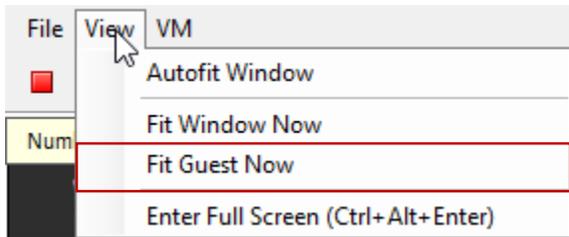


4. Notice that your machine will tell you to “Press Ctrl + Alt + Delete to sign in”. However, if you follow those instructions, your computer will also react to the command and bring you to the security screen. To avoid this, sign into your VM by pressing the **Control + Alt + Insert** keys.
5. Log in with the appropriate user name and password credentials for your course.

### III. Adjust Your Window to Fit Screen

1. If you log into your account, and find that the virtual machine does not fit in your window, you can eliminate a lot of frustrating scrolling with one simple step.
2. Set your window to dimensions that feel comfortable to you. If you want the window to take up your whole screen, select the **Maximize** icon next to the red **Close** button.
3. Now, fit the machine to this window by selecting the **View** tab and selecting **Fit Guest Now** in the drop-down menu. Your machine will automatically adjust to fit the window size.

- a. Note: If the **Autofit Window** option is selected, you will not be able to adjust your screen size. Make sure that option is not selected to be able to fit your guest to your window.



#### IV. Free Your Mouse Cursor from VM Window

1. Sometimes, your mouse cursor can get trapped within the confines of your virtual machine and you can't perform tasks on your physical desktop. This can be fixed by pressing the **Ctrl+Alt** key to release the cursor.

#### V. Shutting Down Your Machine Properly

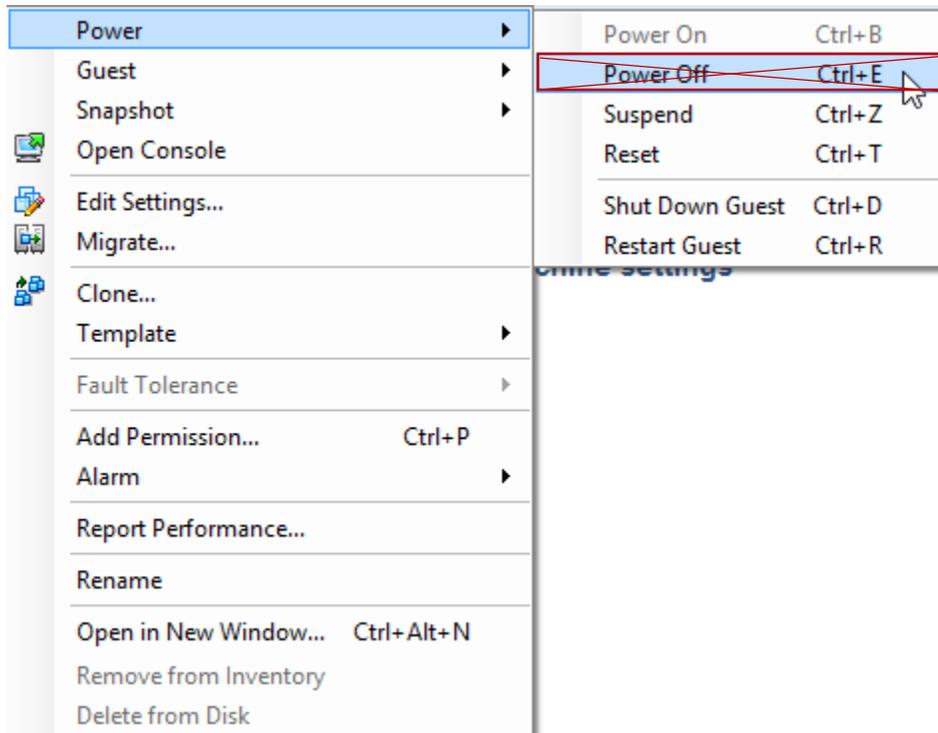
1. To shut off a physical computer, you typically select the Start menu and select **Shut Down** from a drop-down menu. This ensures that all projects, programs, and documents are saved and properly closed before turning the machine off. If you abruptly unplugged a computer or shut it down by holding the power button, this is called a hard shutdown. A hard shutdown forces the computer to shut off, regardless of what programs are running and without saving any work or documents in the process.
2. Obviously, the first option is preferable when shutting down a computer, so that all work is saved and processes completed before turning off. In vSphere, powering off a machine from the vSphere Client is equivalent to unplugging a computer and abruptly shutting down all processes without saving any work. **DO NOT** shut off your virtual machine this way.
  - a. BAD ways to shut down your machine:

## Basic Tasks

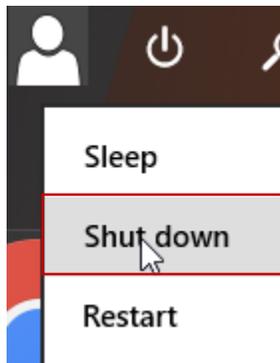
 ~~Power Off the virtual machine~~

 Suspend the virtual machine

 Edit virtual machine settings



3. Correctly shut down your within the machine window. Shut it down like you would a physical desktop by selecting **Shut Down** from the drop-down menu.
4. If your virtual machine does not have that option, shut your machine down using the red square **Shut Down** icon at the top of the window.



OR

