

INFO6003 Lab-08 ESXi and vSphere Client

Preparation

Local Students

- Remote Students and Local
- Get the above two files directly from the Dropbox link on FOL
- Lab8_files for All Students
- <https://www.fanshaweonline.ca/d2l/le/content/1269596/viewContent/10722500/View>
- Zip Compressed File

Create ESXi VM in Workstation

- Open Workstation and start the new virtual machine wizard (Typical)
- Point the installer to the VMware-VMvisor-Installer-5.5.0... ISO.
- During the setup choose to store the virtual disk in one file (40GB) and **deselect the option to power the virtual machine on after creation.**
- Change the Network Adapter to LAN Segment and select the INFO6003 LAN Segment you created last week.
 - Why do we like using LAN segments?

Configure ESXi Host (Note: If you get a CPU error, you can ignore it)

- Power on the VM and go through the default install.
 - go full screen for the install so you can see all the prompts
- Set your root password to **VMware1**
- **It will look like it has stalled at around 30% and again around 90%**
- Reboot at the end of the installation.
- After the system reboots use **F2 to logon, then F2 again** to get into the menu to customize the server settings.
- Choose **Configure Management Network**, then select the **IP Configuration** link.
- Set a static IP of 10.0.0.90 with a subnet mask of 255.255.255.0, no default gateway.
- Save the settings, then use the ESC key to get back to the main screen
 - You will need to select Y to save the settings

Install the vSphere Client on your Windows7 VM.

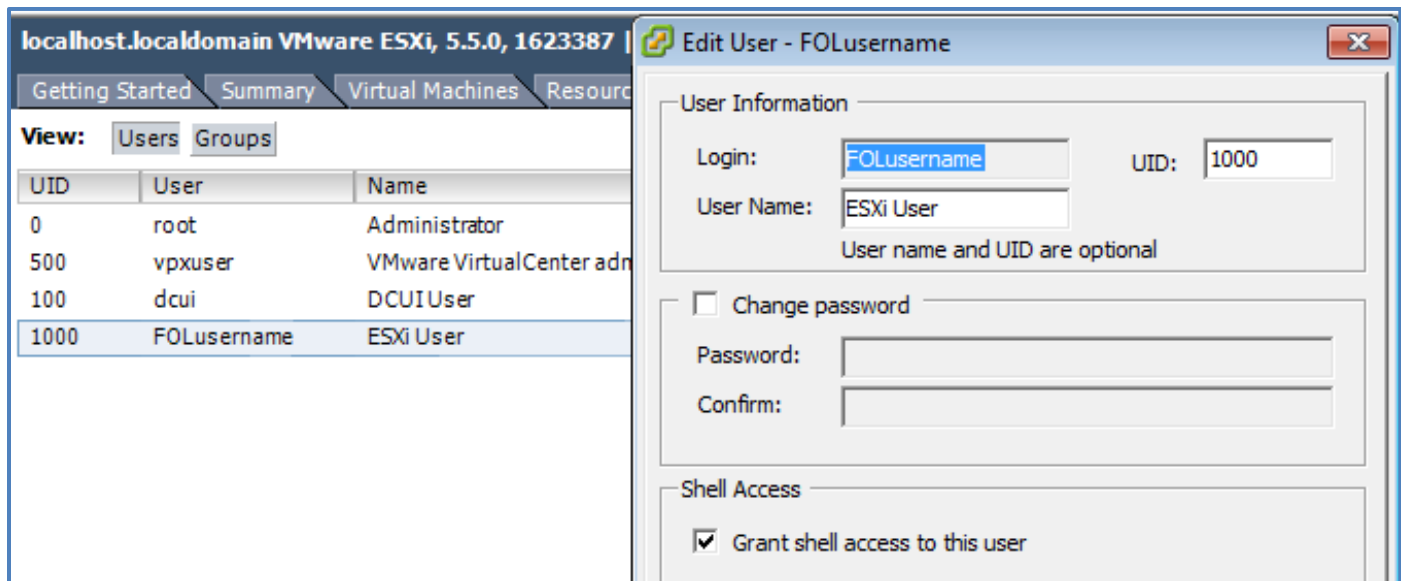
- Logon to your Windows7 VM that we moved to the LAN segment last week.
- To avoid needing to power up the Server2008 R2 Domain Controller you can log onto the W7 VM with the User-Admin account.
 - You use **.user-admin** to accomplish this. (ignore the activation warnings if you get them)
- Install the vSphere Client you downloaded earlier. (**You will have to copy it to the VM**)
- VMware-vclient-all-5.5.0... EXE
- Choose all the defaults during the installation.
- Open the vSphere Client and logon to your ESXi server as root. (If this fails, troubleshoot connectivity)
 - IP Address of ESXi Host.
 - User Name: root
 - Password: VMware1
- Click the box that will install the certificate and choose Ignore the warning.
- Click OK to enter evaluation mode.

- If you aren't taken there automatically go to the Inventory Tab by clicking on the Inventory icon.

Create a User and Assign it Permissions

- Go to Local Users & Groups and create a user with **your FOLusername** for the **login name**
 - You can right click in the white space to bring up the option to add a user)
 - Password of **Windows1**.
 - **Don't configure any other settings.**
 - Click OK
- Choose to edit the settings for this new user.
 - Notice that this user was granted a UID, a User Name and shell access.

Take a screenshot that matches the one below and paste it into slide #1



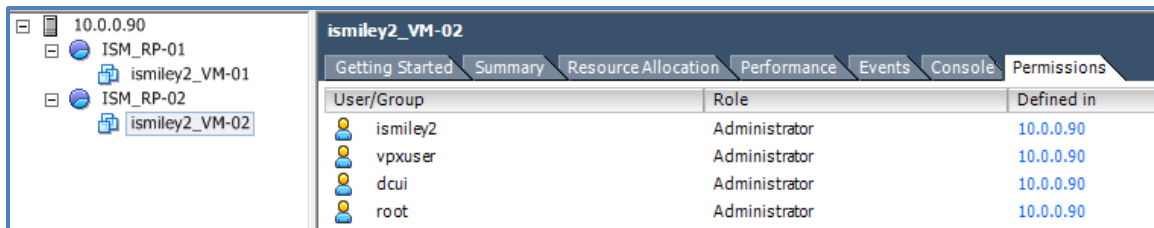
Add a New Permission

- Go to the Permissions tab and choose to add a new permission for the user you just created.
 - Right click in the white space
 - Add your user to the Users and Groups panel.
 - Assign your user the role of Administrator and leave the box checked to Propagate to Child Objects.

Create Resource Pools and Empty Virtual Machines

- Right click on the IP of you ESXi Host and create a new resource pool named ISM_RP-01
- Repeat and create another resource pool named ISM_RP-02
- Right click on ISM_RP-01 and choose to create a New Virtual machine (**Typical**) named **FOLusername_VM-01**
 - Choose the defaults until you get to the Create a Disk settings.
 - Make it a **4GB thin provisioned** disk.
- Create another VM in ISM_RP-02 named FOLusername_VM-02 and the same settings.

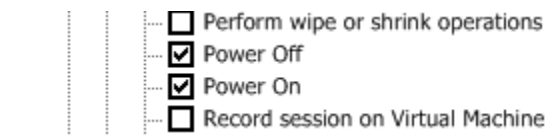
Take a screenshot that matches the one below and paste it into slide #2
Make sure you have selected your second virtual machine and the permissions tab



Because of the default settings, your user has inherited permissions for the objects you created.

We are going to modify the permissions on the **ISM_PR-01 resource pool** and the **FOLusername_VM-02 VM** (Remember from the lecture, these are both inventory objects)

- For the **ISM_PR-01 Resource Pool**: **remove propagation** for your user
 - Under permissions, right click on your user and choose properties to do this
- For the **FOLusername-02 VM**: set your user's role to **No Access**
 - Under permissions, right click on your username and choose properties to do this
- **Close the vSphere Client and log back on as your FOLusername user**
- Go to the Home Page and click on the Roles Icon
 - Home in the location bar
- Add a new role named **Power State** that only has the privilege to power a VM on and off.

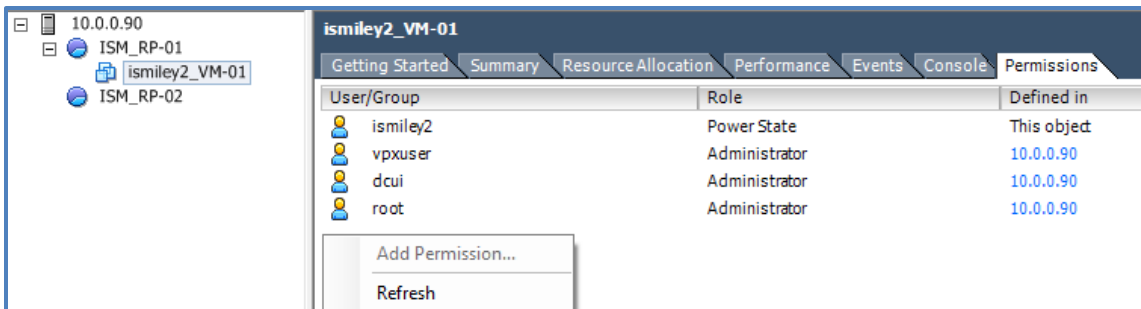


Hint: You are interacting with a Virtual Machine

Assign a Role

- Assign **your user** the **Power State** role for the **FOLusername_VM-01 VM**
 - You can click on the Inventory Icon from the Home screen to get back to the VM
 - Right click on your username and choose properties to add the Power State role
- Right click in the white space and try to assign another permission to this VM.
 - Why did this fail?

Take a screenshot that matches the one below and paste it into slide #3



Create a User with Shell Access and SSH to ESXi Host

- Log onto your ESXi host and enable the SSH connection on your **ESXi host** (not from vSphere)
 - Hint: this is something you usually do when you are troubleshooting problems with your server
- In vSphere, create a new user called **FOLusername-01**
 - Give the user a password, shell access and assign them the role of Administrator (permissions)
 - Copy Putty to your VM
- Open putty and connect to your ESXi host at 10.0.0.90
 - Accept the certificate
 - You need to log on as FOLusername-01

Take a screenshot that matches the one below and paste it into slide #4
Include a net config workstation filtered to "name" and a logon with the uname command

```
C:\Users\User-Admin>net config workstation ! find "name"
Computer name          \\W7-ISMILEY2
Full Computer name     W7-ismiley2.smiley.ca
User name              User-Admin

C:\Users\User-Admin>
```

```
10.0.0.90 - PuTTY
login as: ismiley2-01
Using keyboard-interactive authentication.
Password:
The time and date of this login have been sent to the system logs.

VMware offers supported, powerful system administration tools. Please
see www.vmware.com/go/sysadmintools for details.

The ESXi Shell can be disabled by an administrative user. See the
vSphere Security documentation for more information.
~ # uname -a
VMkernel localhost 5.5.0 #1 SMP Release build-1623387 Feb 21 2014 17:19:17 x86_64 GNU/Linux
~ #
```