



Lab 3.1.1a Install Nested VM - VMware

Introduction

A network lab environment can be used to test upgrades/patches, evaluate new features, or as a training environment for hands-on experience.

Objectives

In this lab the student will:

- Install, configure and manage virtual networking and storage [WECM]

Equipment/Supplies Needed

- Host Computer with VMware Workstation 15
- 2 ESXi 6.7 VM's
- 1 Windows Server VM for DNS and AD
- 1 vCenter VM for administration
- Reference: VMware ESXi Installation and Setup Guide [17 APR 2018]
<https://docs.vmware.com/en/VMware-vSphere/6.7/vsphere-esxi-67-installation-setup-guide.pdf>

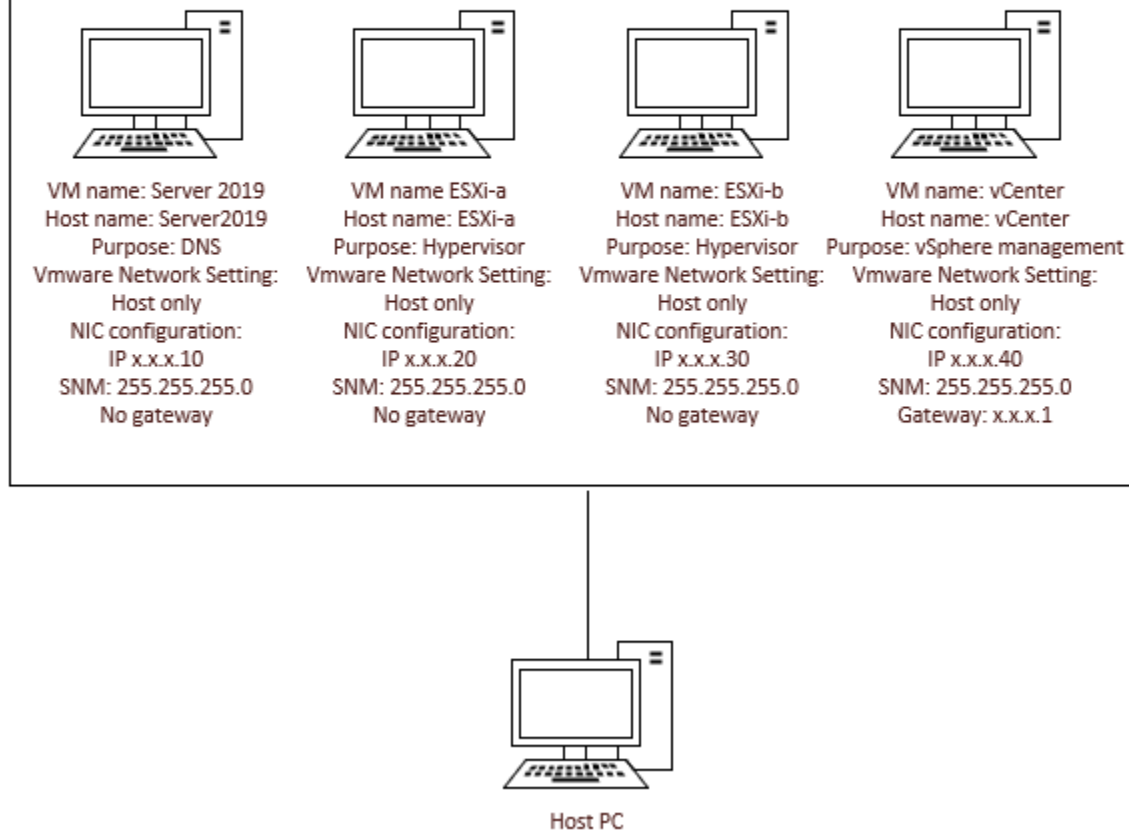
Assignment

Student will install a nested VM in a VmWare Lab environment, as shown in figure below, for use in subsequent labs.

Key activities include creation of the following:

- (1) A Ubuntu Virtual Machine (VM) – vMotion

NOTE: X.X.X. in IP address represents the Host only network (VMnet1) on your host PC.



Procedure

1. Create a nested Ubuntu VM on one of your ESXi VM's so it can be moved with vMotion in a later lab. To be clear, you will create a nested VM on only one of your ESXi VMs.
 - a. From VM settings of your first ESXi VM, click on CD/DVD (IDE). Select the radio button **Use ISO image file:** and browse to the location of the Ubuntu 32bit ISO. Be sure the CD/DVD has a check in both the Connected and Connected at Power On boxes. **TAKE A SCREENSHOT OF THIS STEP.**
2. Sign into vSphere as your AD VMware Administrator from a browser on your host PC so you can create and install Ubuntu on ESXi. Note: There's no need to install VMware Tools in the lab environment.
 - a. Right click your first ESXi in Datacenter1 and select New Virtual Machine. Follow the steps to create a new VM in Datacenter1 assigned to your first ESXi.
 - b. Name the VM Ubuntu.
 - c. Select Datastore150 for the storage policy.
 - d. Select a Compatibility level of ESXi 6.7 or later.
 - e. Select Linux as the OS family and Ubuntu 32bit as the OS Version.
 - f. Assign the following hardware to the new VM:
 - i. CPU 1
 - ii. RAM 1GB
 - iii. Hard disk 16GB
 - iv. CD/DVD Drive Host Device, Connect at power on

v. SCREENSHOT THE NEW VM HARDWARE SETTINGS.

- g. Right click the new VM in the left pane, and power it on. Click on Launch Web Console in the right pane to interact with the new VM as it is installed. Because this is a VM it's better to not let the OS installation try to detect the keyboard. It's better to manually select English (US) as the keyboard.
- h. During the installation you may get an error message if you did not set a default gateway on the ESXi server this VM is being installed on. It's OK to proceed with the installation and ignore the default gateway message.
- i. For disk partitioning use the default of Guided – use entire disk.
- j. Do not select a HTTP proxy.
- k. When the install is complete sign into Ubuntu to verify the VM works. **SCREENSHOT THE NEW VM WITH YOU LOGGED INTO IT**, then shut it down.

3. Place all screenshots in a Word or PDF document and upload that document for grading. Submit the following items as evidence of lab completion for grading.

<u>Concerns</u> Working Towards Proficiency	<u>Criteria</u> Standards for This Competency	<u>Accomplished</u> Evidence of Mastering Competency
	Screenshot of VM Settings - step 1 (33 pt)	1 correct answer; 33 pt each
	Screenshot of VM Hardware Settings - step 2 (33 pt)	1 correct answer; 33 pt each
	Screenshot of running VM with you logged in – step 2k (34 pt)	1 correct answer; 34 pt each