



Lab 3.1.2b iSCSI Lab Add new iSCSI datastore to ESXi

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]

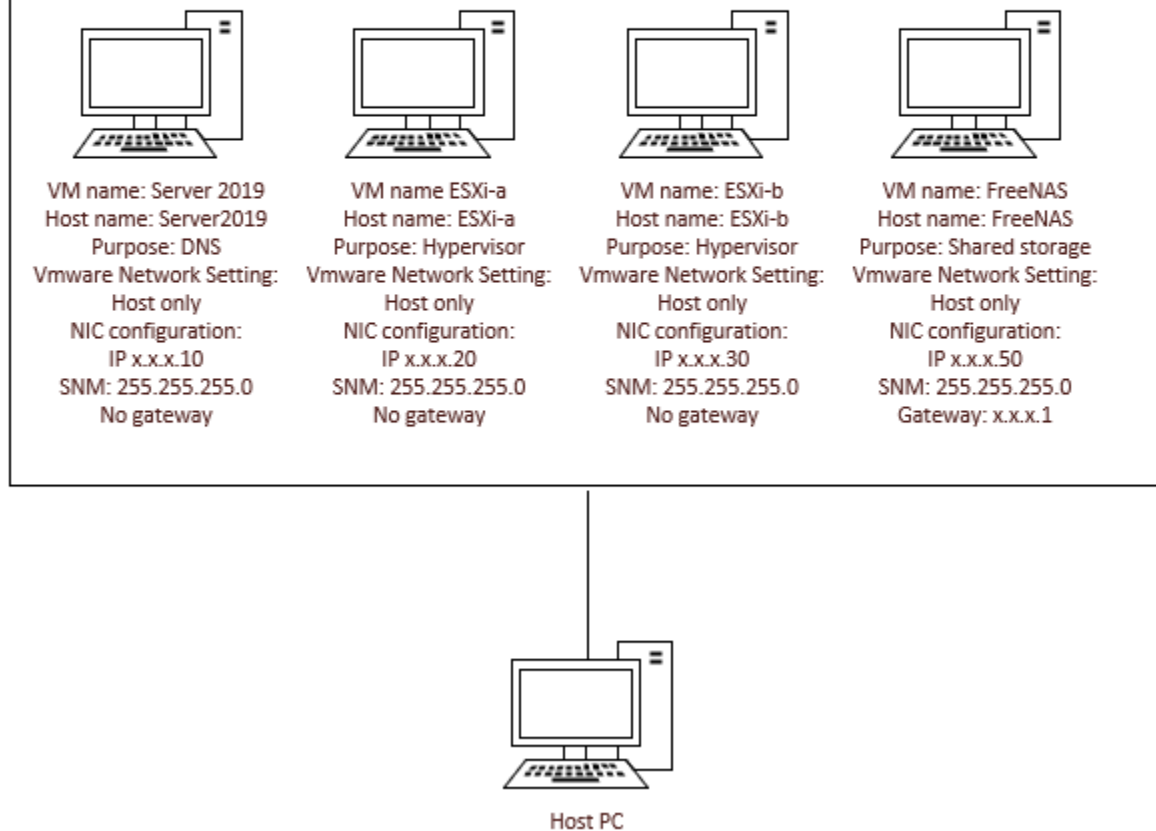
Equipment/Supplies Needed

- Host Computer with VMware Workstation Pro
- Windows Server, FreeNAS, and both ESXi VM's running as shown in the diagram below
- 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

Students will add and configure a new iSCSI datastore to ESXi VM's for shared iSCSI storage. Key activities include configuring a new iSCSI datastore in ESXi for connecting to FreeNAS for shared storage.

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



Procedure

1. We need to add an iSCSI datastore to ESXi to allow it to use the iSCSI target built in the previous lab. Open a browser on your host PC and sign into one of your ESXi VM's.
 - a. In the Navigator pane click on Storage. In the right pane click on the Adapters tab.
 - b. Click on Software iSCSI to add a new adapter. Click on the Enabled radio button.
 - c. To the right of Static targets click on Add static target.
 - d. In the Target field Click to add name and enter the FreeNAS iSCSI target you created in the previous lab. To refresh your memory, it will look something like: iqn.2005-10.orgfreenas.ctl.
 - e. Add the IP address of FreeNAS in the field to the right of the target name.
 - f. Click on Add dynamic target and enter the IP of FreeNAS. **CAPTURE A SCREENSHOT OF THIS STEP.**
 - g. After saving the configuration click on Rescan in the Adapters tab of ESX, then click on Refresh. The new iSCSI software adapter should now show in ESXi and the status should be Online. **CAPTURE A SCREENSHOT OF THIS STEP.**
2. Now we need to add shared iSCSI storage to ESXi. Click on the Datastores tab and click New datastore to create a new VMFS datastore.
 - a. After selecting the default to Create a new VMFS datastore, select the device name (only the FreeNAS device should show as an available device) and give it a name of iscsi-datastore.
 - b. Use the default partitioning options. **CAPTURE A SCREENSHOT OF THIS STEP.**

3. Perform the same steps to configure the other ESXi VM. **CAPTURE THE SAME SCREENSHOTS FOR THE SECOND ESXI VM AS YOU DID FOR THE FIRST ESXI VM.**
4. **Place all screenshots in a Word or PDF document and upload that document for grading. Submit the following items for grading as evidence of successful lab completion.**

<u>Concerns</u> Working Towards Proficiency	<u>Criteria</u> Standards for This Competency	<u>Accomplished</u> Evidence of Mastering Competency
	2 Screenshot of step 1f (33 pt)	2 correct answers; 16.5 pt each
	2 Screenshot of step 1g (33 pt)	2 correct answers; 16.5 pt each
	2 Screenshot of step 2b (34 pt)	2 correct answers; 17 pt each