ITSY 1374 Unit 1 Performance Assessment

Introduction and/or Background

This performance assessment will test your understanding of the installation process of Linux and create a preliminary setup of the lab environment needed going forward for future modules.

Objectives

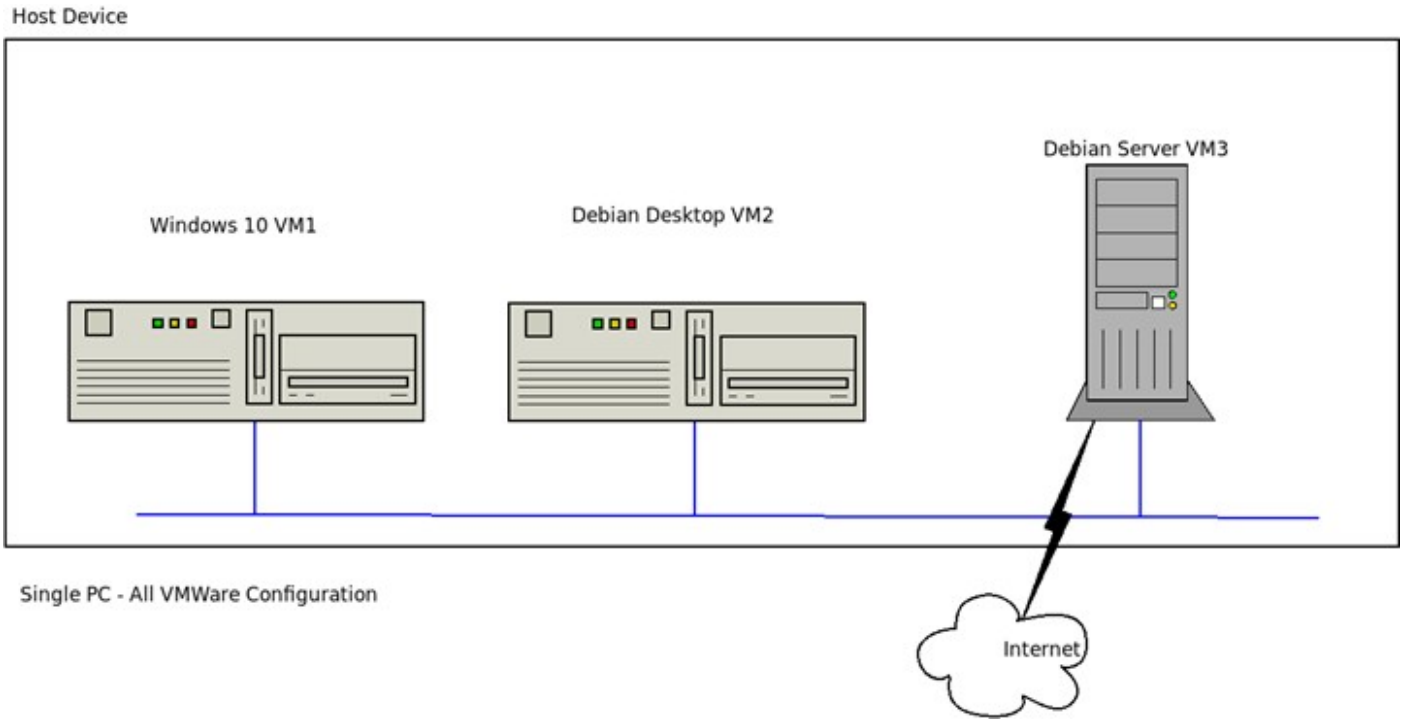
In this project/lab the student will set up a Virtual LAN environment including the following devices:

- Windows 10 desktop, VM1
- Debian Desktop, VM2
- Debian Server, VM3

Equipment/Supplies Needed

- Computer with internet access
- VMware Workstation Virtualization Software
- Linux Installation File: Debian release 9.12

Network Diagram



Procedure

Perform the steps in this lab in the order they are presented to you. Answer all questions and record the requested information. Use the Linux Virtual Machine to perform lab activities as directed. Unless otherwise stated, all tasks done as a non-root user. If root access is needed use the sudo command.

Virtual Machine Configuration & Settings

1. Create a VMware Virtual Machine
    a. Open VMWare Network Editor
    b. Create a new LAN segment.
    c. Configure LAN
        i. Set for HOST only mode.
        ii. Set Subnet IP to 192.168.10.0
    d. Once set take a screenshot.
    e. Close VMWare Network Editor.

2. Open VMware Workstation
    a. Create a New Virtual Machine VM2: You can find from either Home Tab or by select File from the main menu
    b. Select typical install
    c. Install from: Select Installer disc image (ISO) and browse the location of the installation file previously downloaded, typically in the download folder on your computer.
    d. Create a New Virtual Machine VM3: You can find from either Home Tab or by select File from the main menu
    e. Repeat steps (b) and (c) above.
    f. Create a New Virtual Machine VM1: You can find from either Home Tab or by selecting File from the main menu.
    g. Repeat steps (b) and (c) above.

3. Configure VM1, VM2, VM3 to reside on the private lan segment you created.
    a. From VM1 execute the ping command to VM2, VM3. Screenshot the results.
    b. From VM2 execute the ping command to VM1, VM3. Screenshot the results.
    c. From VM3 execute the ping command to VM1, VM2. Screenshot the results.

Lab Submissions Proof: Provide screenshots as indicated in the lab; upload your proof to Canvas for grading. Each screenshot should include the IP addresses at the start of the ping. Also in your submission indicate the IP addresses for VM1, VM2, VM3.

!!These three VMs are to be RETAINED as they are used throughout this course!!

Rubric

Checklist/Single Point Mastery

Concerns Working Towards Proficiency	Criteria Standards for This Competency	Accomplished Evidence of Mastering Competency
	Criteria #1: Screenshot of LAN segment created in Host-Only mode with Subnet IP of 192.168.10.0 (10 points)	
	Criteria #2: Screenshot of VM1 with IP info (15 points)	
	Criteria #3: Screenshot of VM2 with IP info (15 points)	
	Criteria #4: Screenshot of VM3 with IP info (15 points)	
	Criteria #5: Screenshot of ping command from VM1 to VM2, VM3 (15 points)	
	Criteria #6: Screenshot of ping command from VM2 to VM1, VM3 (15 points)	
	Criteria #7: Screenshot of ping command from VM3 to VM1, VM2 (15 points)	