



Institute of  
Computer  
Technology

Name: Tushar Panchal

En.No: 21162101014

Sub: Virtualization

Branch: CBA

Batch:51

## PRACTICAL 01

### ❖ Management with vCenter Server through ESXi.

#### » TASK :

Simulation of an ESXi installation.

Review ESXi Host Client for management.

☞ **HANDS-ON      LABS      INTERACTIVE      SIMULATION:      ESXI**  
**INSTALLATION AND CONFIGURATION :**

The screenshot shows a browser window with the URL [https://labs.hol.vmware.com/HOL/console/lab/HOL-2410-01-SDC-HOL/NEE-9407\\_8\\_845645\\_29/saas-1208](https://labs.hol.vmware.com/HOL/console/lab/HOL-2410-01-SDC-HOL/NEE-9407_8_845645_29/saas-1208). The main content area displays a guide titled "HOL-2410-01-SDC: ESXi Installation and Configuration". The guide provides step-by-step instructions for booting the server and starting the ESXi installer. To the right of the guide, there is an "INTERACTIVE SIMULATION: ESXI INSTALLATION AND CONFIGURATION" section. This section includes a screenshot of the ESXi 8.0.0-28513897 standard Boot Menu, which shows the option to boot from the local disk. Below the menu, it says "Automatic boot in 5 seconds...". The simulation section also contains text explaining the purpose of the lab and how to start the interactive simulation. A small screenshot of the simulation interface is shown at the bottom right.

## ➡ Accept the EULA and continue:

**HOL-2410-01-SDC: ESXi Installation and Configuration**

installation media and power on the server to boot and load the ESXi installer. Then, follow the steps below:

1. Press the **Enter** key to start the installation.
2. Press the **Enter** key to Accept the EULA and continue.
3. Press the **Enter** key to select the drive to install ESXi on.
4. Press the **Enter** key to select the US Default keyboard.
5. For the Root password, type **VMware!**
6. Press the **down-arrow (↓)** key to move to the **Confirm password** field.
7. Confirm the password by typing **VMware!** again and press **Enter**.
8. Press **Tab** to confirm the installation process.

Now, watch ESXi being installed.

9. Press the **Enter** key to reboot the server.

NOTE: At this point, you would want to remove the installation media prior to restarting. Now that the server is back up and running, we will need to configure the settings for the Management Network. This will allow us to connect the ESXi host to the network and add the host to the vCenter Server.

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## ➡ select the drive to install ESXi on:

**HOL-2410-01-SDC: ESXi Installation and Configuration**

installation media and power on the server to boot and load the ESXi installer. Then, follow the steps below:

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Now, watch ESXi being installed.

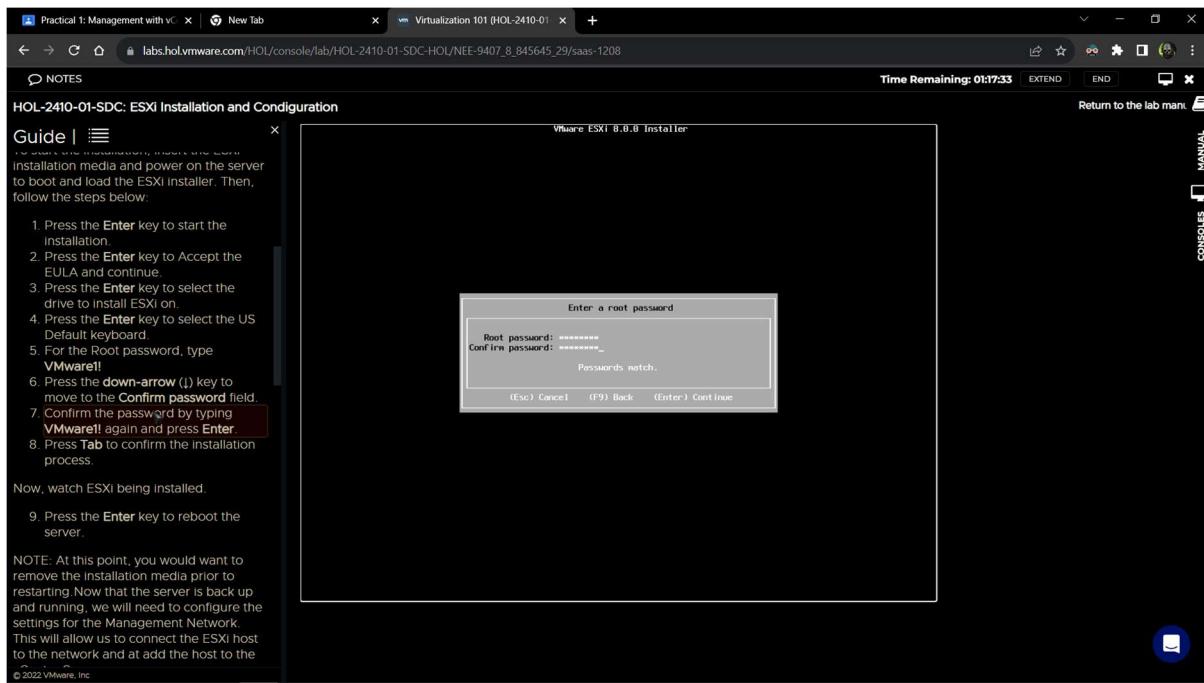
9. Press the **Enter** key to reboot the server.

NOTE: At this point, you would want to remove the installation media prior to restarting. Now that the server is back up and running, we will need to configure the settings for the Management Network. This will allow us to connect the ESXi host to the network and add the host to the vCenter Server.

© 2022 VMware, Inc.

## ➡ select the US Default keyboard.

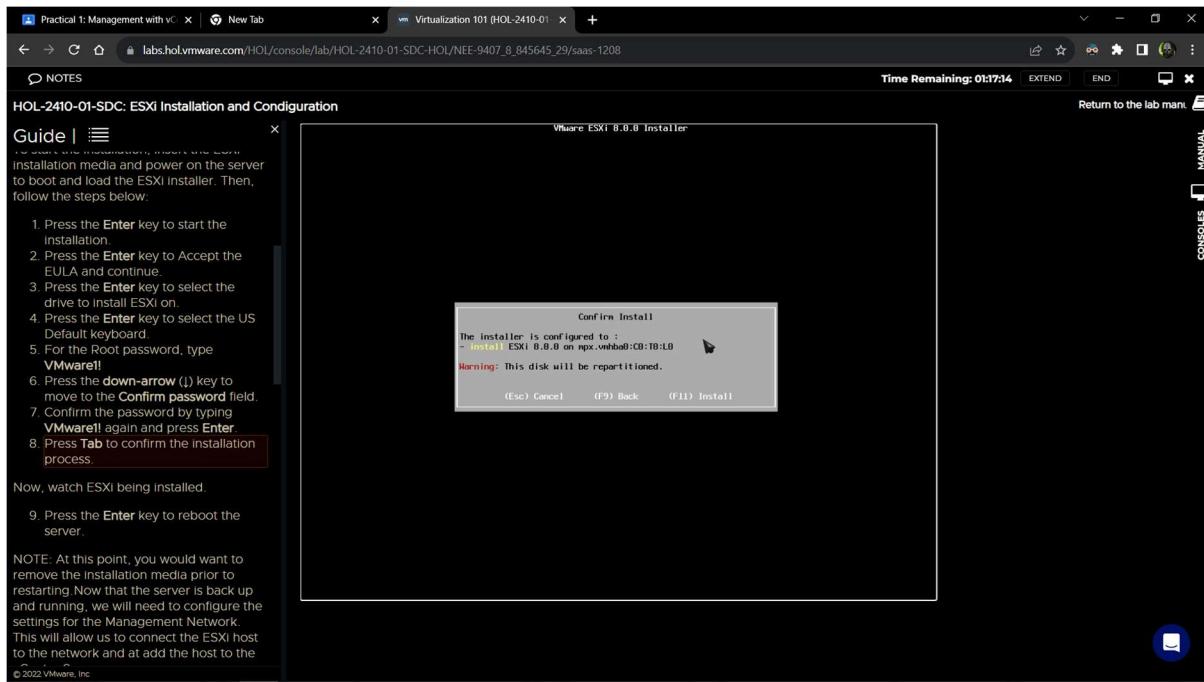
➡ For the Root password, type VMware1!: :



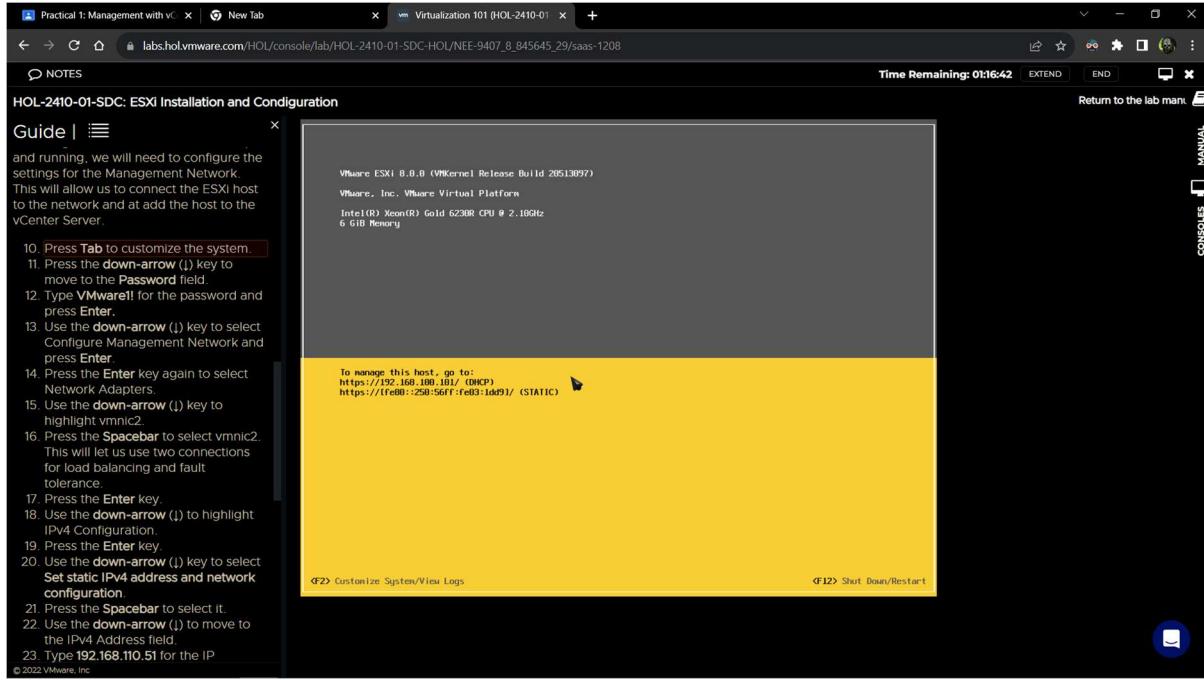
➡ Press the down-arrow (↓) key to move to the Confirm password field.

➡ Confirm the password by typing VMware1! again and press Enter.

➡ confirm the installation process :

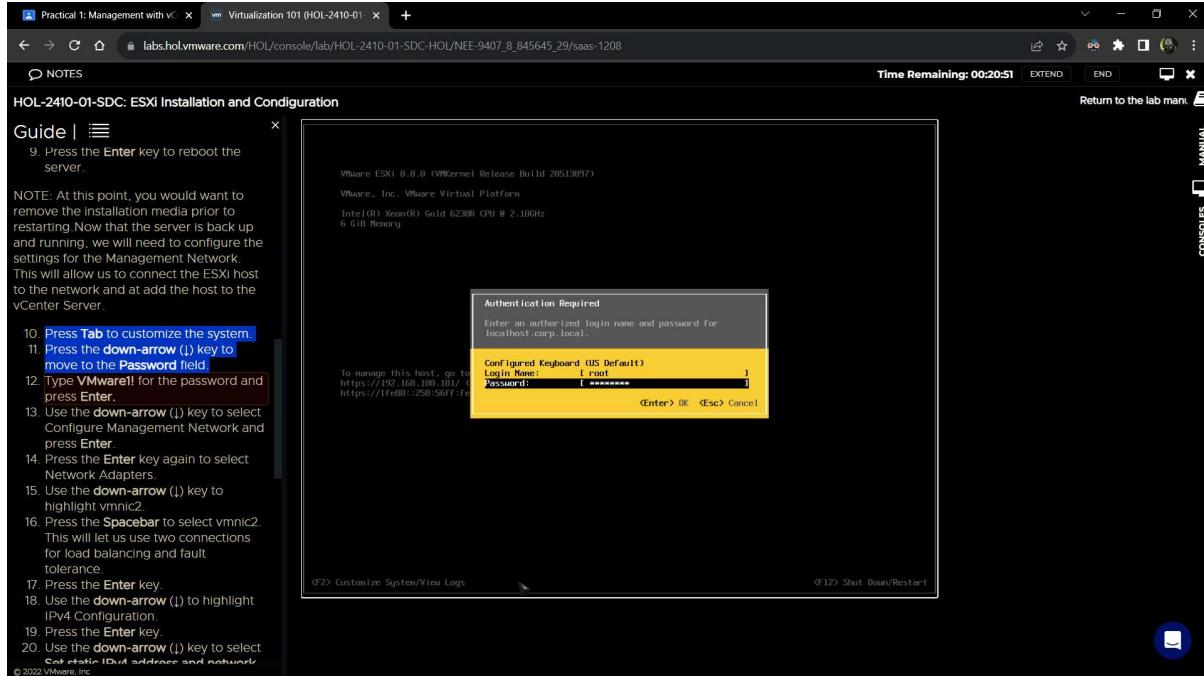


➡ **reboot the server:**



➡ **Press Tab to customize the system.**

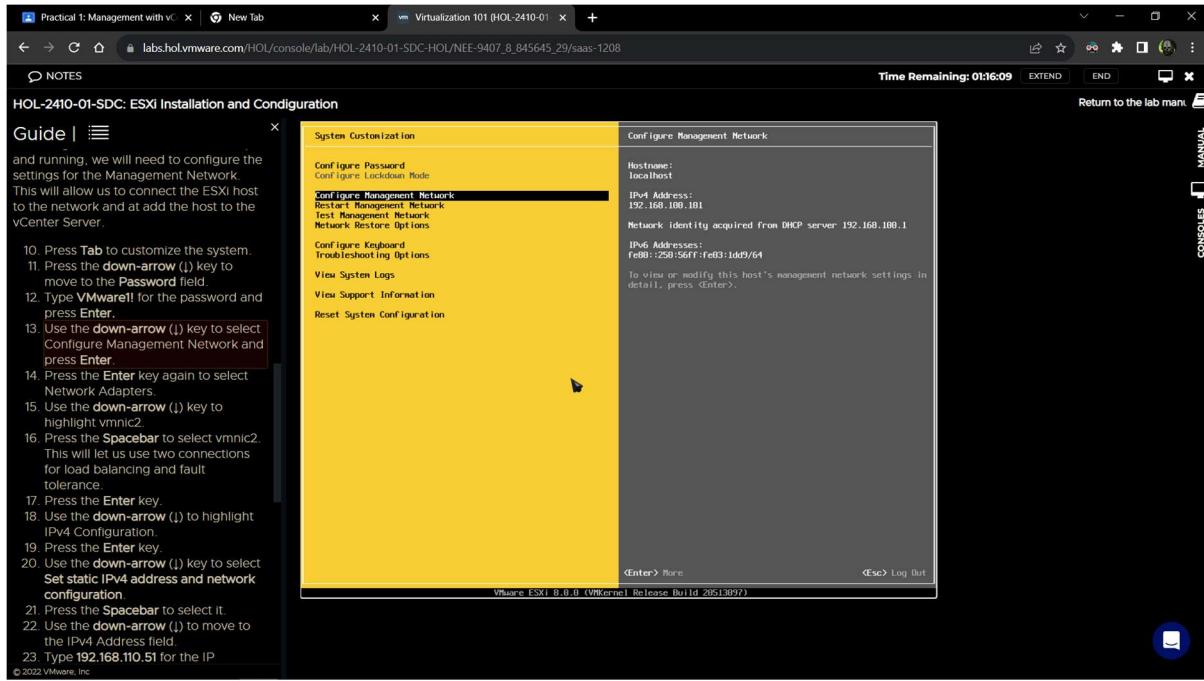
➡ **Press the down-arrow (↓) key to move to the Password field :**



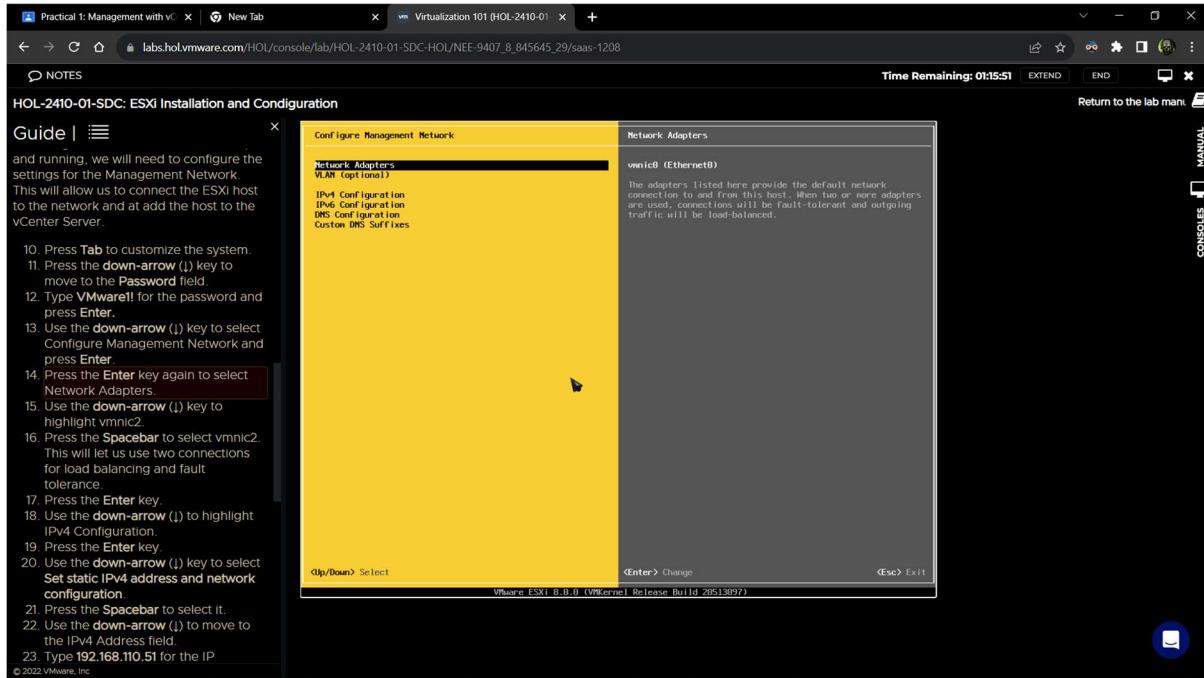
➡ **Type VMware! for the password and press Enter.**



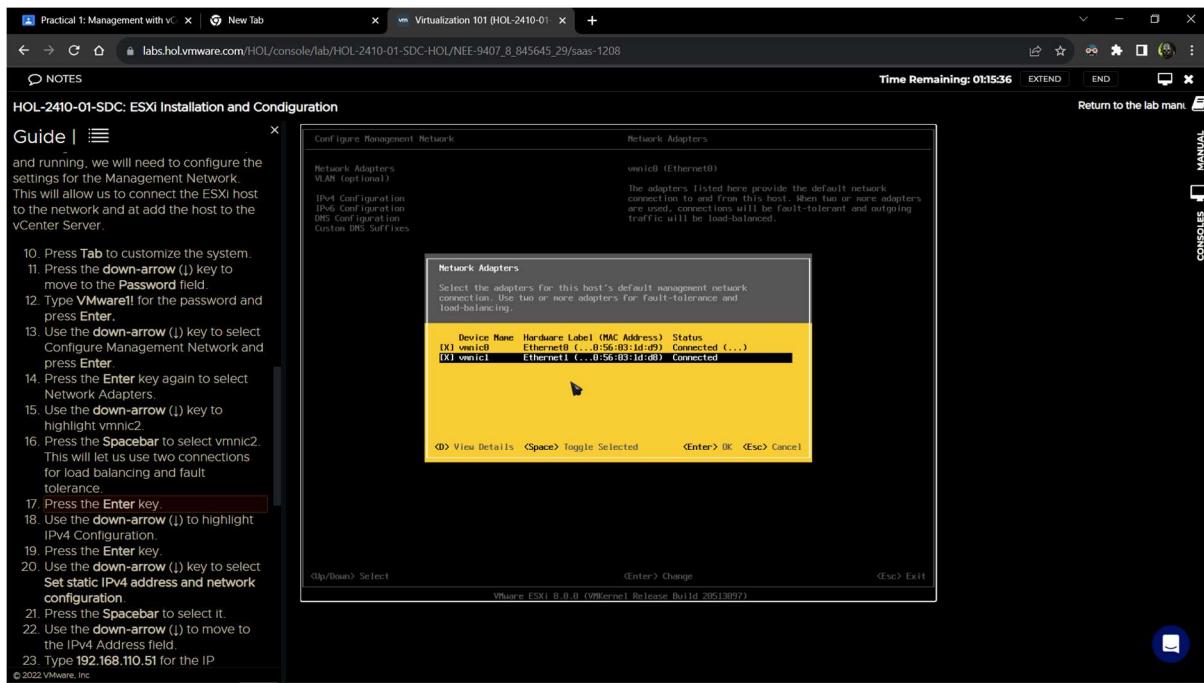
→ **Use the down-arrow (↓) key to select Configure Management Network and press Enter:**



→ **Press the Enter key again to select Network Adapters :**

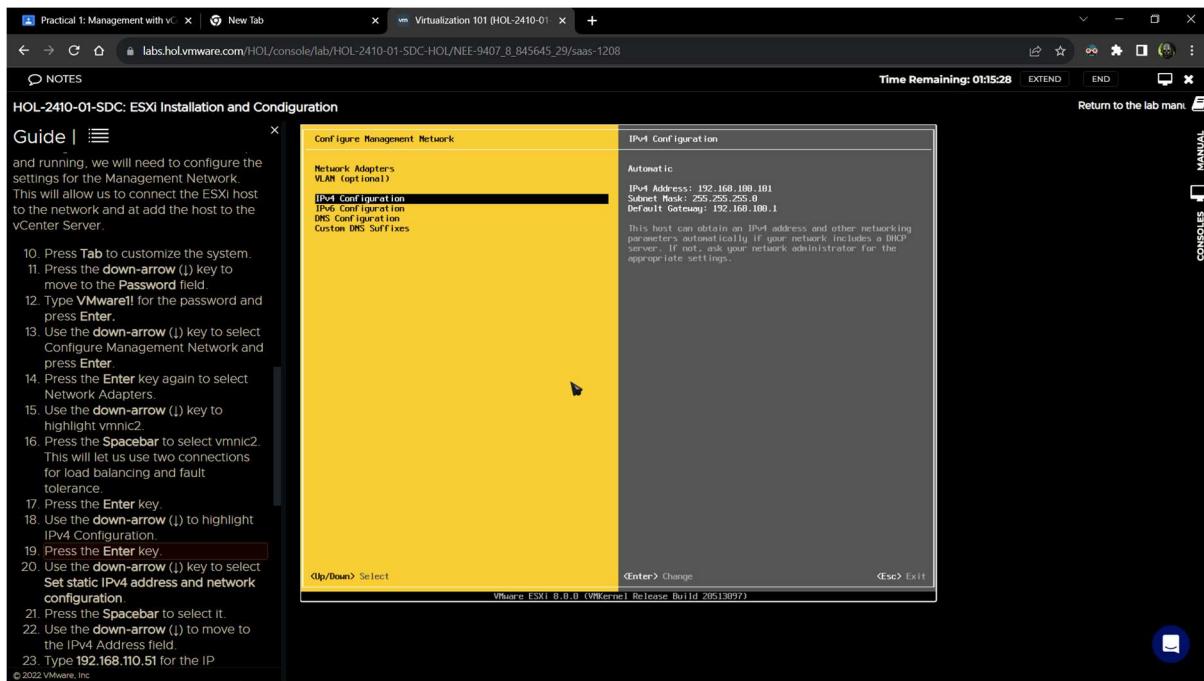


→ **Use the down-arrow (↓) key to highlight vmnic2:**

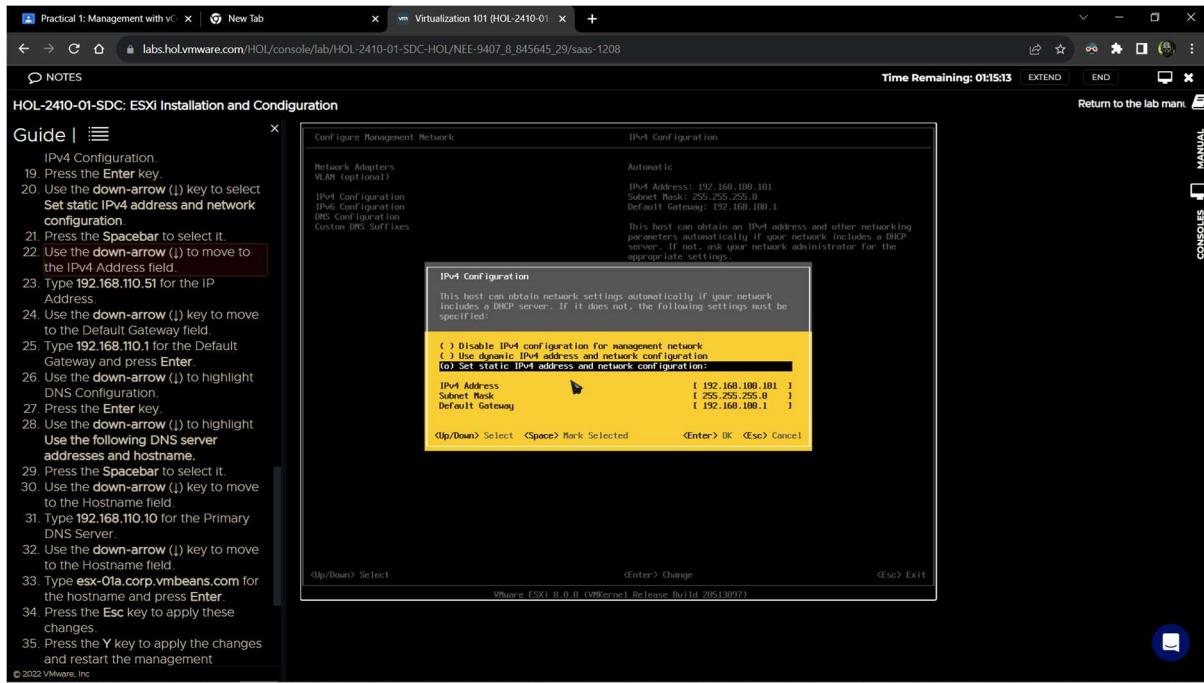


→ **Press the Spacebar to select vmnic2. This will let us use two connections for load balancing and fault tolerance .**

→ **Use the down-arrow (↓) to highlight IPv4 Configuration :**

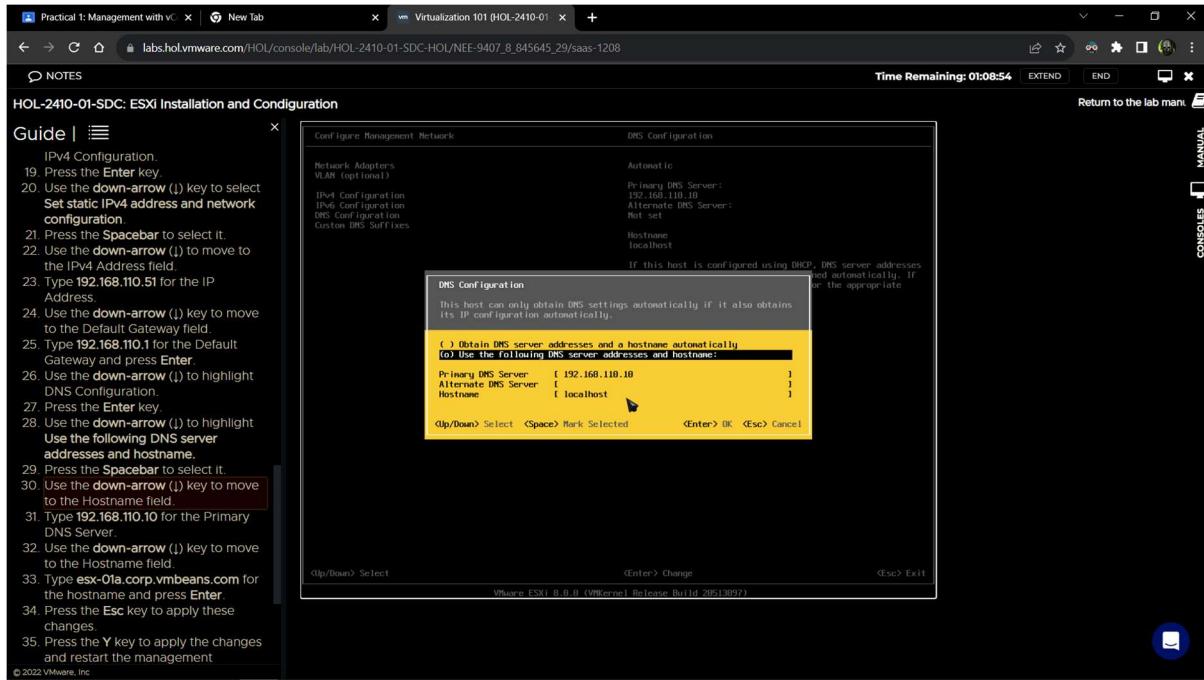


- »→ **Use the down-arrow (↓) key to select Set static IPv4 address and network configuration .**
- »→ **Use the down-arrow (↓) to move to the IPv4 Address field.**
- »→ **Type 192.168.110.51 for the IP Address.**
- »→ **Use the down-arrow (↓) key to move to the Default Gateway field.**
- »→ **Type 192.168.110.1 for the Default Gateway and press Enter:**



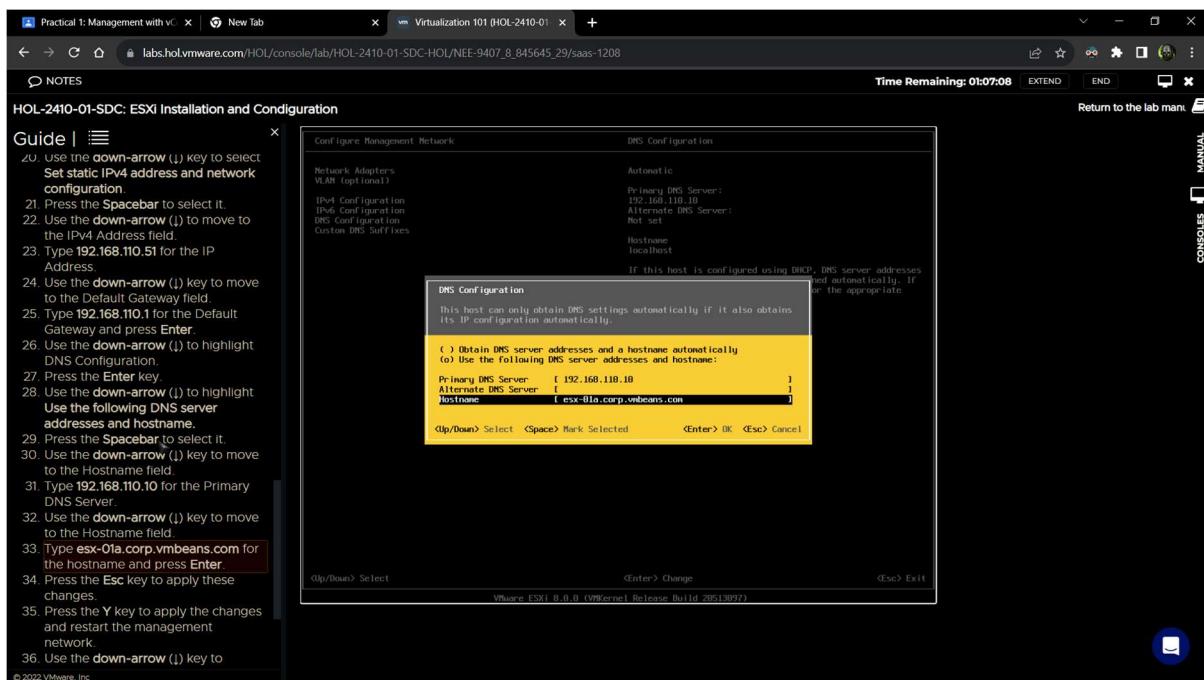
- »→ **Use the down-arrow (↓) to highlight DNS Configuration :**
- »→ **Press the Spacebar to select it.**
- »→ **Use the down-arrow (↓) key to move to the Hostname field.**

→ Type 192.168.110.10 for the Primary DNS Server:



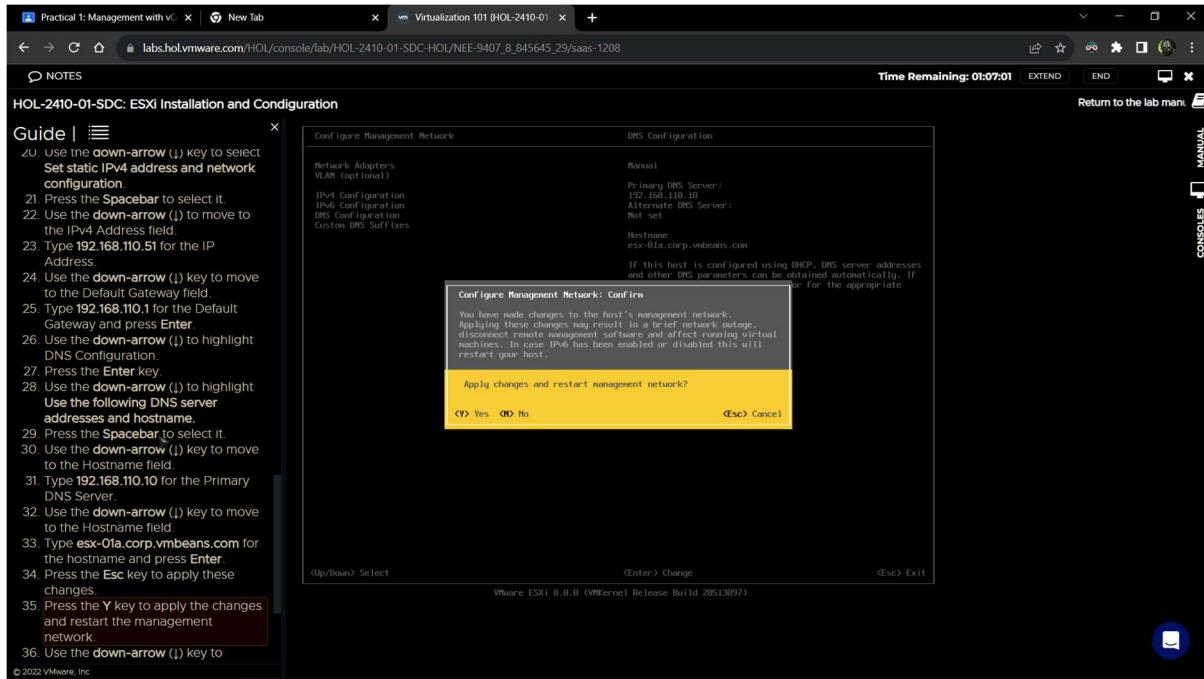
→ Use the down-arrow (↓) key to move to the Hostname field.

→ Type esx-01a.corp.vmbeans.com for the hostname and press Enter:



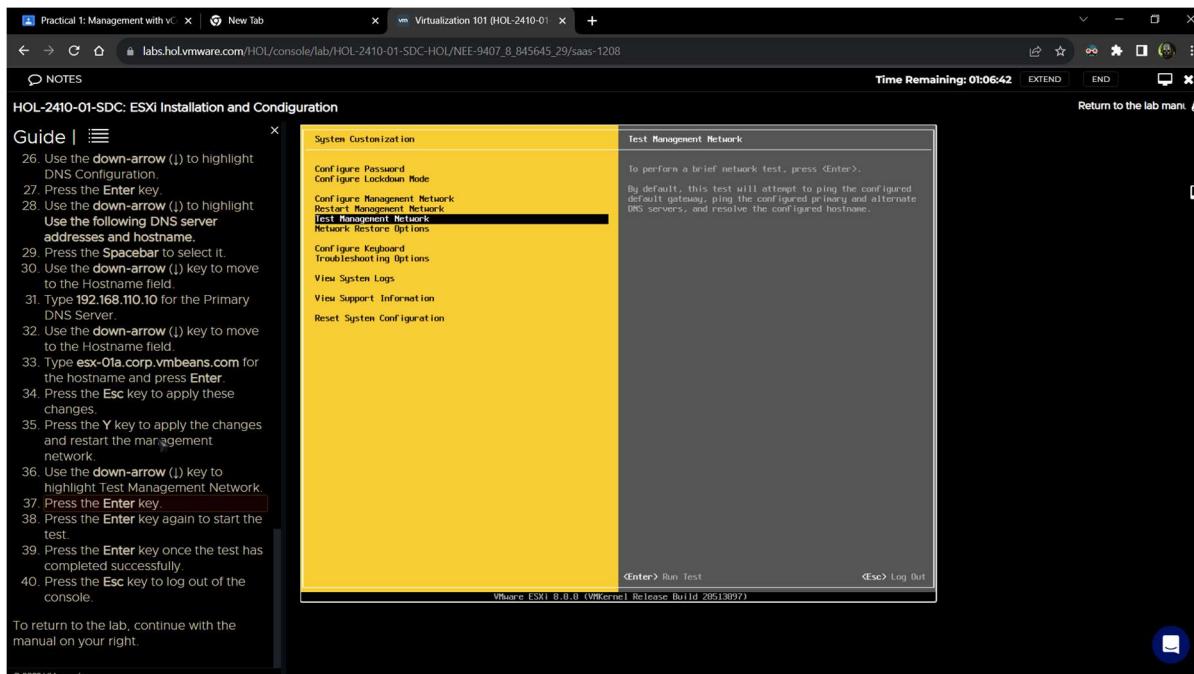
→ Press the Esc key to apply these changes.

→ **Press the Y key to apply the changes and restart the management network:**



→ **Use the down-arrow (↓) key to highlight Test Management Network.**

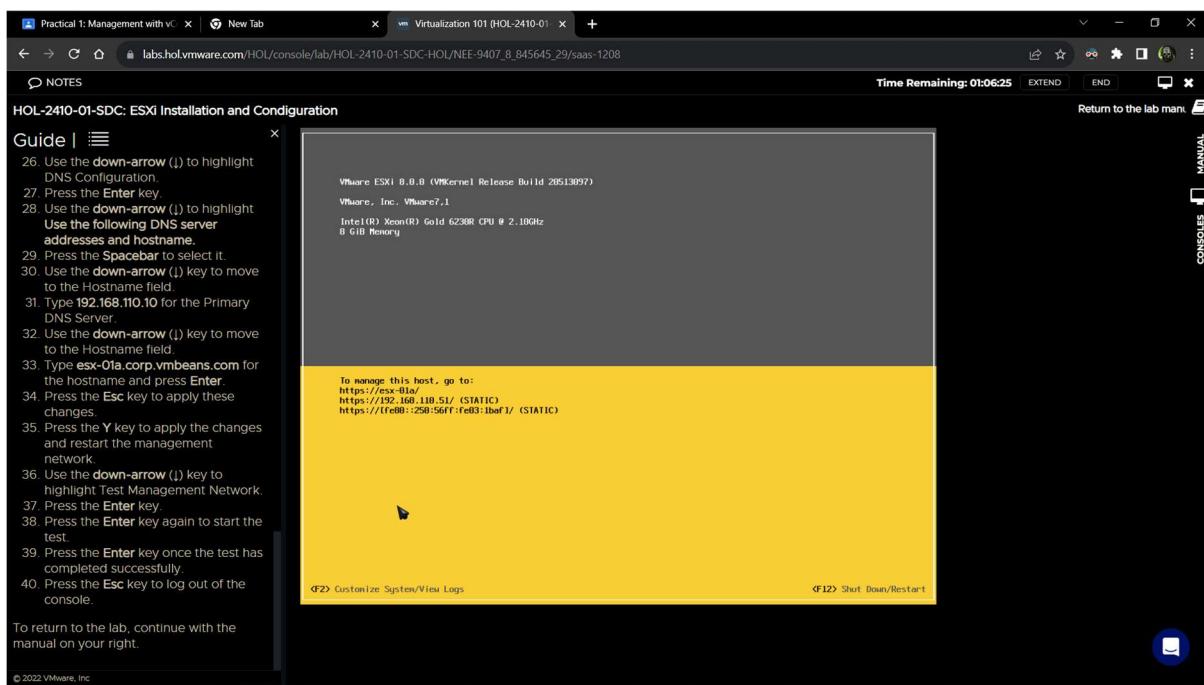
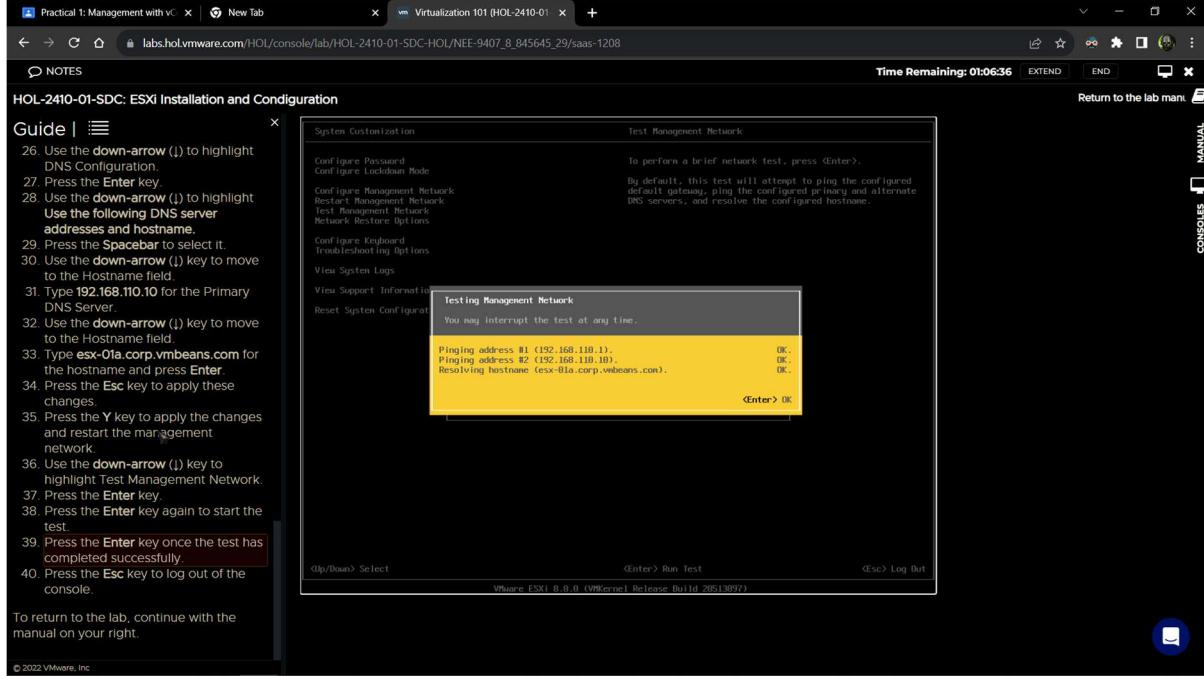
→ **Press the Enter key.**



→ **Press the Enter key again to start the test.**

→ **Press the Enter key once the test has completed successfully.**

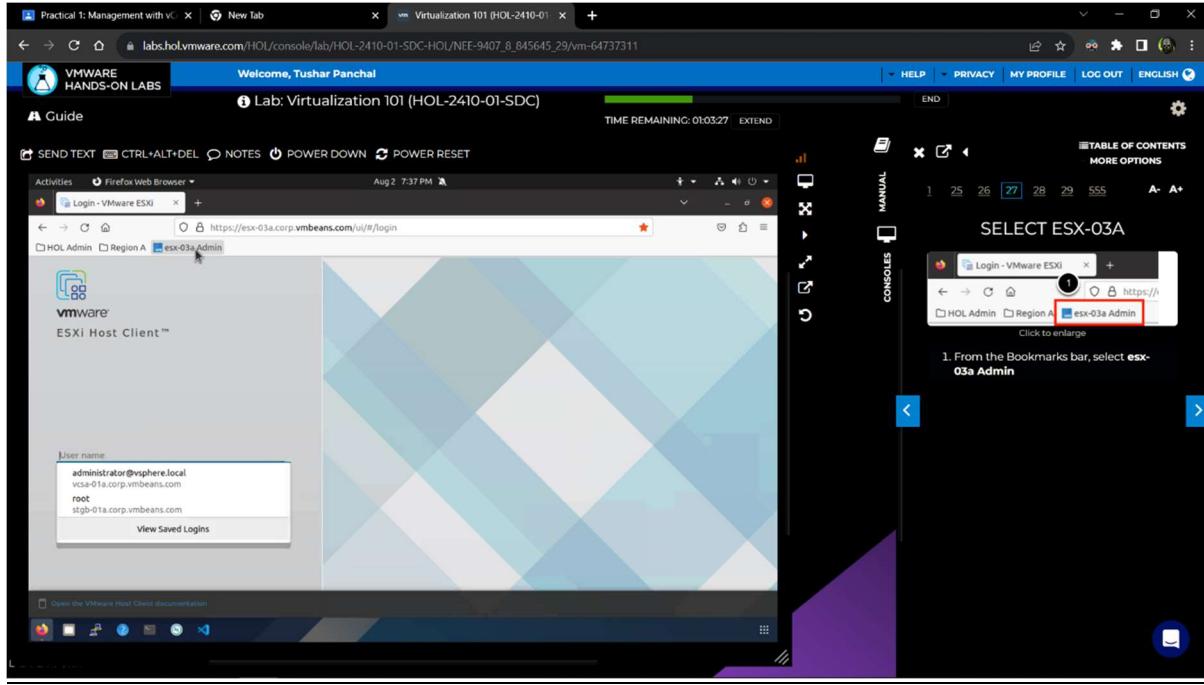
→ **Press the Esc key to log out of the console.**



→ **Press OPEN THE LAB MAIN CONSOLE AND MANUAL**  
**Click on the Firefox Icon on the Linux Task Bar**



From the Bookmarks bar, select esx-03a Admin

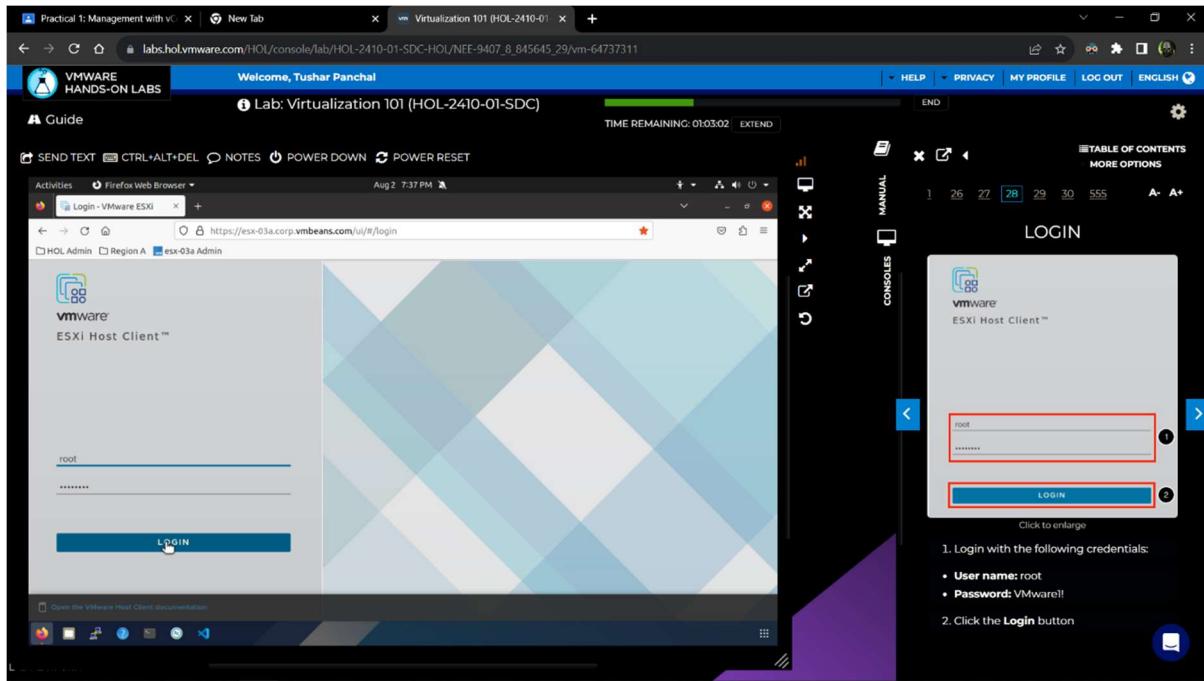


>Login with the following credentials:

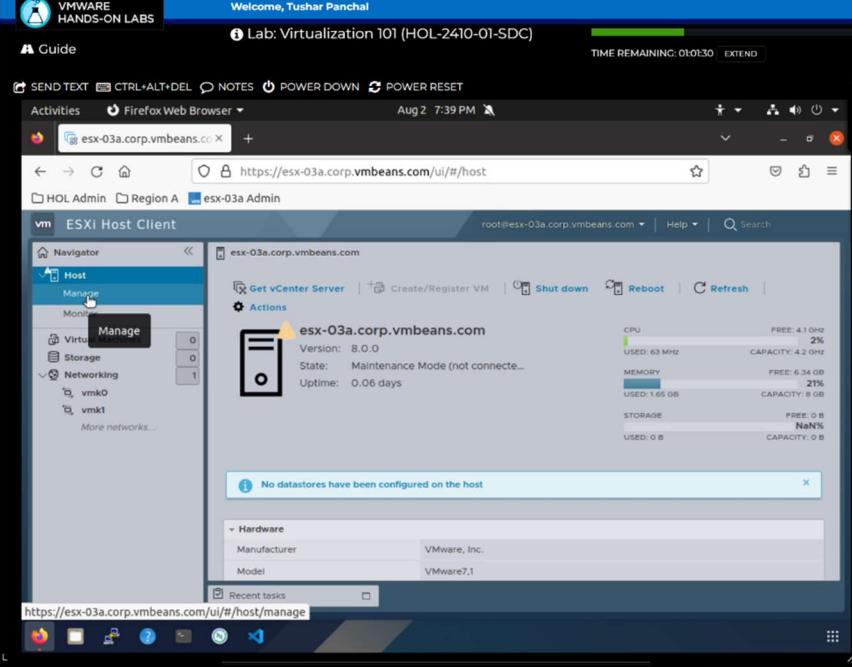
**User name: root**

**Password: VMware1!**

Click the Login button



➡ **Click on Manage**



The screenshot shows the VMware Host Client interface. The left sidebar has 'Host' selected under 'Manage'. The main pane displays the host details for 'esx-03a.corp.vmbeans.com'. It shows the host is in Maintenance Mode (not connected) and lists hardware information like CPU, Memory, and Storage usage. A message indicates 'No datastores have been configured on the host'. Below the host details, there's a section for 'Recent tasks'. The right side of the screen includes a 'CONSOLES' panel with a preview of the host's status and a 'MANUAL' panel with a table of contents.

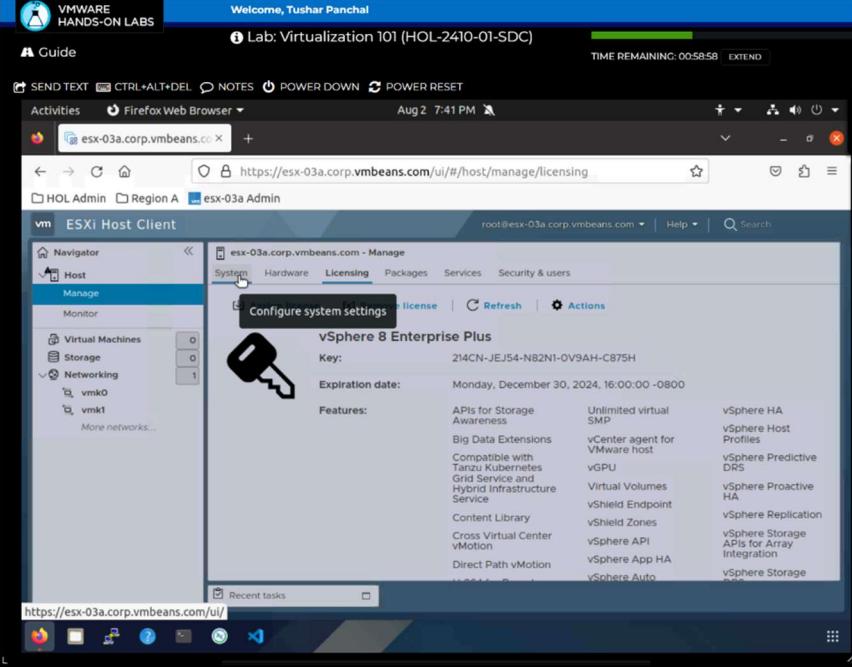
**1. Click on Manage**

The ESXi Host, in this case, **esx-03a**, can now be directly managed. This can be useful in test/dev environments where a vCenter Server is not present or in a production environment where the vCenter Server is not reachable.

The initial screen shows high-level details and recent tasks. There are also various power options for the host and an Actions menu for the most common tasks. Note that the server is currently in Maintenance Mode, which will be discussed in a future lesson.

➡ **Click on the System tab.**

➡ **You can find that the most common options set are the date and time for the host.**

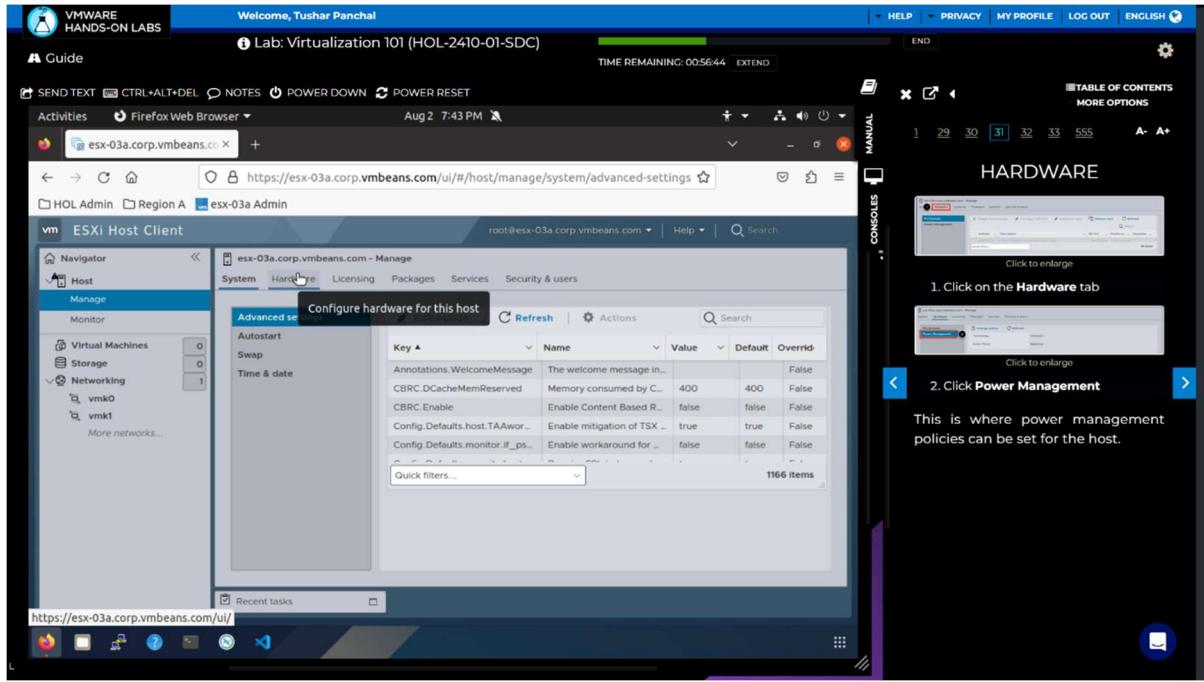


The screenshot shows the VMware Host Client interface. The left sidebar has 'Host' selected under 'Manage'. The top navigation bar has 'System' selected. The main pane displays the 'Configure system settings' page for 'vSphere 8 Enterprise Plus'. It shows the host key, expiration date (Monday, December 30, 2024), and various features like APIs for Storage Awareness, Big Data Extensions, and more. To the right, a list of vSphere services and features is shown, such as vSphere HA, vSphere Host Profiles, vSphere Predictive DRS, etc. The right side of the screen includes a 'CONSOLES' panel with a preview of the host's status and a 'MANUAL' panel with a table of contents.

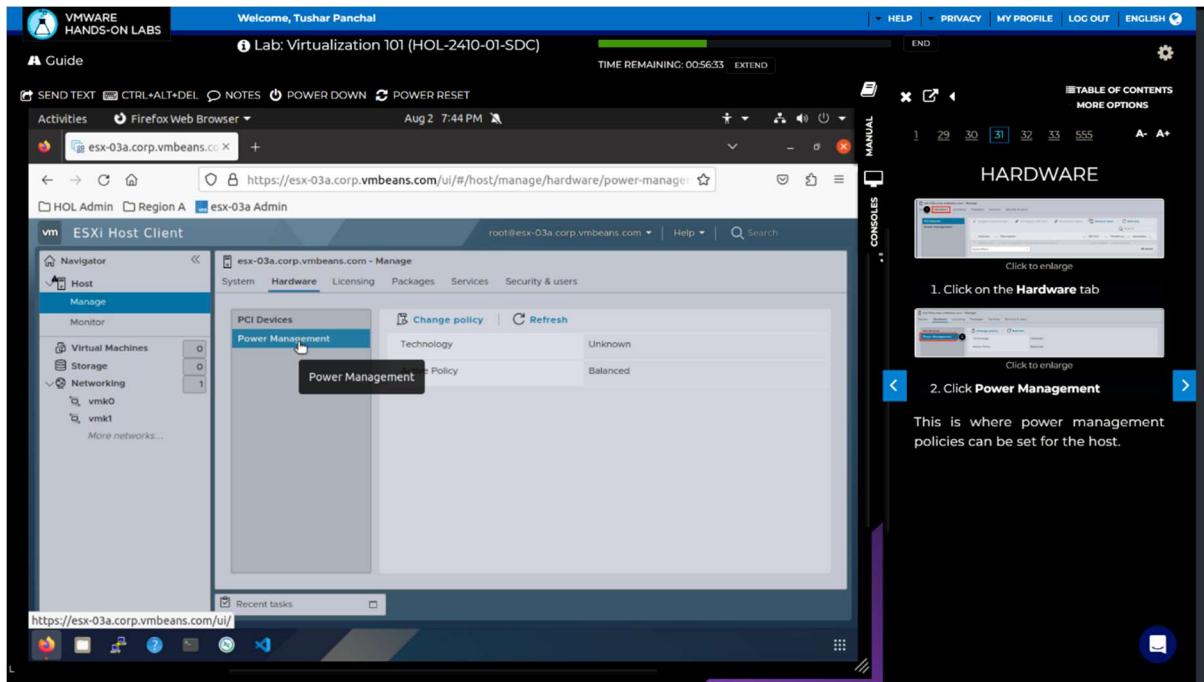
**1. Click on the System tab.**

You can find that the most common options set are the date and time for the host. It can be set and synchronized with an NTP server or set manually. In addition, Autostart settings for the host can be configured here as well.

➡ **Click on the Hardware tab**



➡ **Click Power Management**



➡ **Click the Services tab**

➡ **Services like SSH access and the Direct Console UI can be stopped and started from this screen.**

**SERVICES**

Configure services running on this host

Name	Description	Status	Source	Firewall rules
attestsd	attestsd	Stopped	Base system	None
DCUI	Direct Console UI	Running	Base system	None
dpd	dpd	Stopped	vmware-dp	None
entropyd	entropyd	Stopped	Base system	None
kmxid	kmxid	Stopped	Base system	None
ihsrl	Icard-Resolv Teamd	Running	Base system	None

Click to enlarge  
1. Click the **Services** tab  
Services like SSH access and the Direct Console UI can be stopped and started from this screen.

## → Click on Security & Users :

**SECURITY AND USERS**

Configure security settings and user permissions for this host

Acceptance level

- Authentication
- Certificates
- Users
- Roles
- Lockdown mode

Acceptance level      Partner

Click to enlarge  
1. Click on **Security & users**  
On the Security & Users tab, security options such as authentication to Active Directory and Certificates can be set here. There is also the ability to create additional roles and user accounts for the host itself. This option uses accounts that are local only to the host and not shared with any other hosts or vCenter Server. vCenter Server is set up to use single sign-on which makes account management much easier. This will be reviewed in the lessons that follow.

## ➡ Click on Monitors

The Monitor section includes Performance Charts, Hardware monitoring, an event log and other useful monitoring information.

1. Click on Monitor

1 Click the Logs tab

## ➡ Click the logs tab

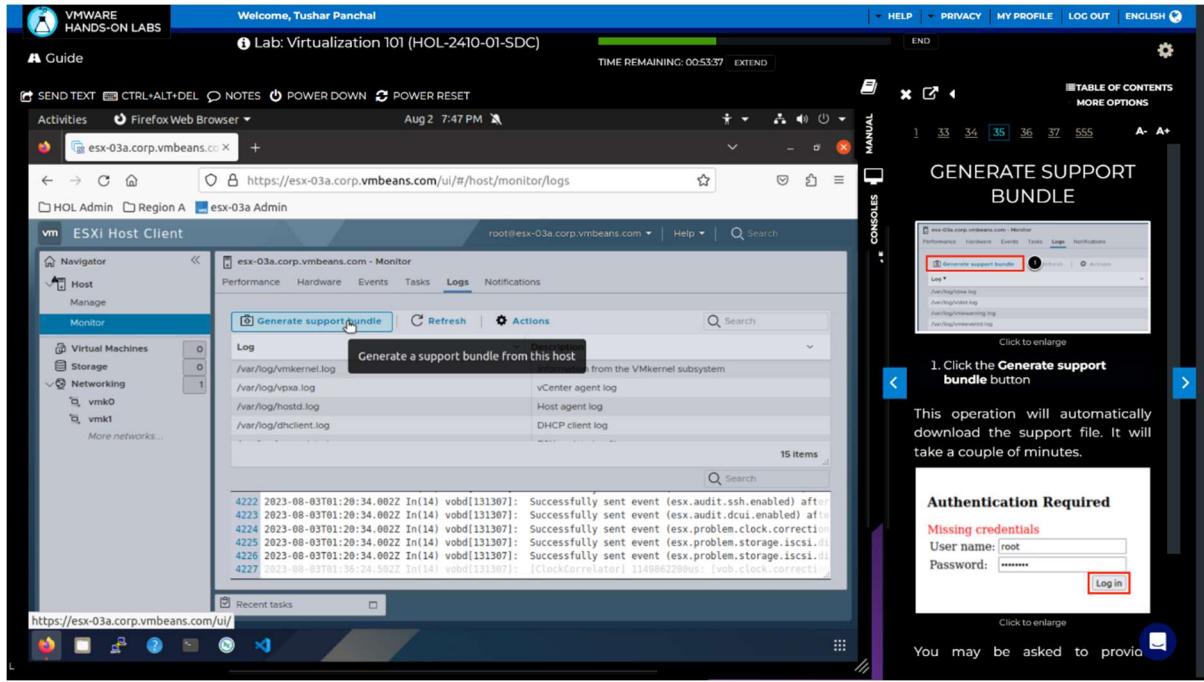
The Monitor section includes Performance Charts, Hardware monitoring, an event log and other useful monitoring information.

1. Click on Monitor

1 Click the Logs tab

On the Logs tab, a support bundle can be created that includes log files and system information that can be helpful in troubleshooting issues.

➡ **Click the generate support bundle**

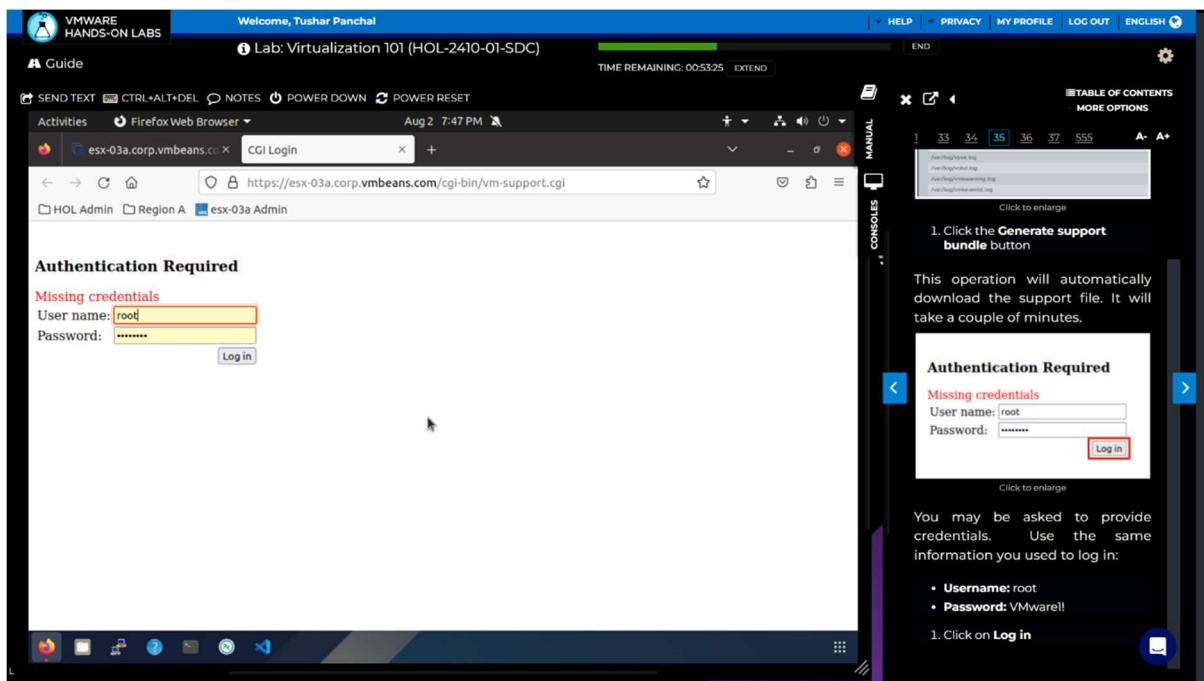


➡ **You may be asked to provide credentials. Use the same information you used to log in:**

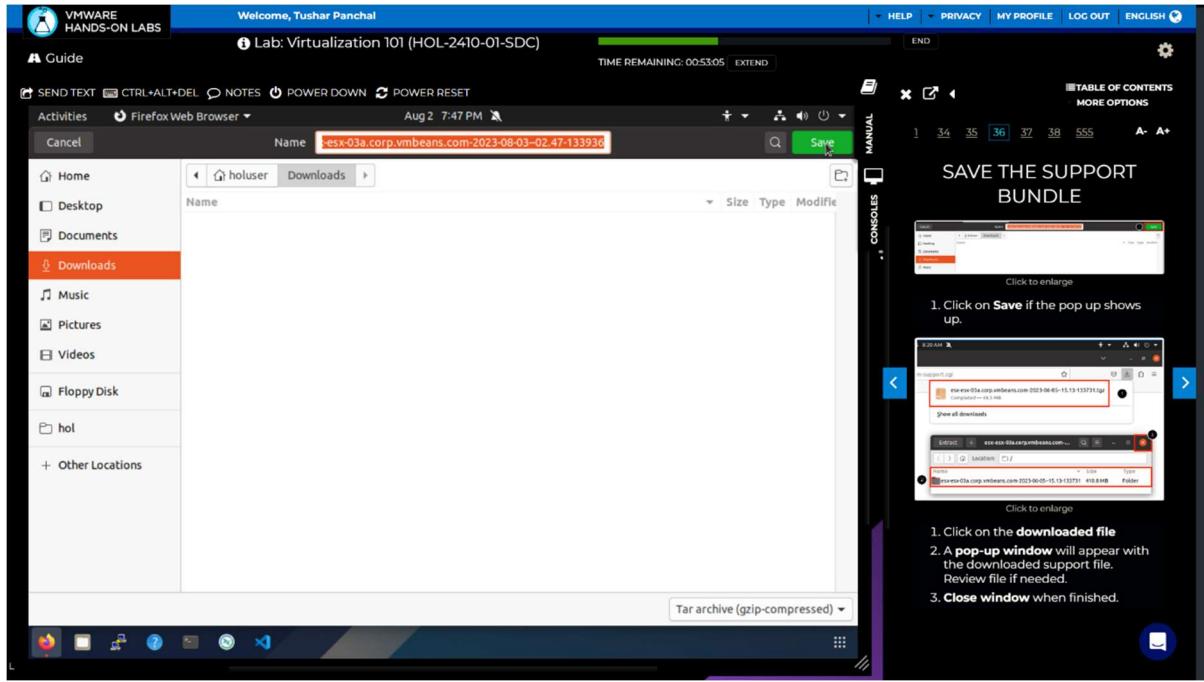
**Username: root**

**Password: VMware1!**

➡ **Click on Log in**



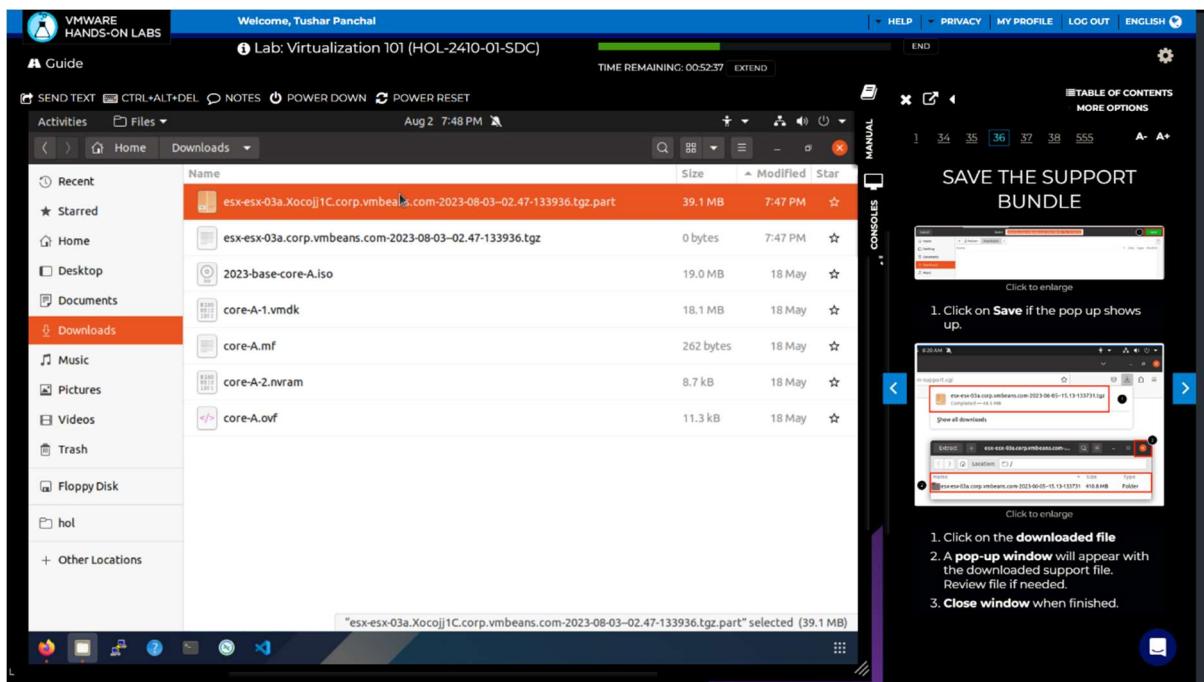
→ **Click on Save if the pop up shows up.**



→ **Click on the downloaded file**

→ **A pop-up window will appear with the downloaded support file. Review file if needed.**

→ **Close window when finished**



→ **In addition to managing and monitoring the host, Virtual Machines can be created, Storage and Networking can be configured at the host level.**

VMWARE HANDS-ON LABS

Welcome, Tushar Panchal

Lab: Virtualization 101 (HOL-2410-01-SDC)

TIME REMAINING: 00:01:59 EXTEND

Guide

SEND TEXT CTRL+ALT+DEL NOTES POWER DOWN POWER RESET

Activities Firefox Web Browser Aug 2 7:48 PM

esx-03a.corp.vmbeans.com X CGI Login

HOL Admin Region A esx-03a Admin

vm ESXi Host Client

Virtual Machines 0

Storage 0

Networking 1

vmk0

vmk1

No virtual machines

Quick filters...

VMS, STORAGE AND NETWORKING

Navigator Host Manage Monitor

Virtual Machines 0

Storage 0

Networking 1

vmk0

vmk1

1

1. In addition to managing and monitoring the host, **Virtual Machines** can be created, **Storage and Networking** can be configured at the host level.

Since these features will be covered throughout the lab and the actions performed are identical, just at the vCenter Server level, we will not be reviewing them here.

→ **VCENTER 8 Overview**

INTRODUCING

VMware vSphere 8

The Enterprise Workload Platform

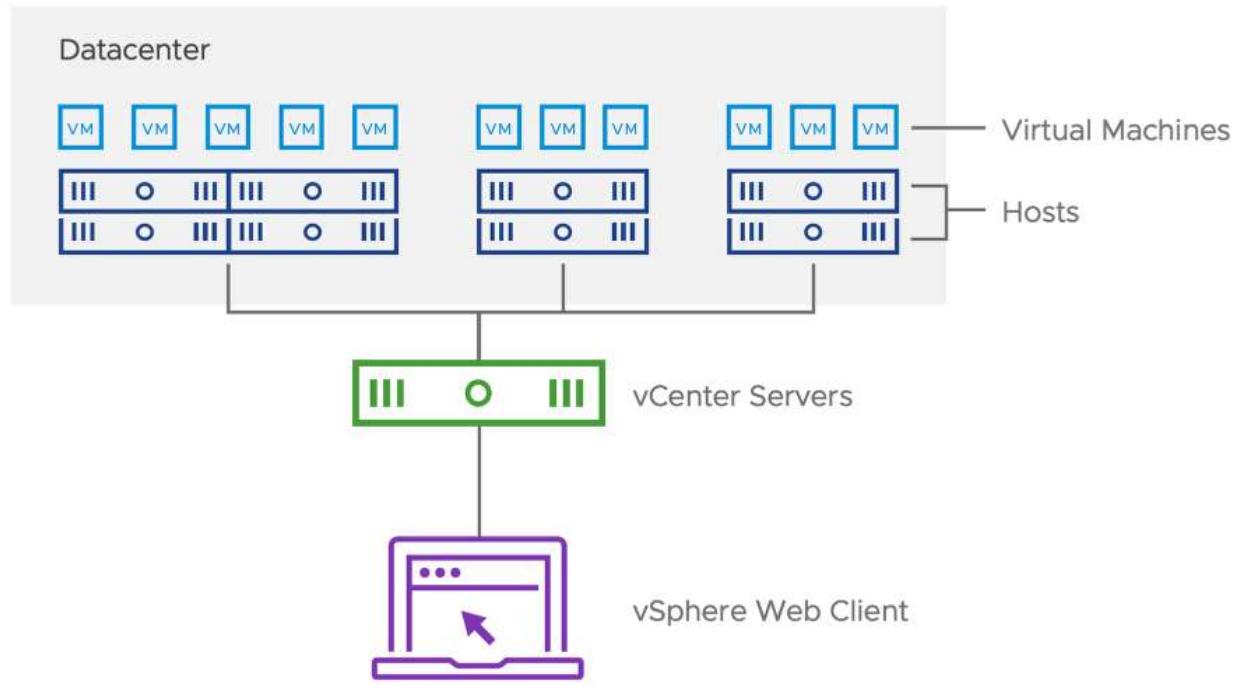
Get Cloud Benefits On-Premises  
Enhance existing on-premises workloads in place with cloud services

Supercharge Workload Performance  
Meet the throughput and latency needs of modern distributed workloads

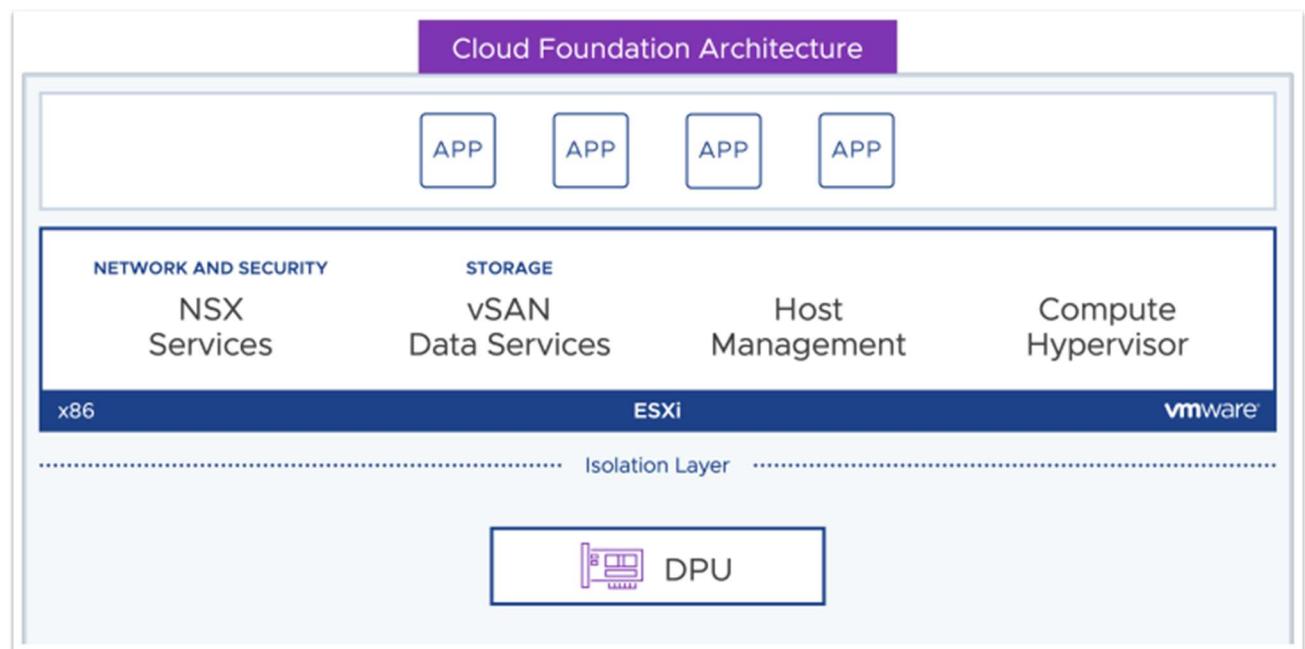
Enhance Operational Efficiency  
Efficiently reduce IT maintenance windows

Accelerate Innovation for DevOps  
Easily discover, access and deploy developer services

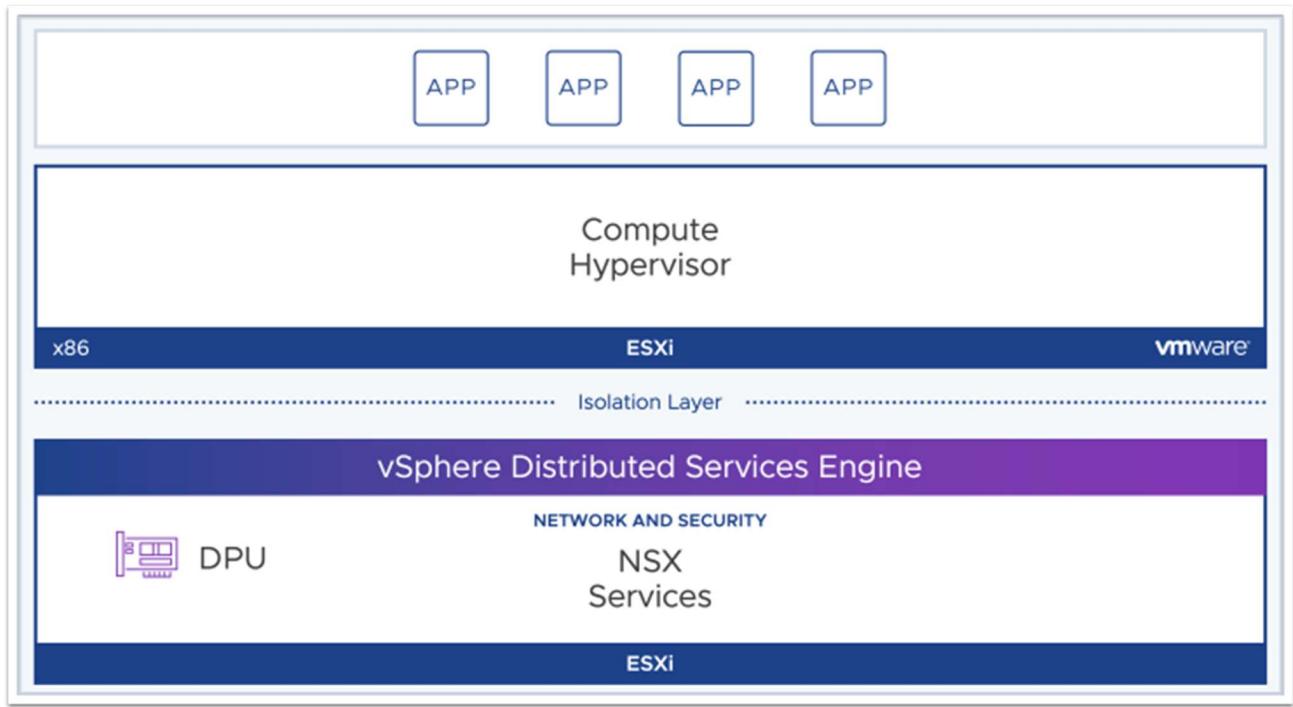
## → **VSPHERE COMPONENTS**



## → **Data Processing Units**



## ➡ **VSPHERE Distributed Services Engine**



### » **Observation :**

Overall, the practical lab focuses on the installation and initial configuration of an ESXi host, including setting up the management network, customizing system settings, accessing the management interface, and exploring basic management and monitoring options. It also briefly touches on the importance of managing virtual machines, storage, and networking, and introduces some components of vSphere.