

CompTIA Server+

Server Operating Systems Installation Methods

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 - **Review**
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Introduction

Server+

Install Windows Server 2022

Configure Windows Server 2022

Computer Name

Welcome to the **Server Operating Systems Installation Methods** Practice Lab. In this module, you will be provided with the instructions and devices needed to develop your hands-on skills.

Learning Outcomes

In this module, you will complete the following exercises:

- Exercise 1 - Perform a Local Installation of Windows Server 2022

After completing this module, you should be able to:

- Prepare a Windows Virtual Machine
- Install the Windows Server 2022 Operating System
- Configure Windows Server 2022

Exam Objectives

The following exam objectives are covered in this module:

2.1 Given a scenario, install server operating systems

- Installations

Lab Duration

It will take approximately **1 hour** to complete this lab.

Help and Support

For more information on using Practice Labs, please see our **Help and Support** page. You can also raise a technical support ticket from this page.

Click **Next** to view the Lab topology used in this module.

Lab Topology

During your session, you will have access to the following lab configuration.

Depending on the exercises, you may or may not use all of the devices, but they are shown here in the layout to get an overall understanding of the topology of the lab.

- **PLABDC01** - (Windows Server 2019 - Domain Controller)
- **PLABDM01** - (Windows Server 2022 - Domain Member Server)
- **PLABWIN10** - (Windows 10 - Domain Member Workstation)
- **PLABALMA** - (Alma Linux 8.7 - Stand-alone Linux Workstation)
- **PLABUBUNTU** - (Linux Ubuntu - Stand-alone Linux Server)

Click **Next** to proceed to the first exercise.

Exercise 1 - Perform a Local Installation of Windows Server 2022

In this exercise, you will perform a local installation of the Windows Server 2022 operating system. You will also prepare a Windows virtual machine in Hyper-V to perform the local

installation. Finally, the learner will perform post-installation configurations on Windows Server 2022.

Learning Outcomes

After completing this exercise, you should be able to:

- Prepare a Windows Virtual Machine
- Install the Windows Server 2022 Operating System
- Configure Windows Server 2022

Your Devices

You will be using the following devices in this lab. Please power these on now.

- **PLABDC01** - (Windows Server 2019 - Domain Controller)
- **PLABDM01** - (Windows Server 2022 - Domain Member Server)
- **PLABWIN10** - (Windows 10 - Domain Member Workstation)

Task 1 - Preparing a Windows Virtual Machine

In this task, you will prepare a virtual machine to install Windows Server 2022.

Step 1

Connect to **PLABWIN10**.

Click the **Start** charm and type the following:

Hyper-V

Select **Hyper-V Manager** from the **Best match** pop-up menu.

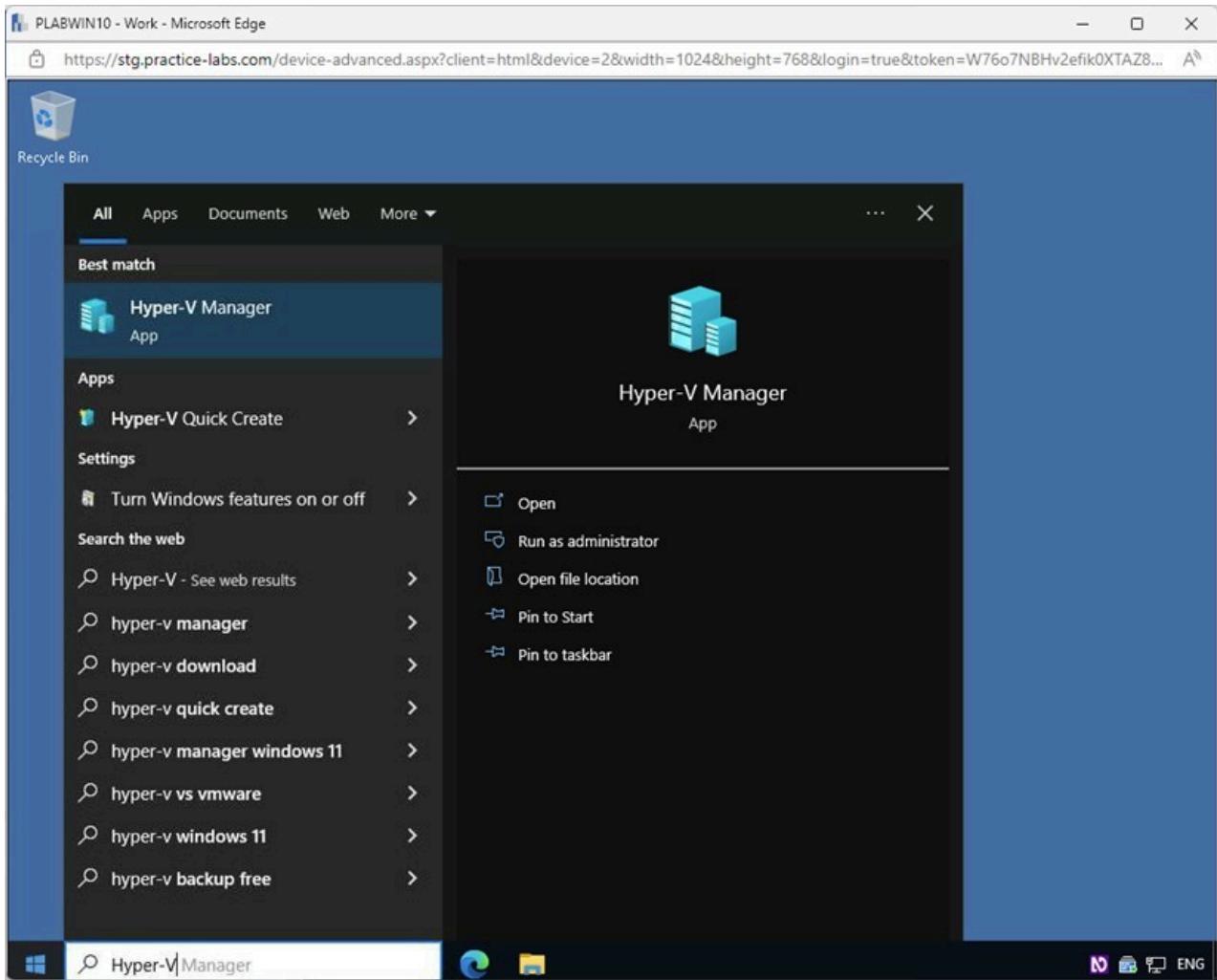


Figure 1.1 Screenshot of PLABWIN10: Displaying selecting Hyper-V Manager from the Best match pop-up menu.

Step 2

In the **Hyper-V Manager** window, select and right click on **PLABVM01** from the **Virtual Machines** pane. Select **Settings**.

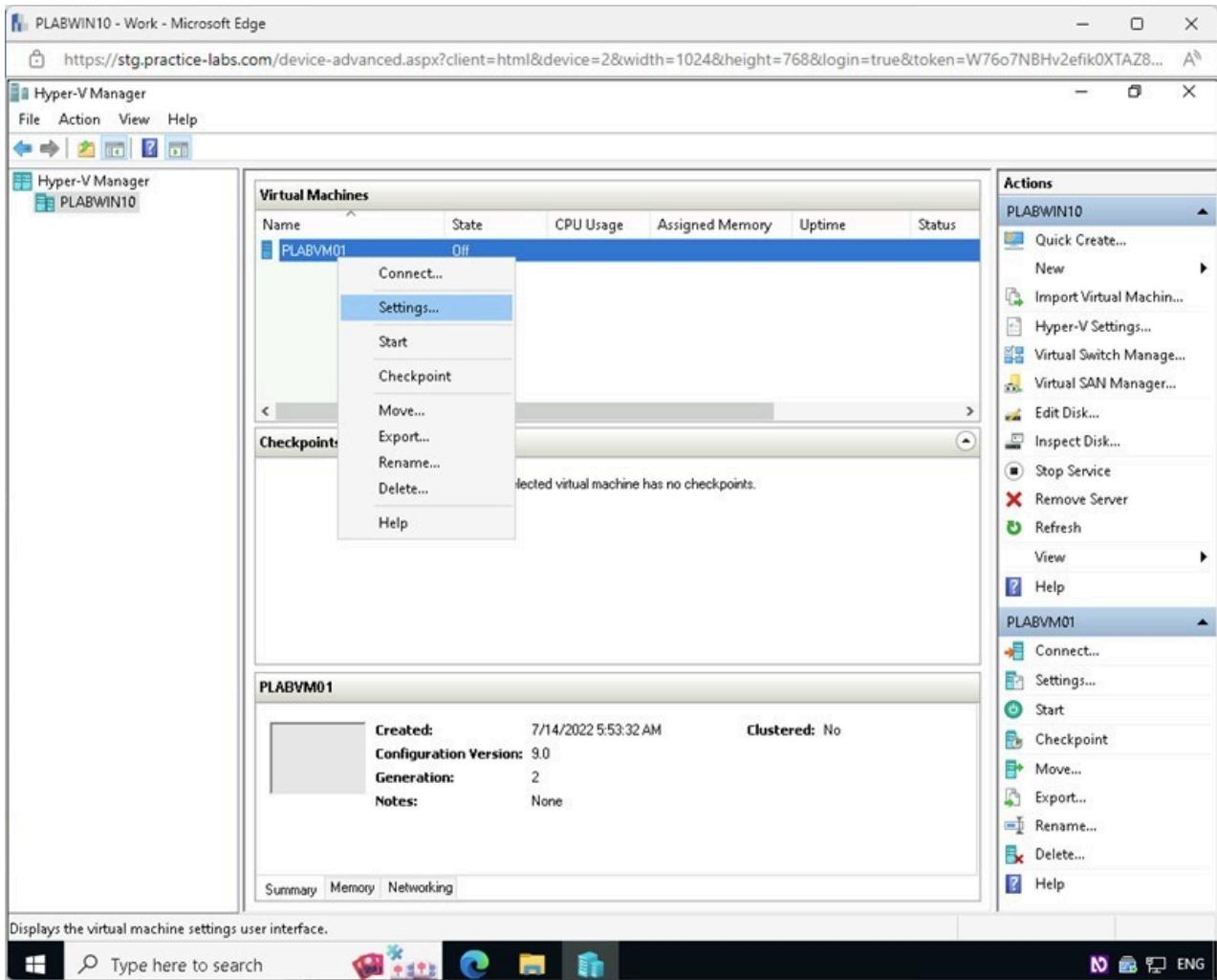


Figure 1.2 Screenshot of PLABWIN10: Displaying the Hyper-V Manager window. PLABVM01 is right-clicked and Settings selected from the context menu.

Step 3

In the **Settings for PLABVM01 on PLABWIN10** window, select **SCSI Controller** under the **Hardware** section.

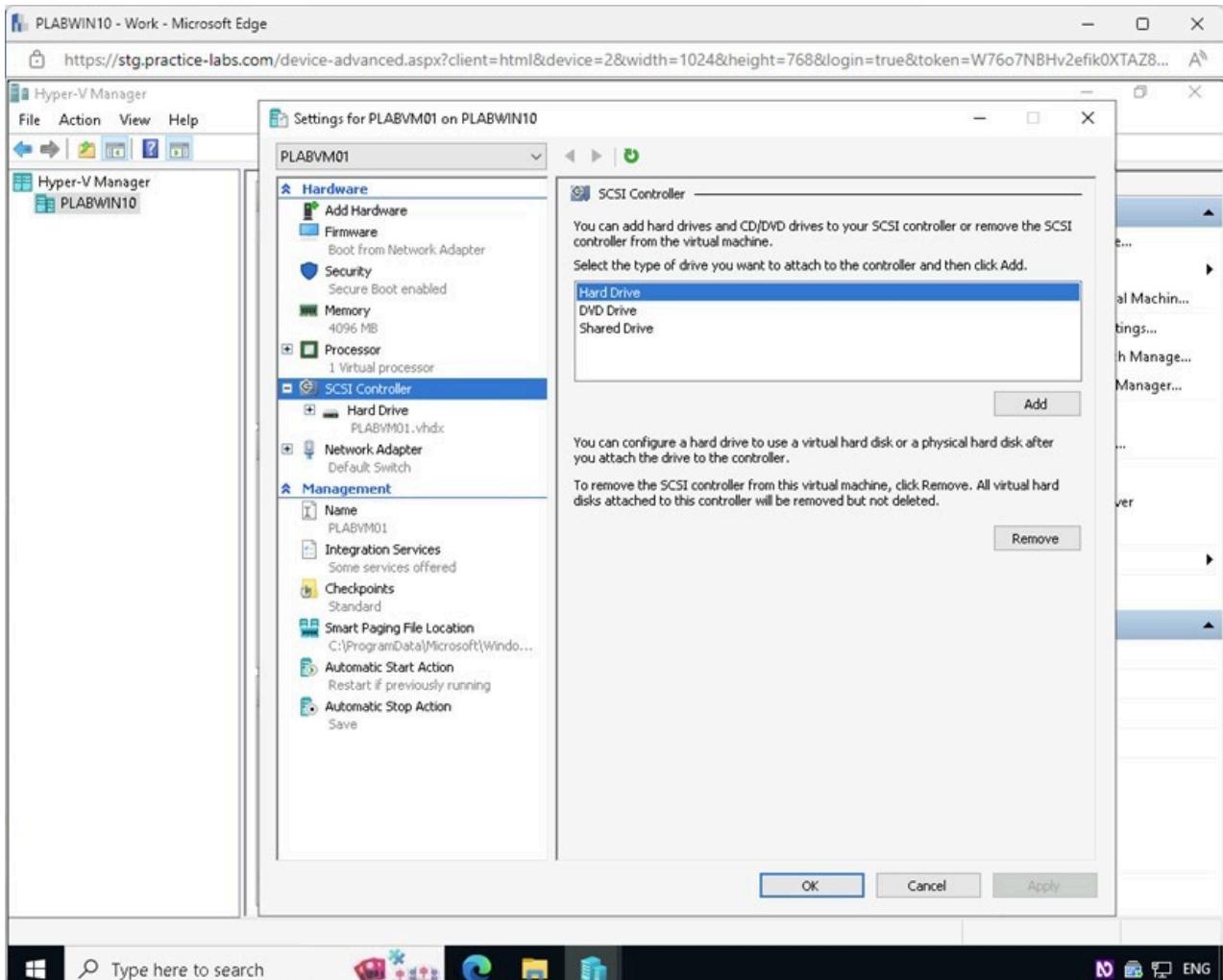


Figure 1.3 Screenshot of PLABWIN10: Displaying selecting SCSI Controller under the Hardware section in the Settings for PLABVM01 on PLABWIN10 window.

Step 4

In the **SCSI Controller** pane, select **DVD Drive** and click **Add**.

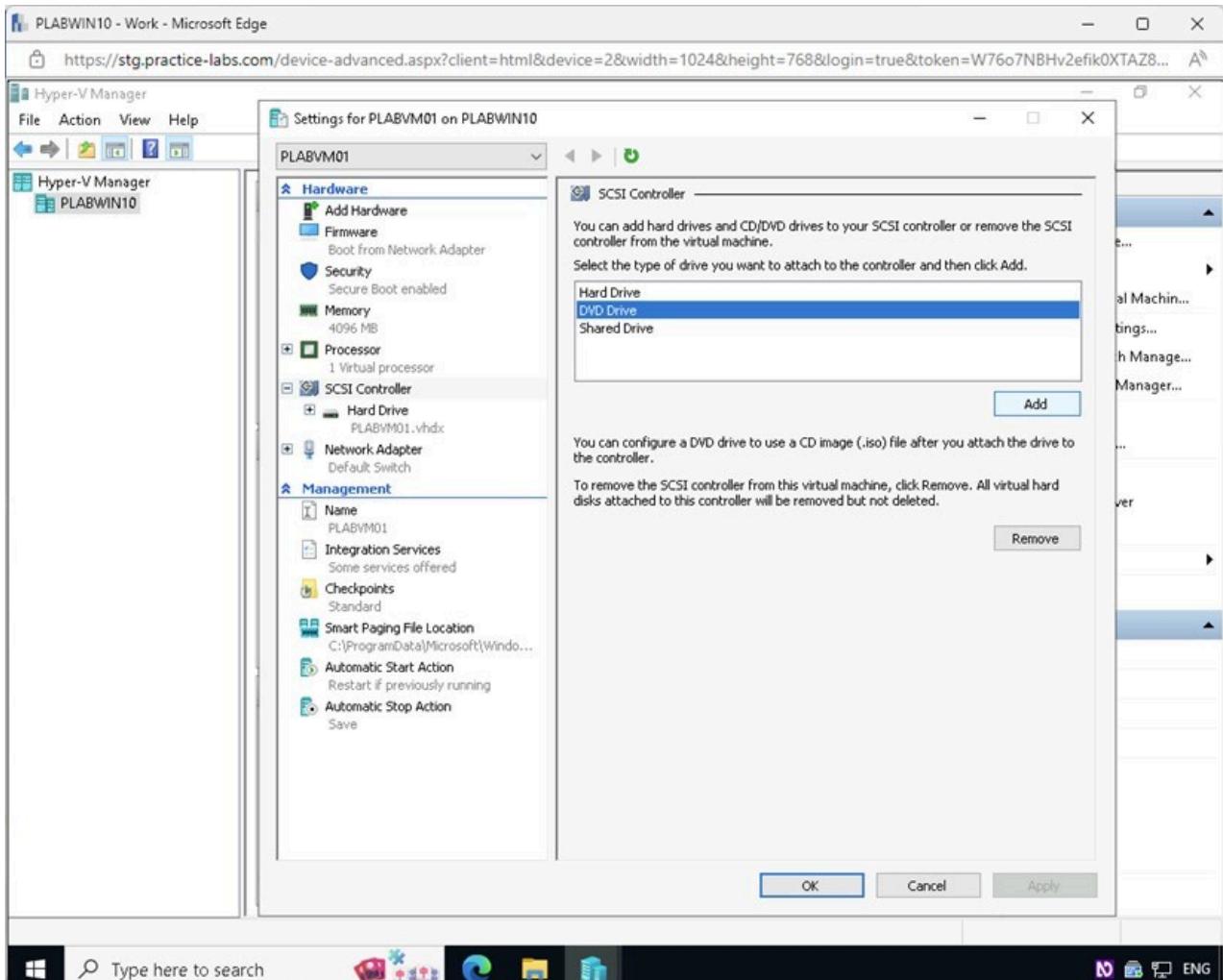


Figure 1.4 Screenshot of PLABWIN10: Displaying selecting DVD Drive in the SCSI Controller pane with the Add button highlighted.

Step 5

In the **DVD Drive** pane, select the **Image file** option.

Click **Browse**.

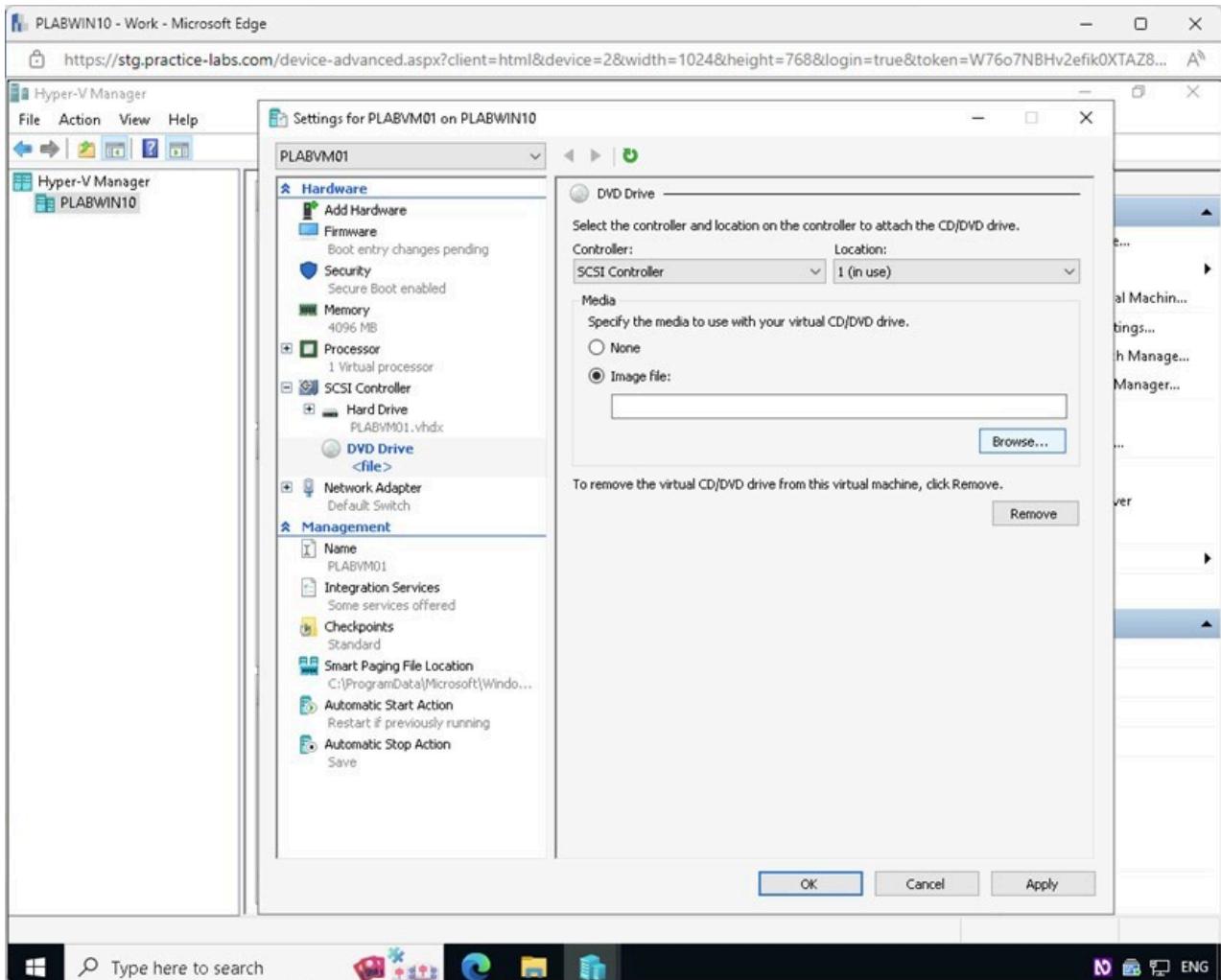


Figure 1.5 Screenshot of PLABWIN10: Displaying the DVD Drive pane with the Image file option selected and the Browse button highlighted.

Step 6

In the **Open** dialog box, type the following for the **File name** field:

```
\plabdm01\ISO
```

Click **Open**.

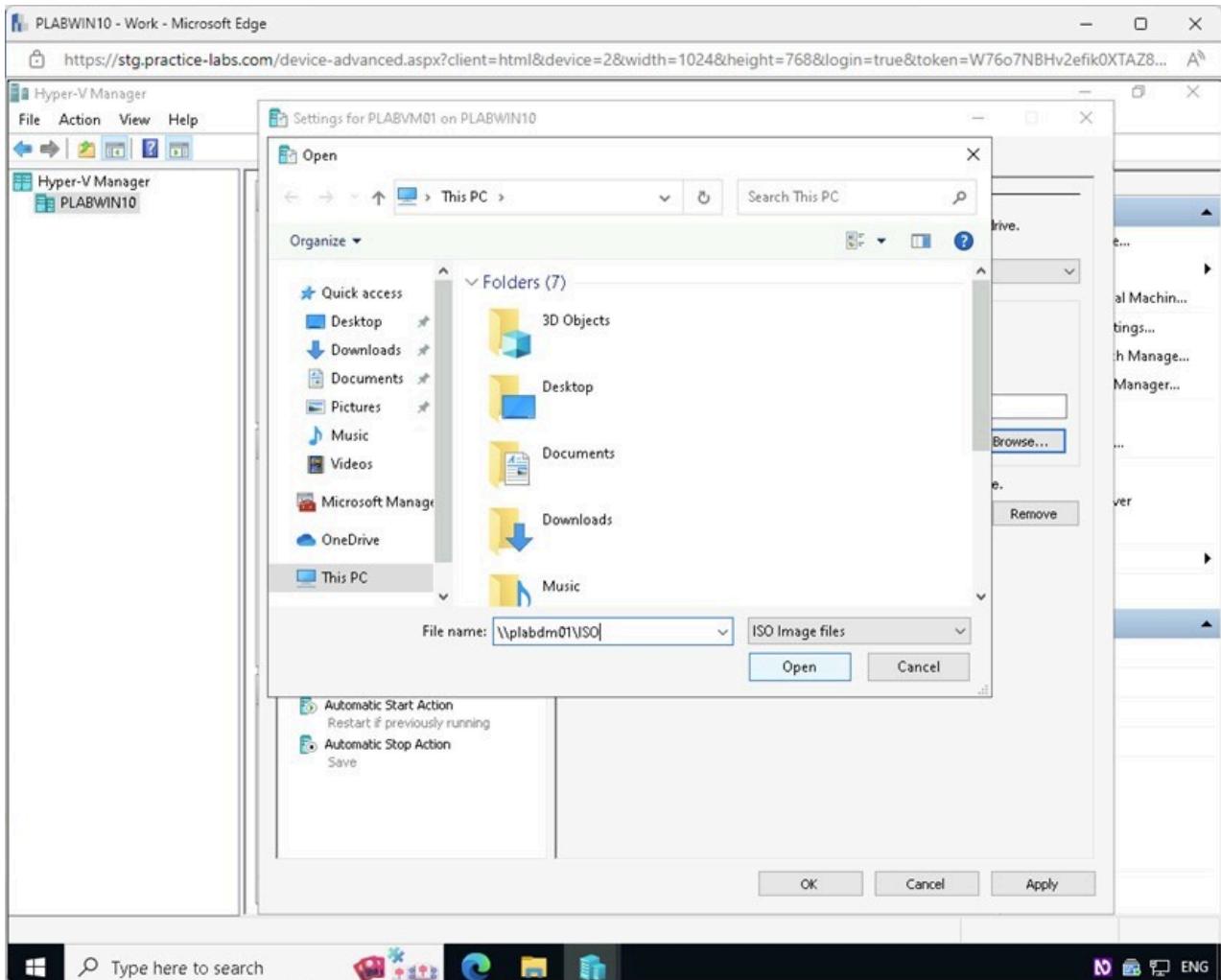


Figure 1.6 Screenshot of PLABWIN10: Displaying the Open dialog box, showing the required File name typed in and the Open button selected.

Step 7

In the **Open** dialog box, select the **en-us_windows_2022_x64_dvd_620d7eac.iso** file and click **Open**.

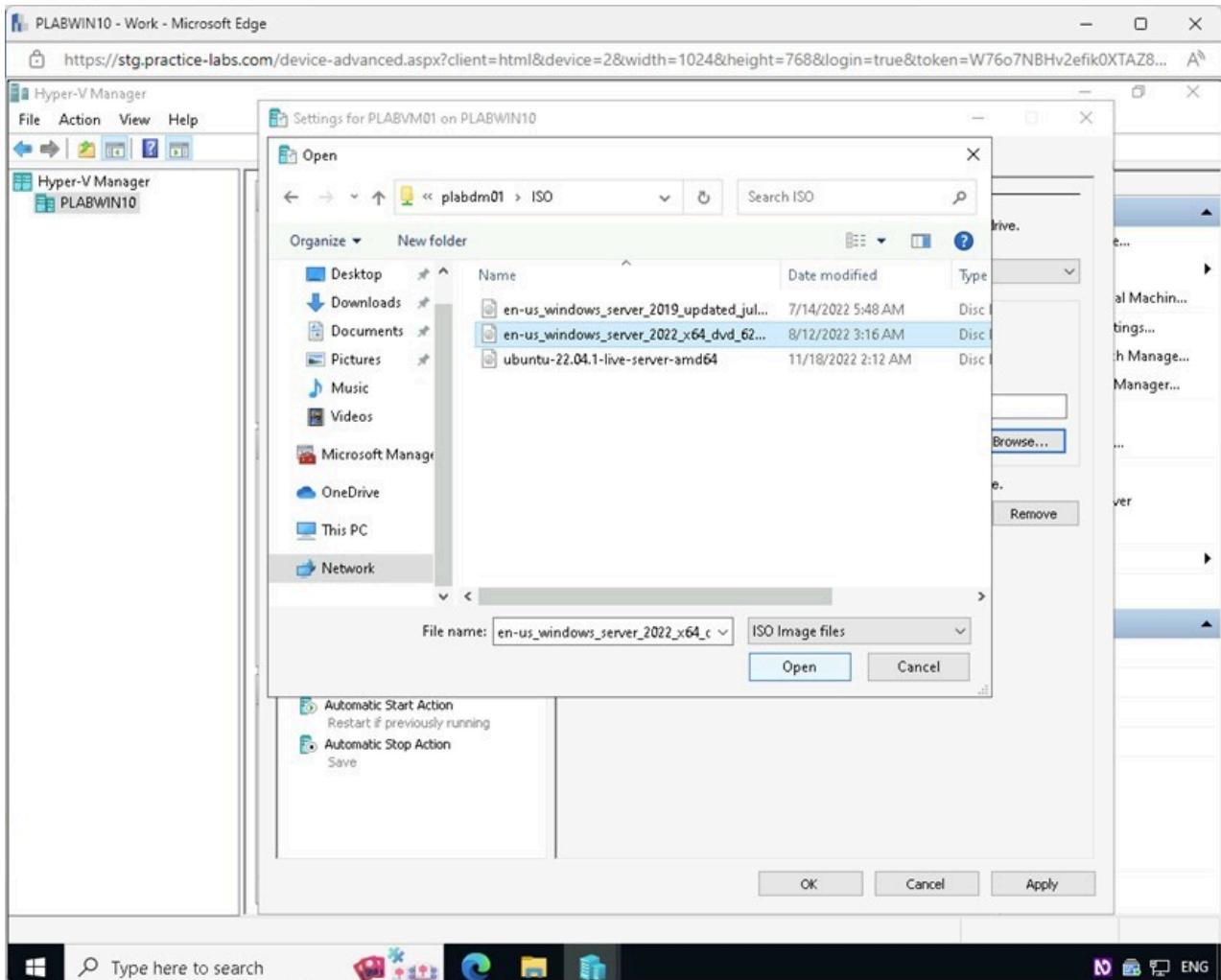


Figure 1.7 Screenshot of PLABWIN10: Displaying the Open dialog box, showing the required File selected and the Open button highlighted.

Step 8

Back on the **Settings for PLABVM01 on PLABWIN10** window, click **Apply**.

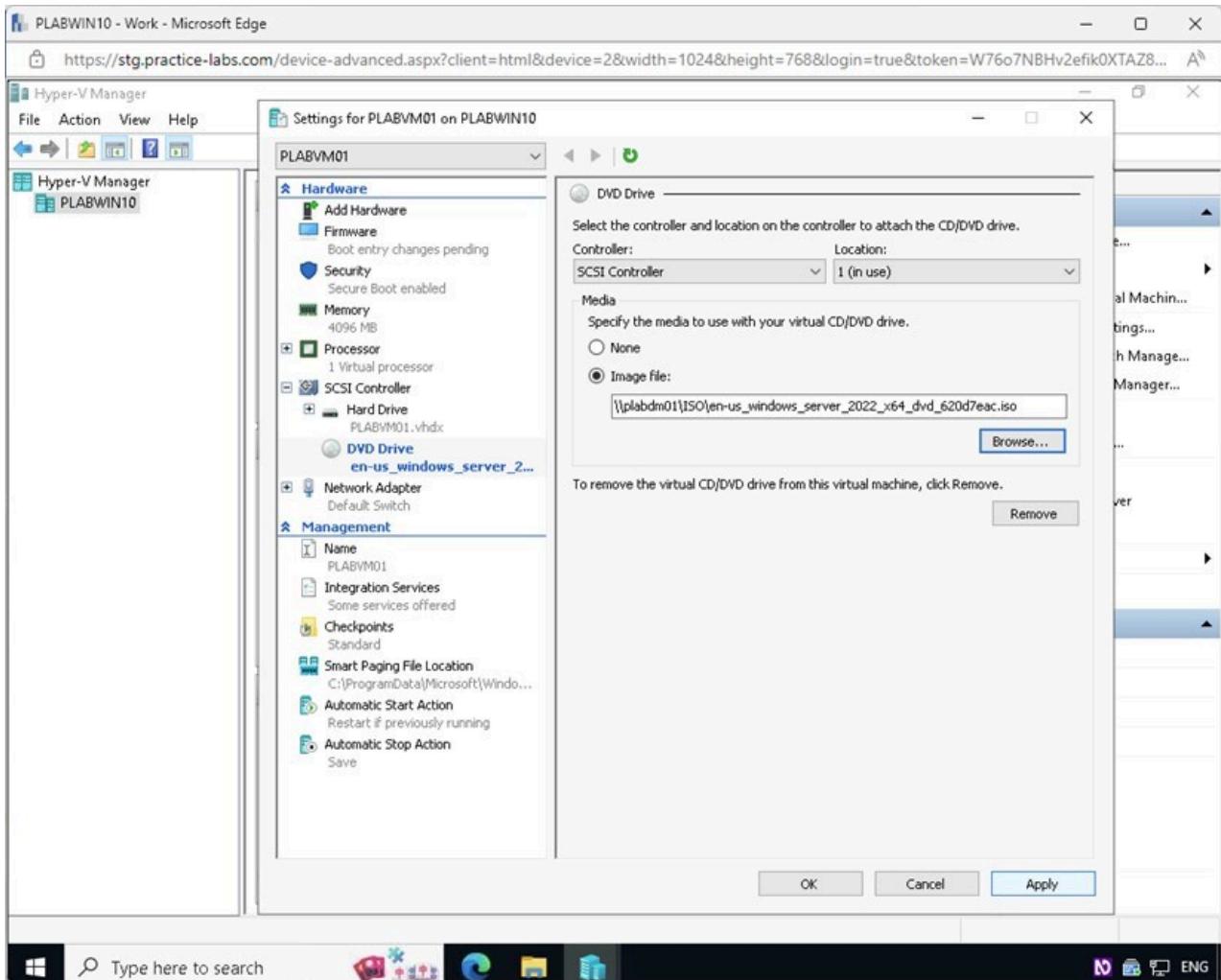


Figure 1.8 Screenshot of PLABWIN10: Displaying the Settings for PLABVM01 on PLABWIN10 window, showing the Apply button highlighted.

Step 9

In the **Settings for PLABVM01 on PLABWIN10** window, select **Firmware** from the **Hardware** section.

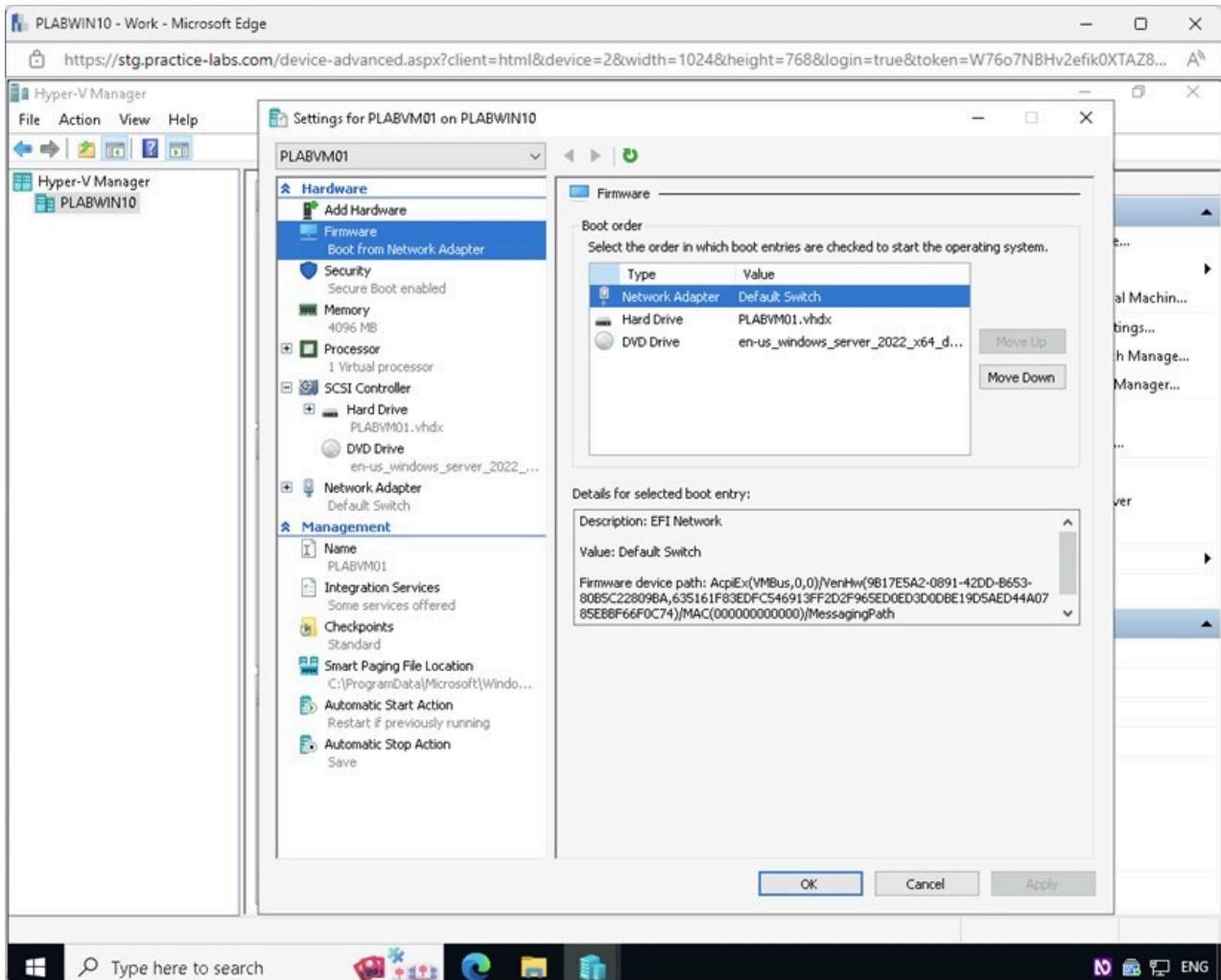


Figure 1.9 Screenshot of PLABWIN10: Displaying the Settings for PLABVM01 on PLABWIN10 window, showing Firmware from the Hardware section selected.

Step 10

In the **Firmware - Boot order** pane, select the **DVD Drive** and click the **Move Up** button twice until the **DVD Drive** is on top.

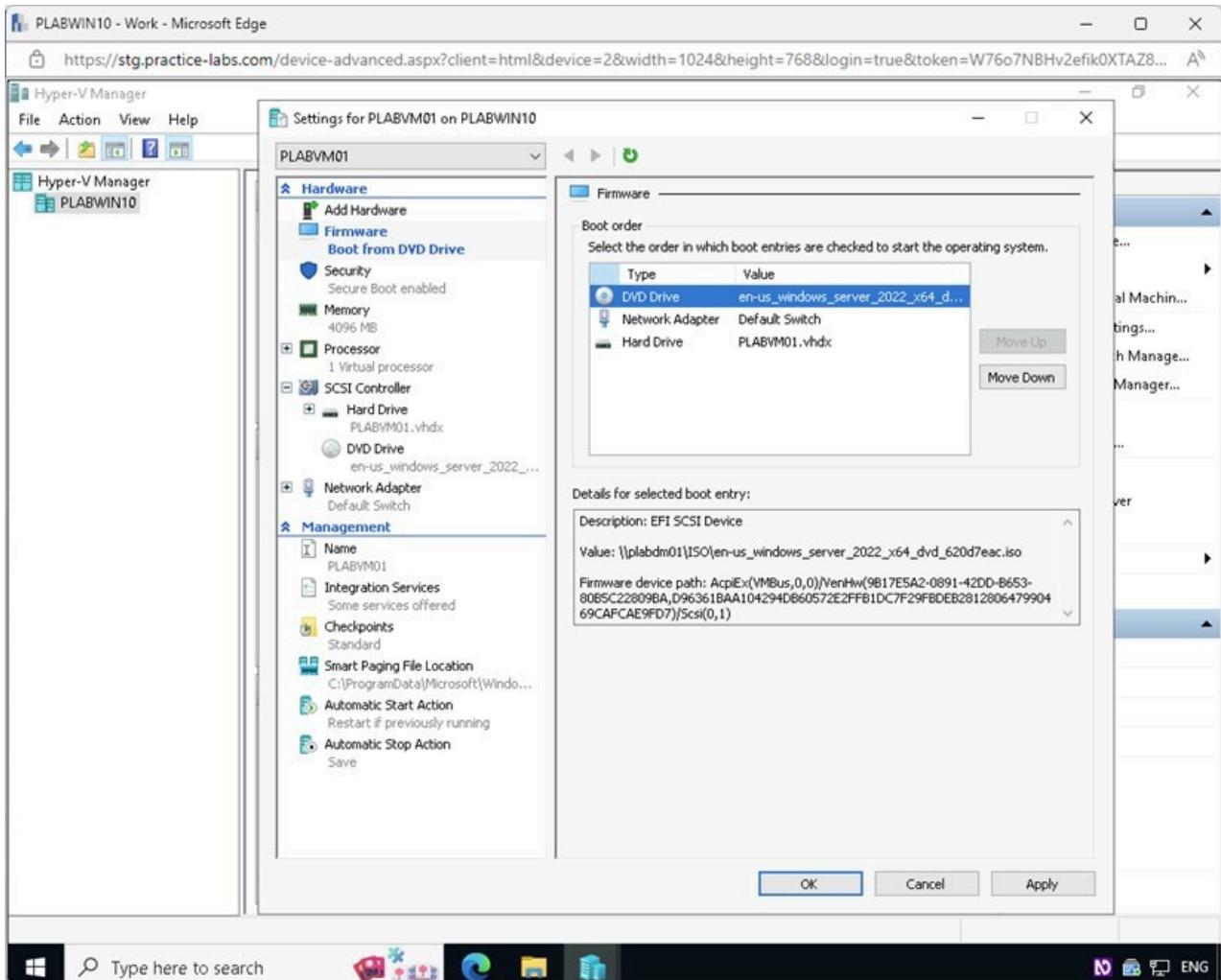


Figure 1.10 Screenshot of PLABWIN10: Displaying the Firmware - Boot order pane, showing the DVD Drive listed on top.

Step 11

In the **Settings for PLABVM01 on PLABWIN10** window, click **OK**.

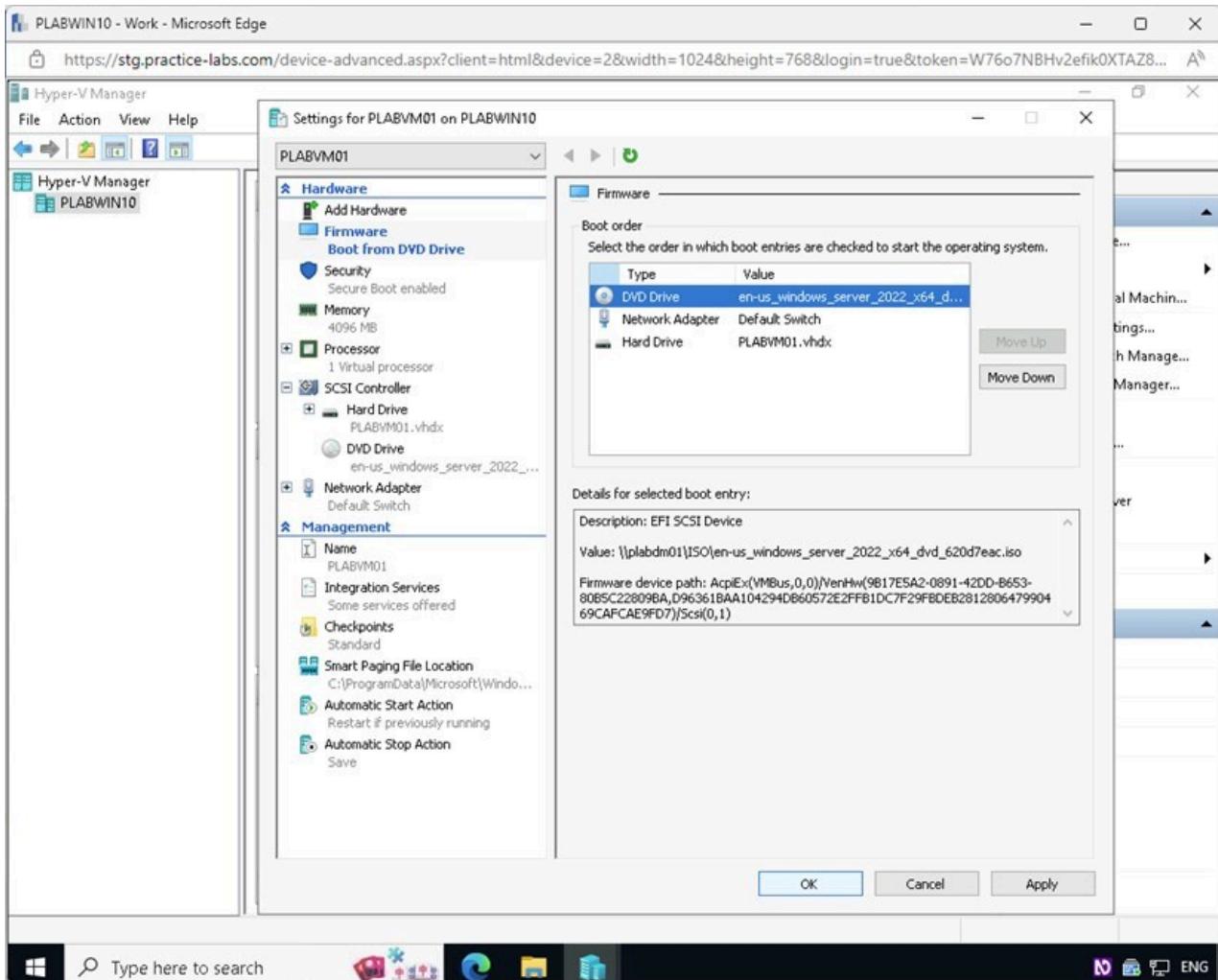


Figure 1.11 Screenshot of PLABWIN10: Displaying the Settings for PLABVM01 on PLABWIN10 window, showing the OK button selected.

Keep the **Hyper-V Manager** window open.

Task 2 - Install the Windows Server 2022 Operating System

In this task, you will install Windows Server 2022 on the virtual machine created in the previous task.

Step 1

Ensure you are connected to **PLABWIN10** and the **Hyper-V Manager** window is open.

In the **Hyper-V Manager** window, under the **Virtual Machines** tab, double-click on **PLABVM01**.

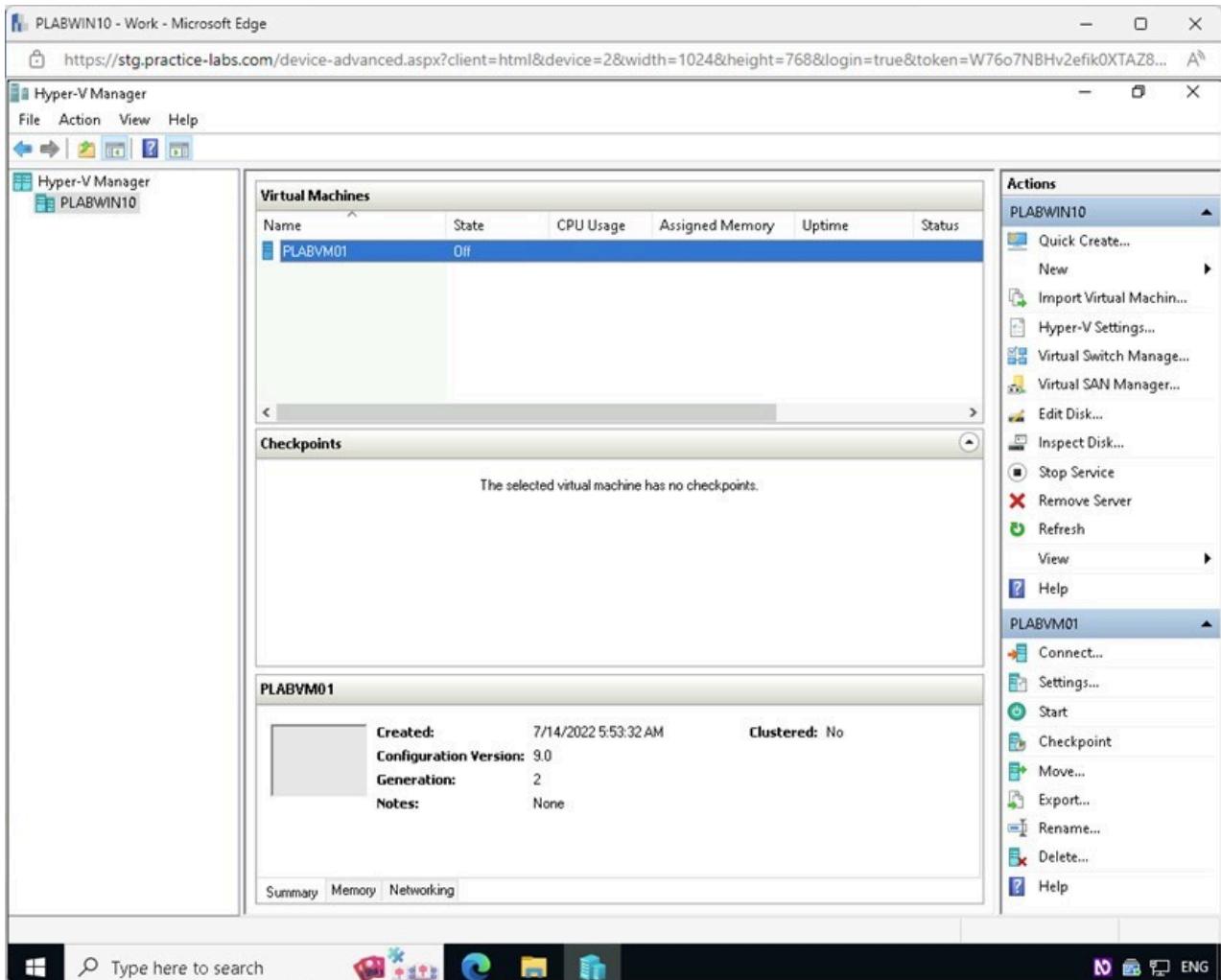


Figure 1.12 Screenshot of PLABWIN10: Displaying selecting PLABVM01 in the Hyper-V Manager window.

Step 2

In the **PLABVM01 on PLABWIN10 - Virtual Machine Connection** window, click **Start**.

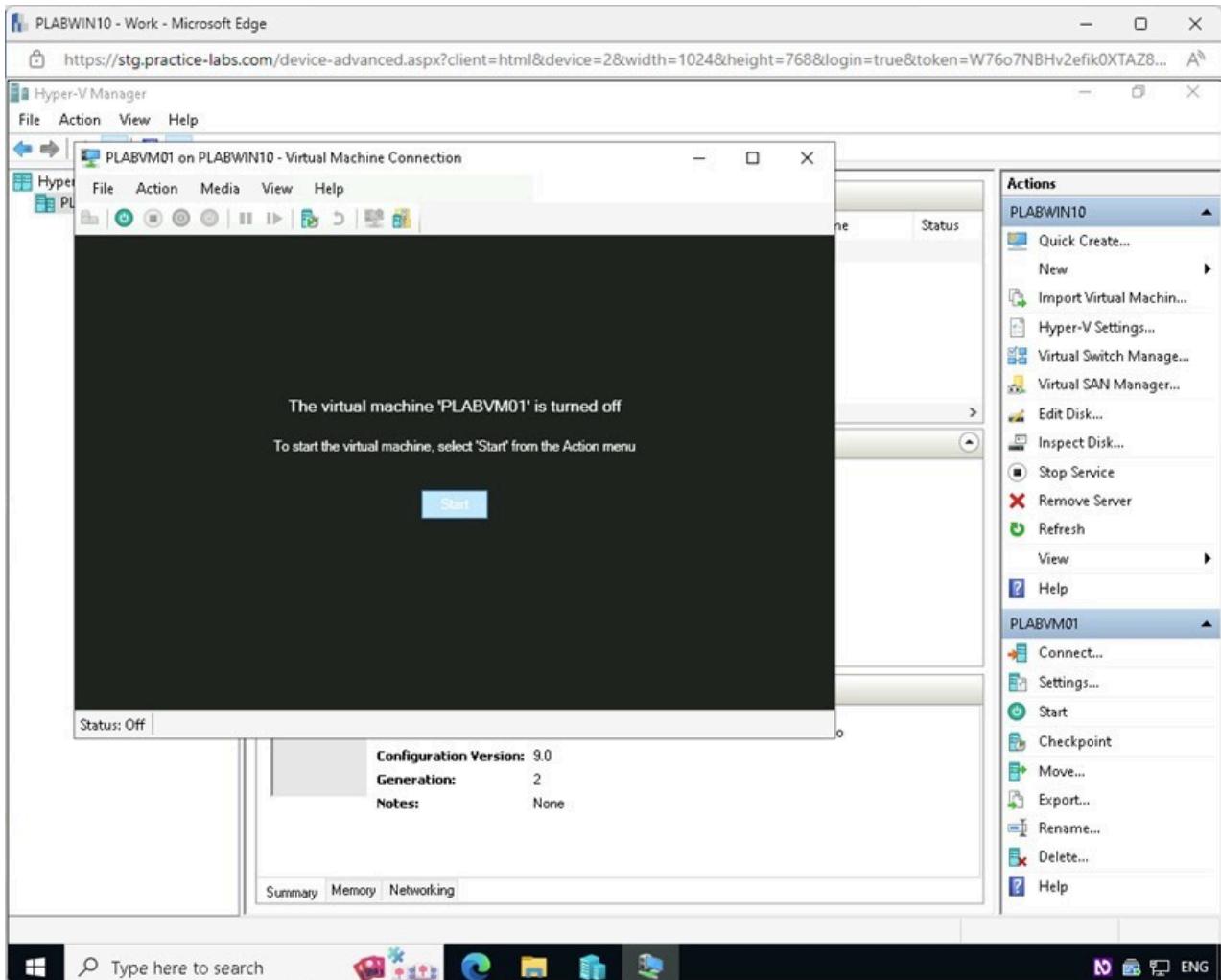


Figure 1.13 Screenshot of PLABWIN10: Displaying selecting Start in the PLABVM01 on PLABWIN10 - Virtual Machine Connection window.

Step 3

In the **Press any key to boot from CD or DVD** screen, press the **Spacebar** key on the keyboard to start the Windows installation process.

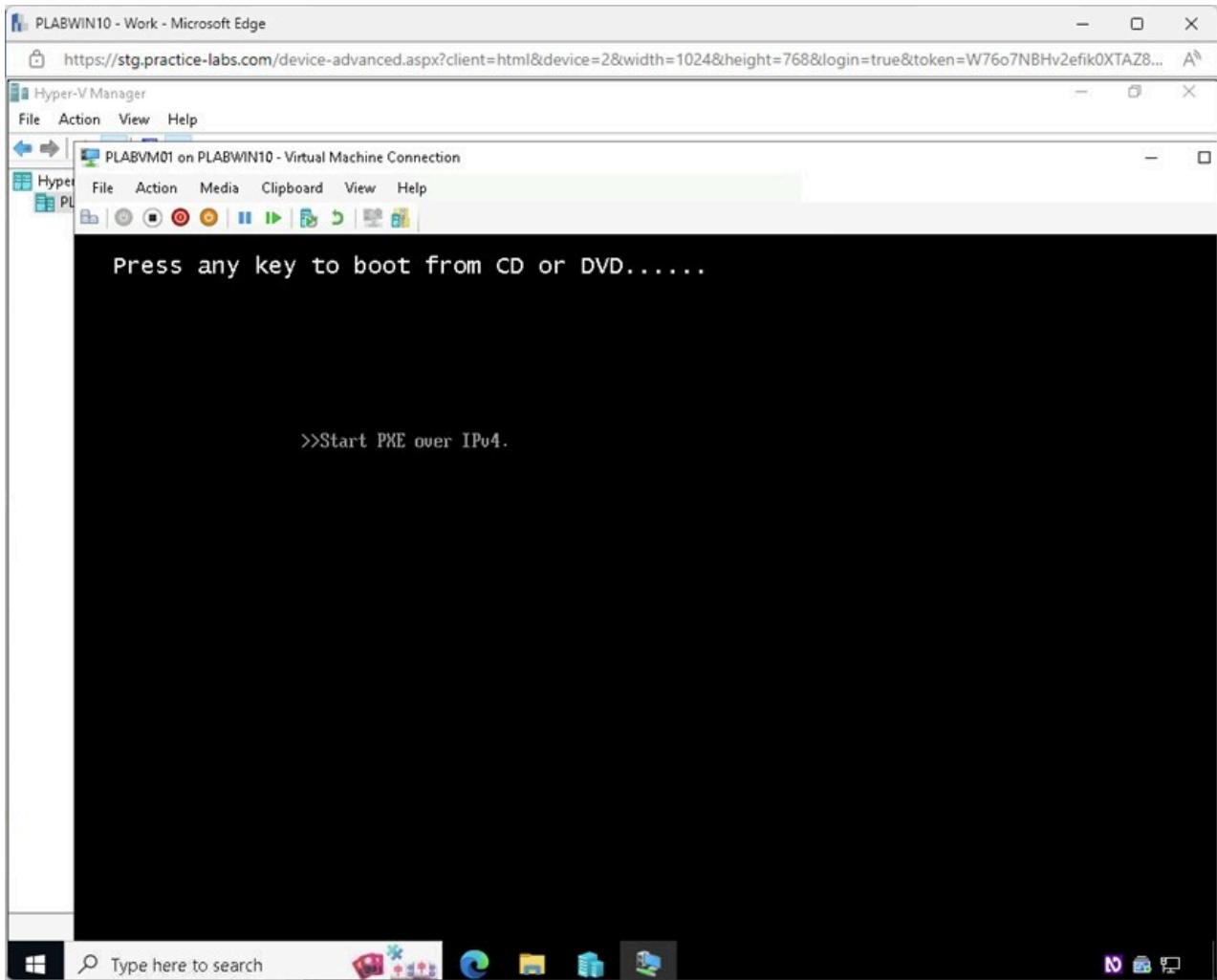


Figure 1.14 Screenshot of PLABWIN10: Displaying the Press any key to boot from CD or DVD screen.

Note: If you happen to miss pressing the spacebar or the installation process stops, select the **Ctrl+Alt+Del** icon in the **Actions** bar and perform Step 1 again to restart the Windows installation process.

Step 4

Examine the Windows installation process begin.

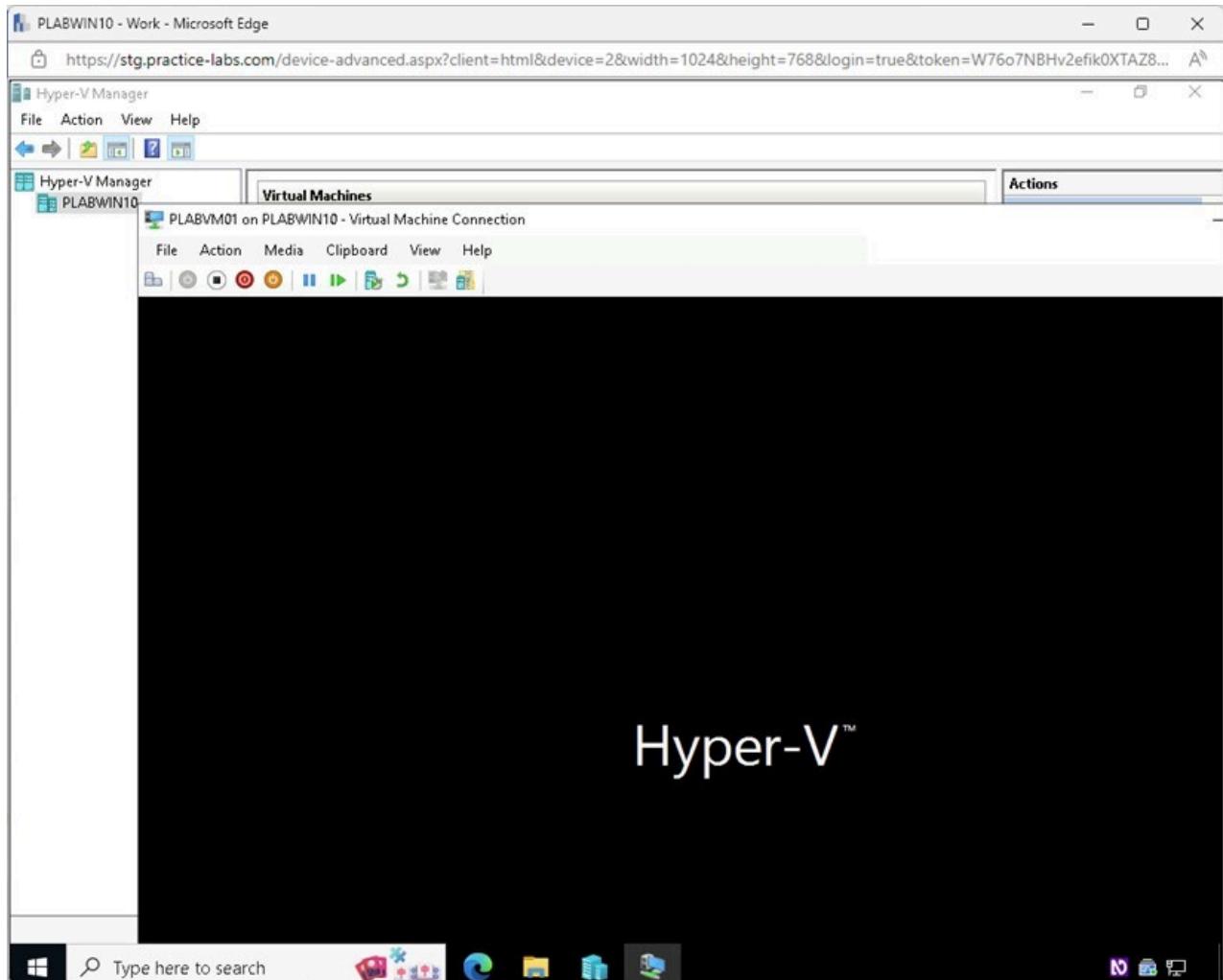


Figure 1.15 Screenshot of PLABWIN10: Displaying the Windows Setup screen.

Note: If the Windows installation process pauses on the Windows Setup screen, press Enter to start the Windows installation process.

Step 5

In the **PLABVM01 on PLABWIN10 - Virtual Machine Connection** window, click the **Maximize** icon.

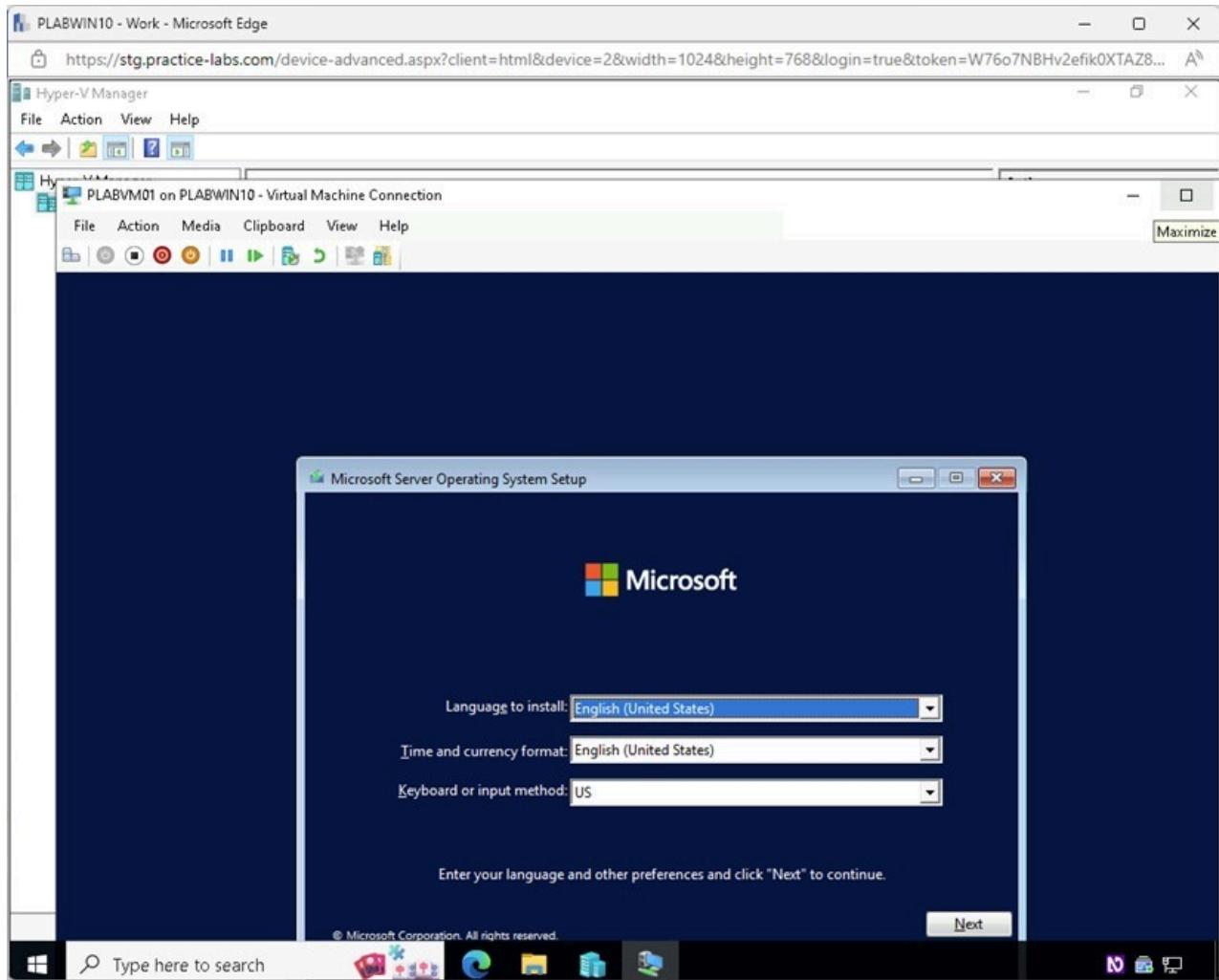


Figure 1.16 Screenshot of PLABWIN10: Displaying selecting the Maximize icon in the PLABVM01 on PLABWIN10 - Virtual Machine Connection window.

Step 6

In the **Microsoft Server Operating System Setup** page, review the Locale settings and click **Next**.

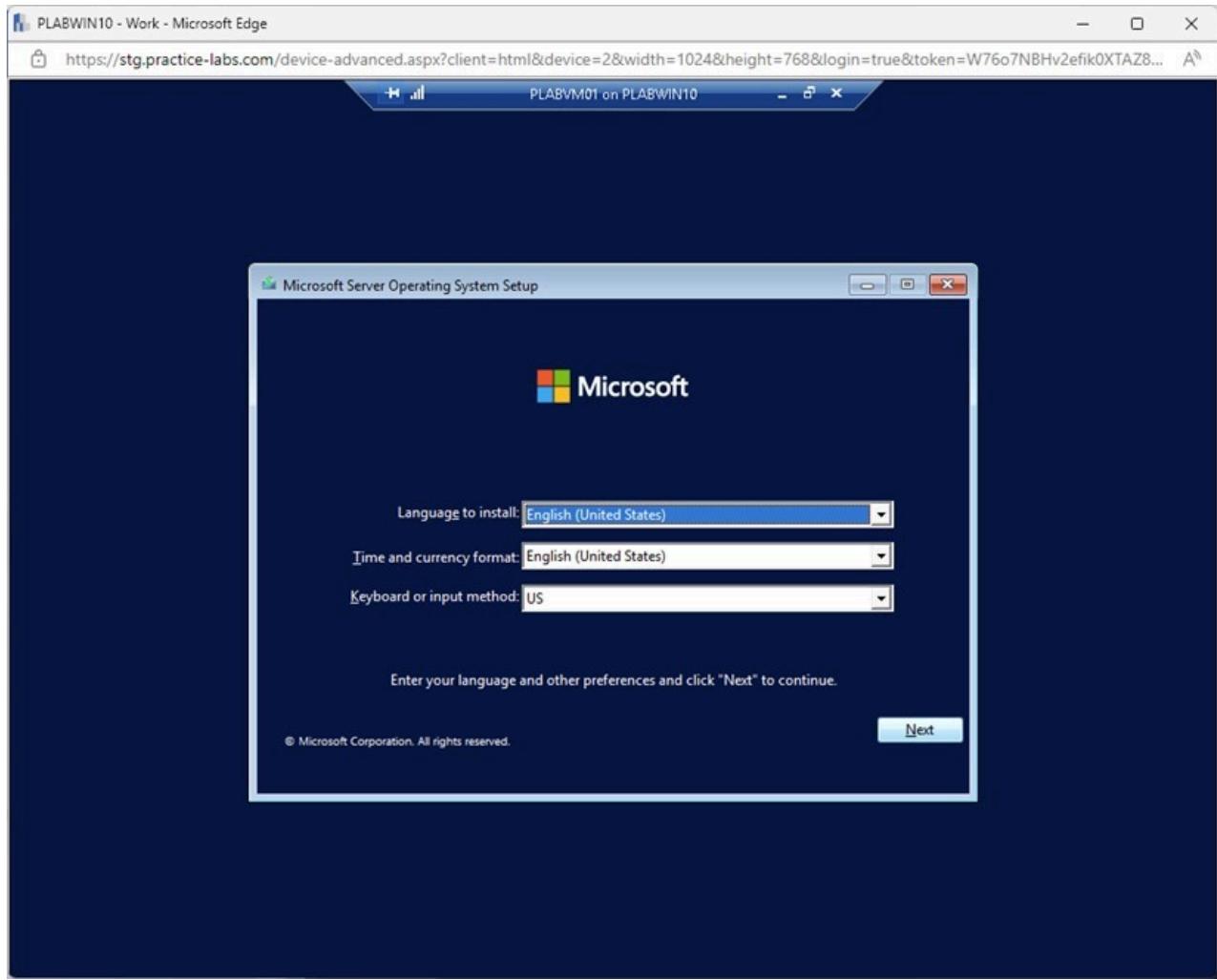


Figure 1.17 Screenshot of PLABWIN10: Displaying selecting Next in the Microsoft Server Operating System Setup page.

Step 7

On the **Microsoft Server Operating System Setup** page, click **Install now**.

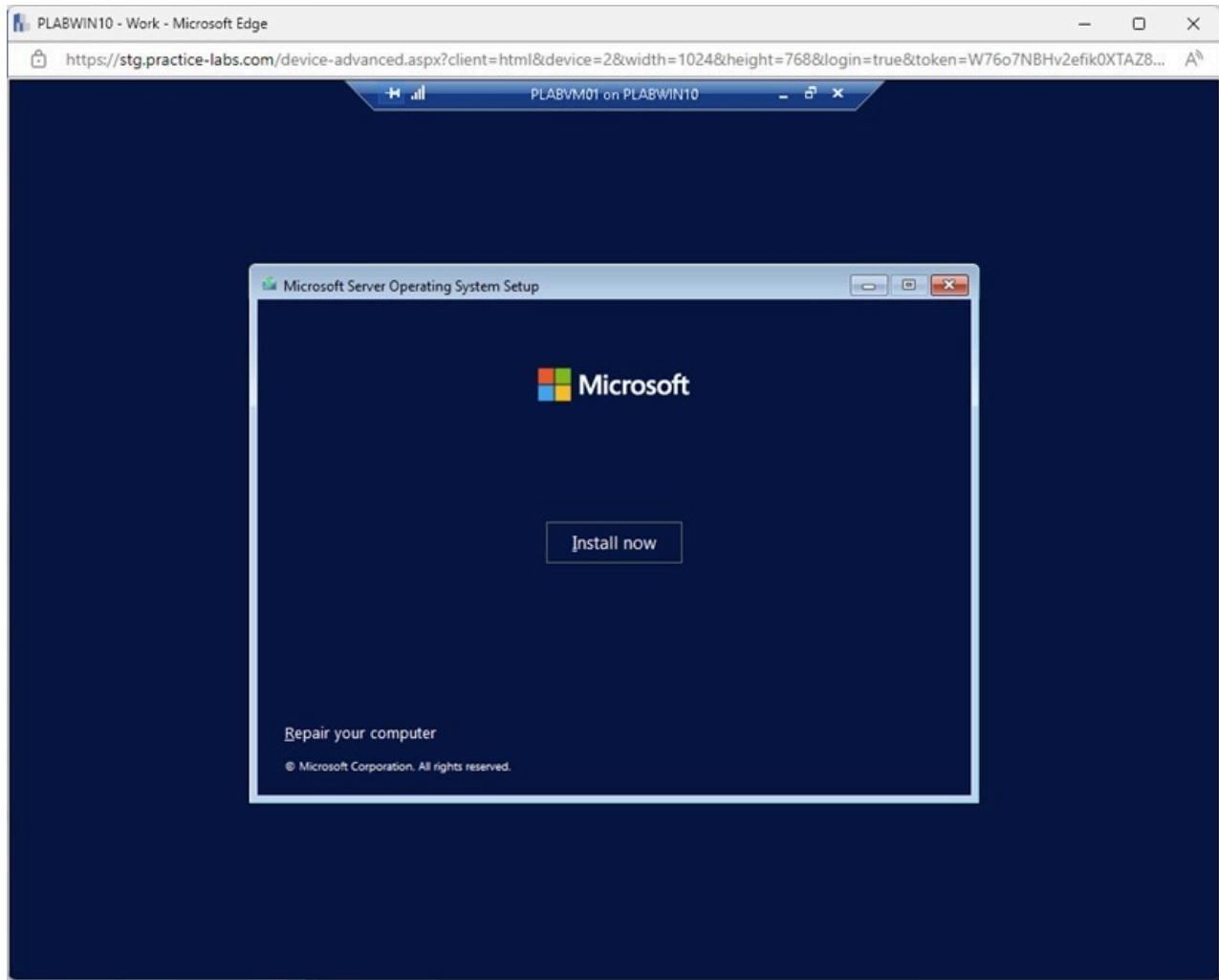


Figure 1.18 Screenshot of PLABWIN10: Displaying selecting Install now in the Microsoft Server Operating System Setup page.

Step 8

In the **Microsoft Server Operating System Setup - Activate Microsoft Server Operating System Setup** page, click the **I don't have a product key** link.

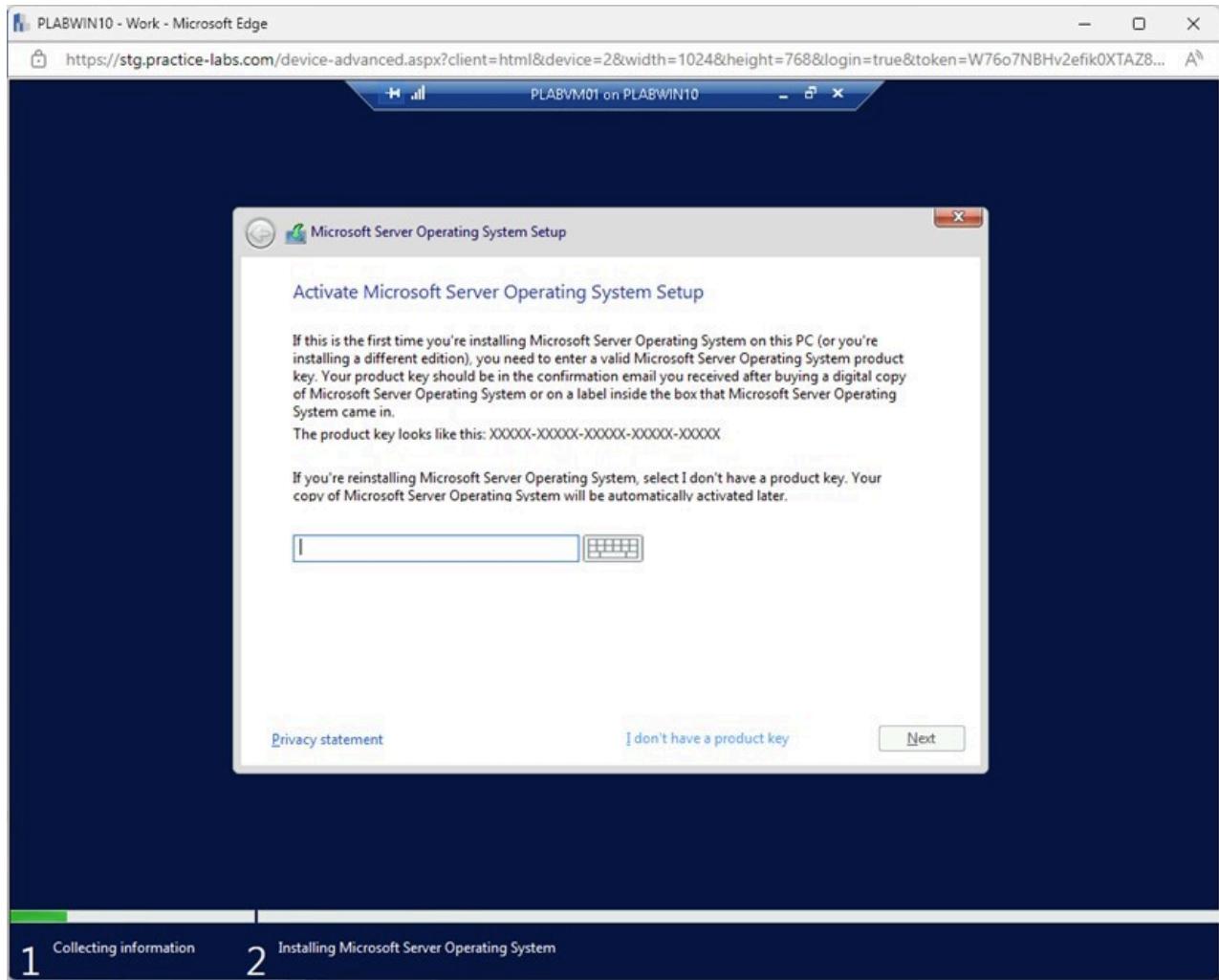


Figure 1.19 Screenshot of PLABWIN10: Displaying selecting the I don't have a product key link on the Microsoft Server Operating System Setup - Activate Microsoft Server Operating System Setup page.

Step 9

In the **Select the operating system you want to install** page, select **Windows Server 2022 Standard (Desktop Experience)**.

Click **Next**.

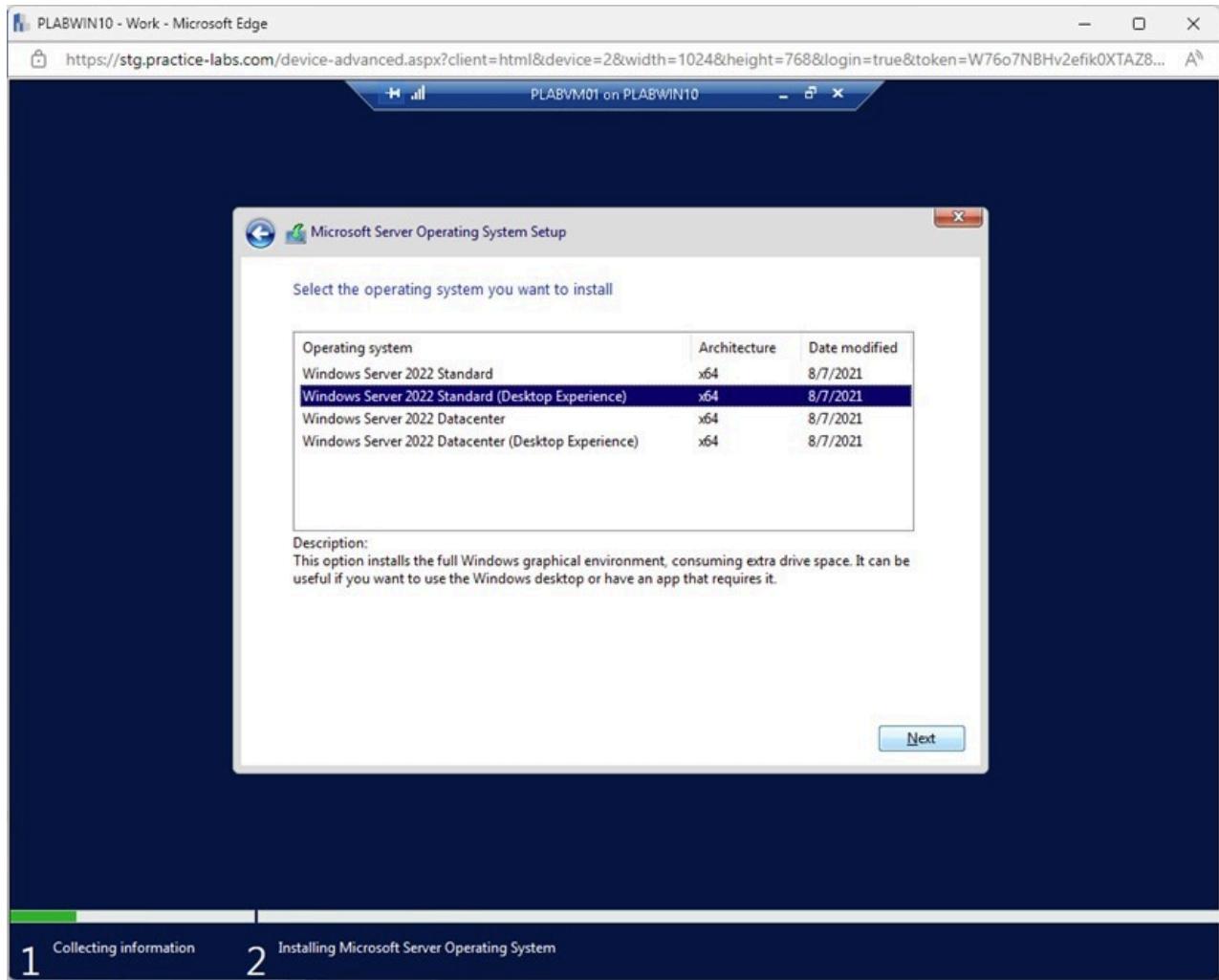


Figure 1.20 Screenshot of PLABWIN10: Displaying the Select the operating system you want to install page, showing the required operating system selected and the Next button highlighted.

Step 10

In the **Applicable notices and license terms** page, select the checkbox next to **I accept the Microsoft Software License Terms. If an organization is licensing it, I am authorized to bind the organization.**

Click **Next**.

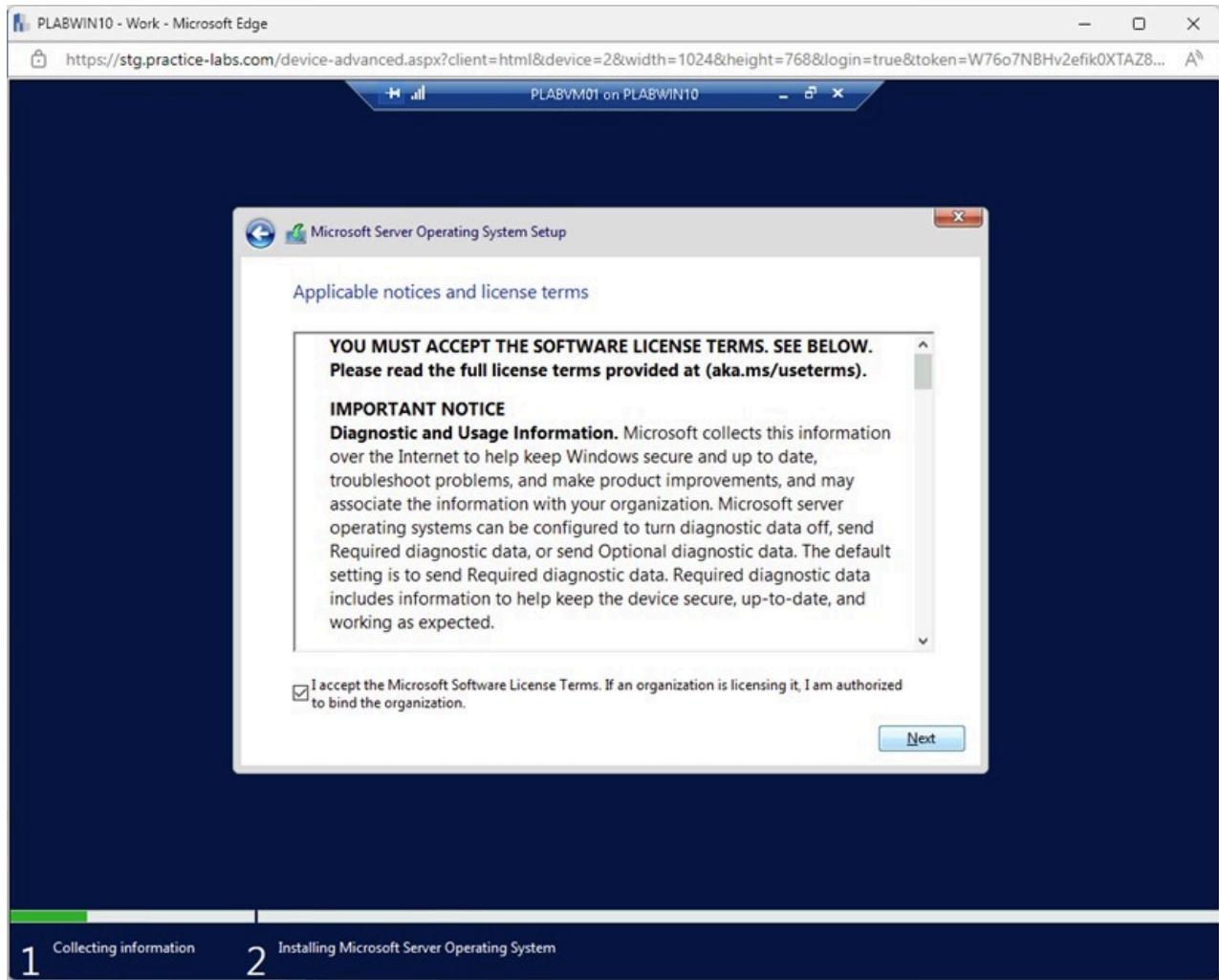


Figure 1.21 Screenshot of PLABWIN10: Displaying the Applicable notices and license terms page, showing the required settings performed and the Next button highlighted.

Step 11

In the **Which type of installation do you want?** page, select **Custom: Install Microsoft Server Operating System only (advanced)**.

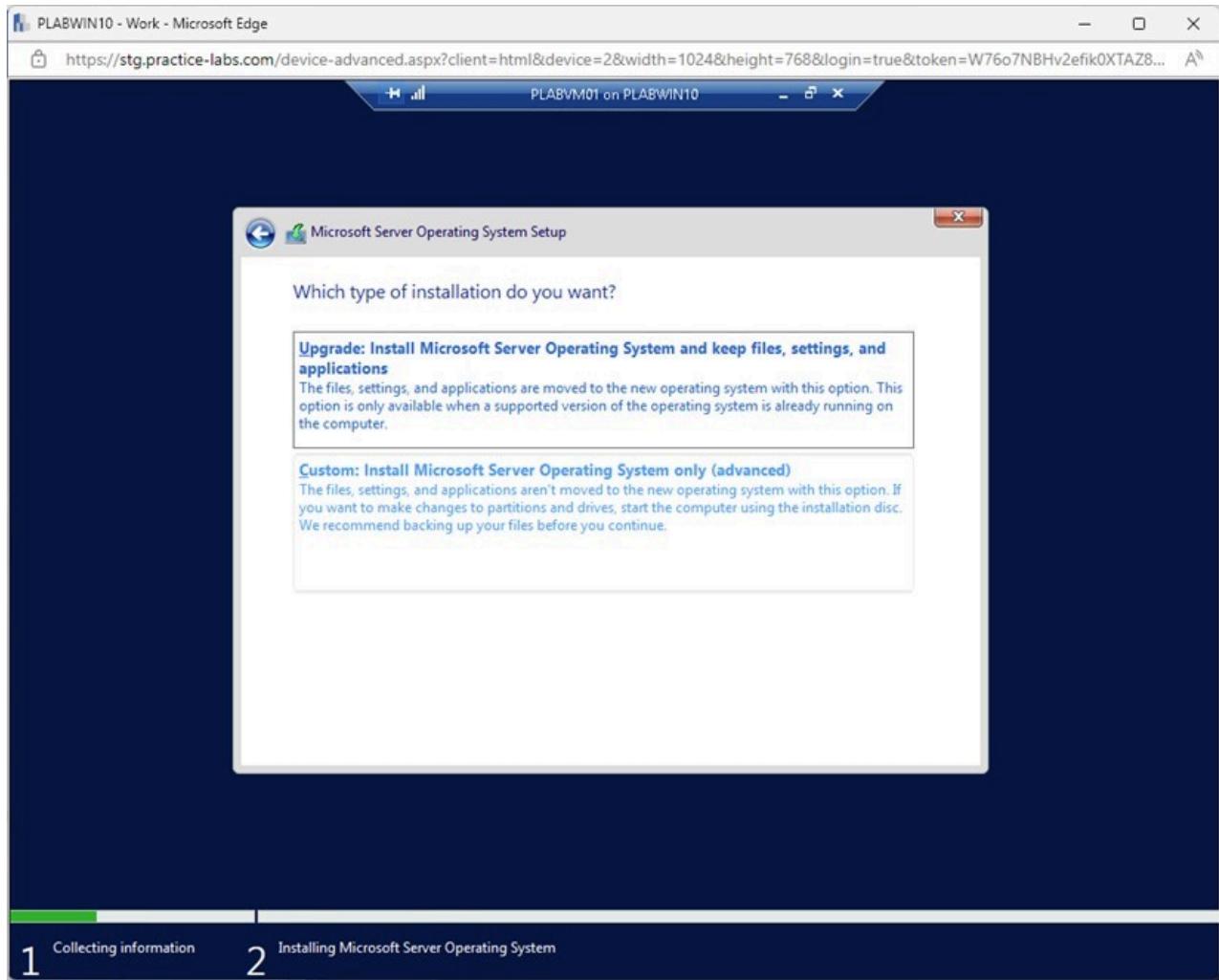


Figure 1.22 Screenshot of PLABWIN10: Displaying the Which type of installation do you want? page, showing the required option selected.

Step 12

In the **Where do you want to install the operating system?** page, click **Next**.

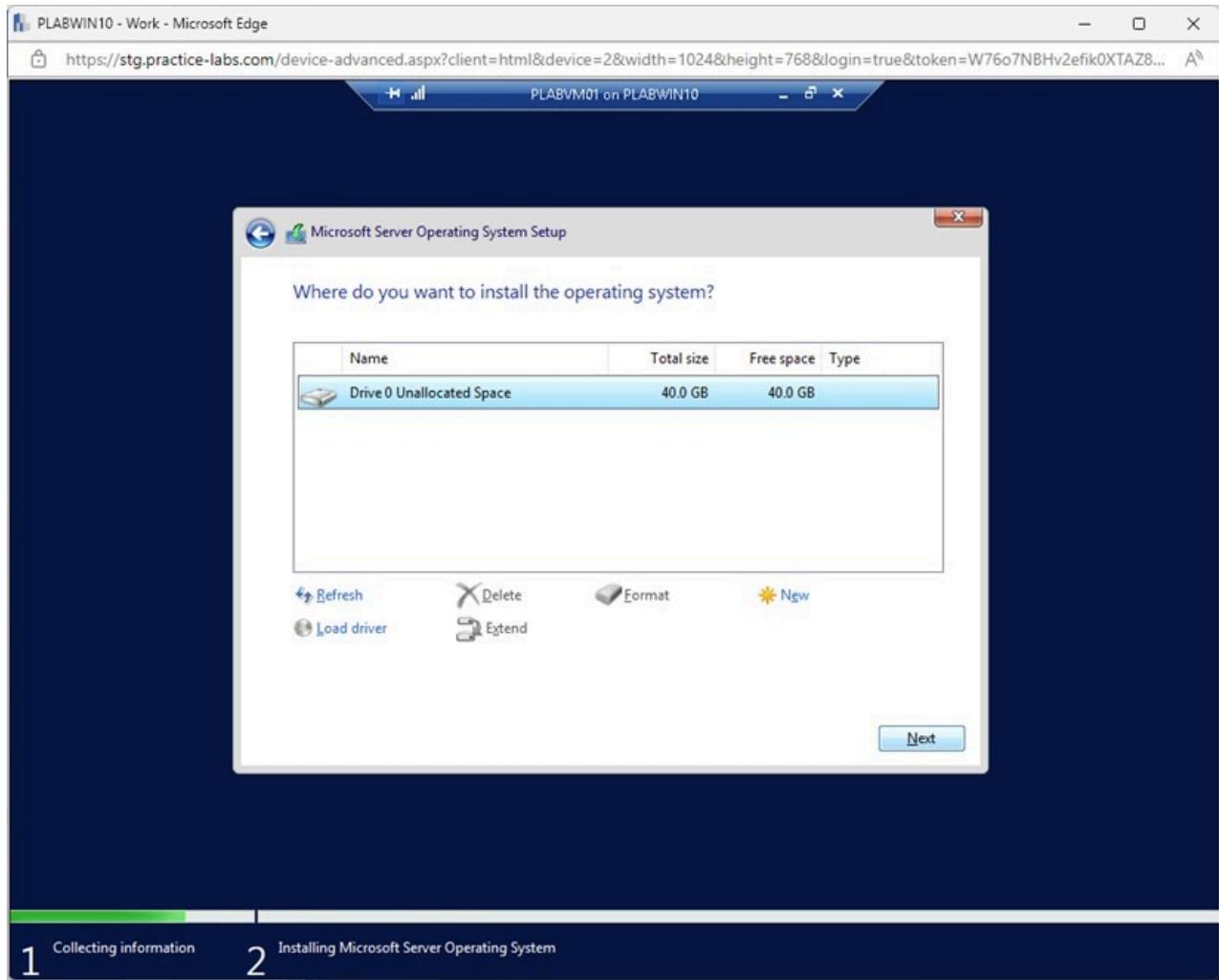


Figure 1.23 Screenshot of PLABWIN10: Displaying selecting Next in the Where do you want to install the operating system? page.

Step 13

Observe the Windows installation process in the **Installing Microsoft Server Operating System** screen.

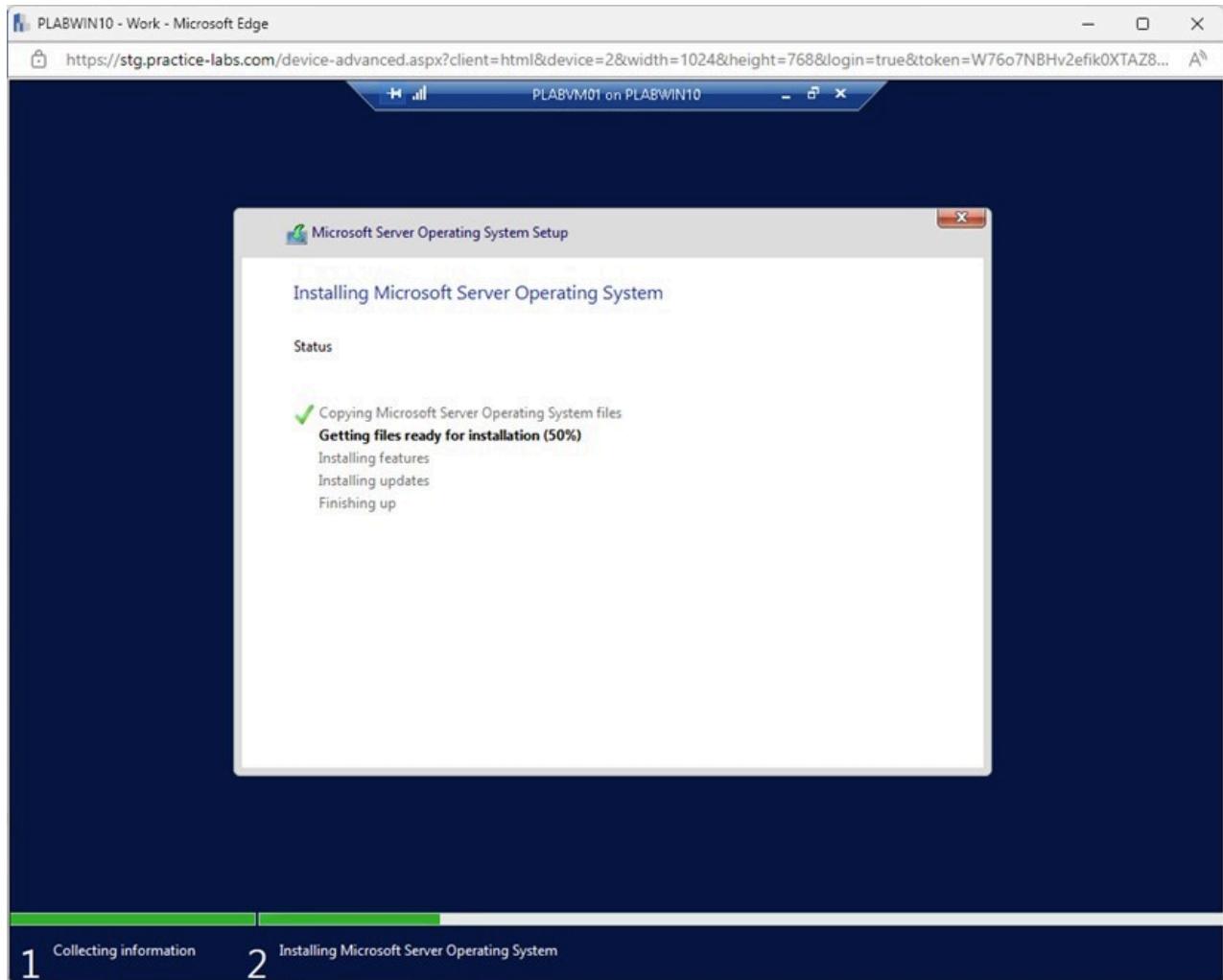


Figure 1.24 Screenshot of PLABWIN10: Displaying the Installing Microsoft Server Operating System screen.

Note: This process could take several minutes.

Step 14

In the **Microsoft Server Operating System needs to restart to continue** screen, select **Restart now**.

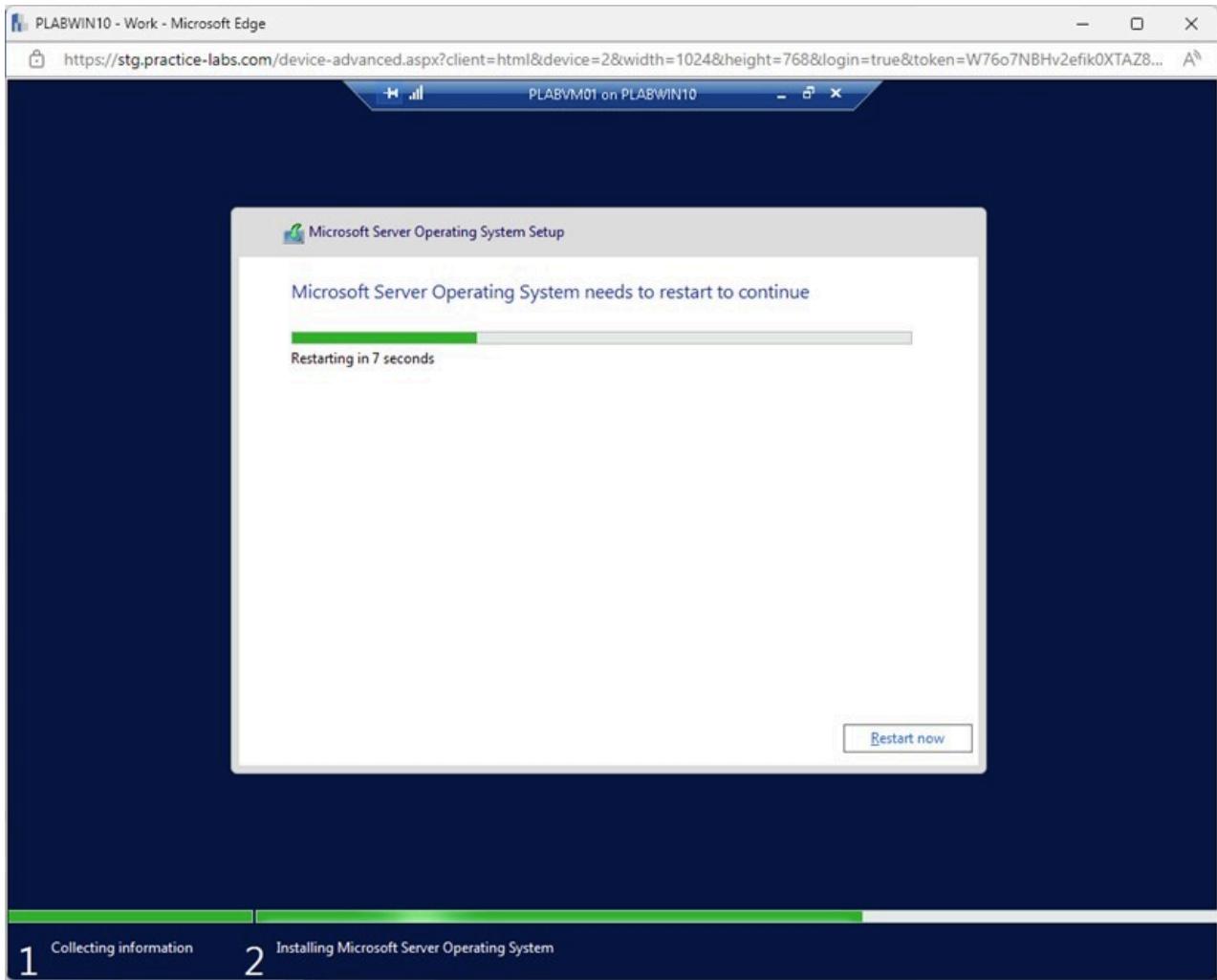


Figure 1.25 Screenshot of PLABWIN10: Displaying selecting Restart now in the Microsoft Server Operating System needs to restart to continue screen.

Leave the **PLABVM01 on PLABWIN10** connection window open.

Task 3 - Configure Windows Server 2022

In this task, you will configure common settings in the Windows Server 2022 operating system.

Step 1

In **PLABWIN10**, the **PLABVM01 on PLABWIN10** connection window is open.

Once the virtual machine restarts, the **Hyper-V - Getting ready** screen will appear.

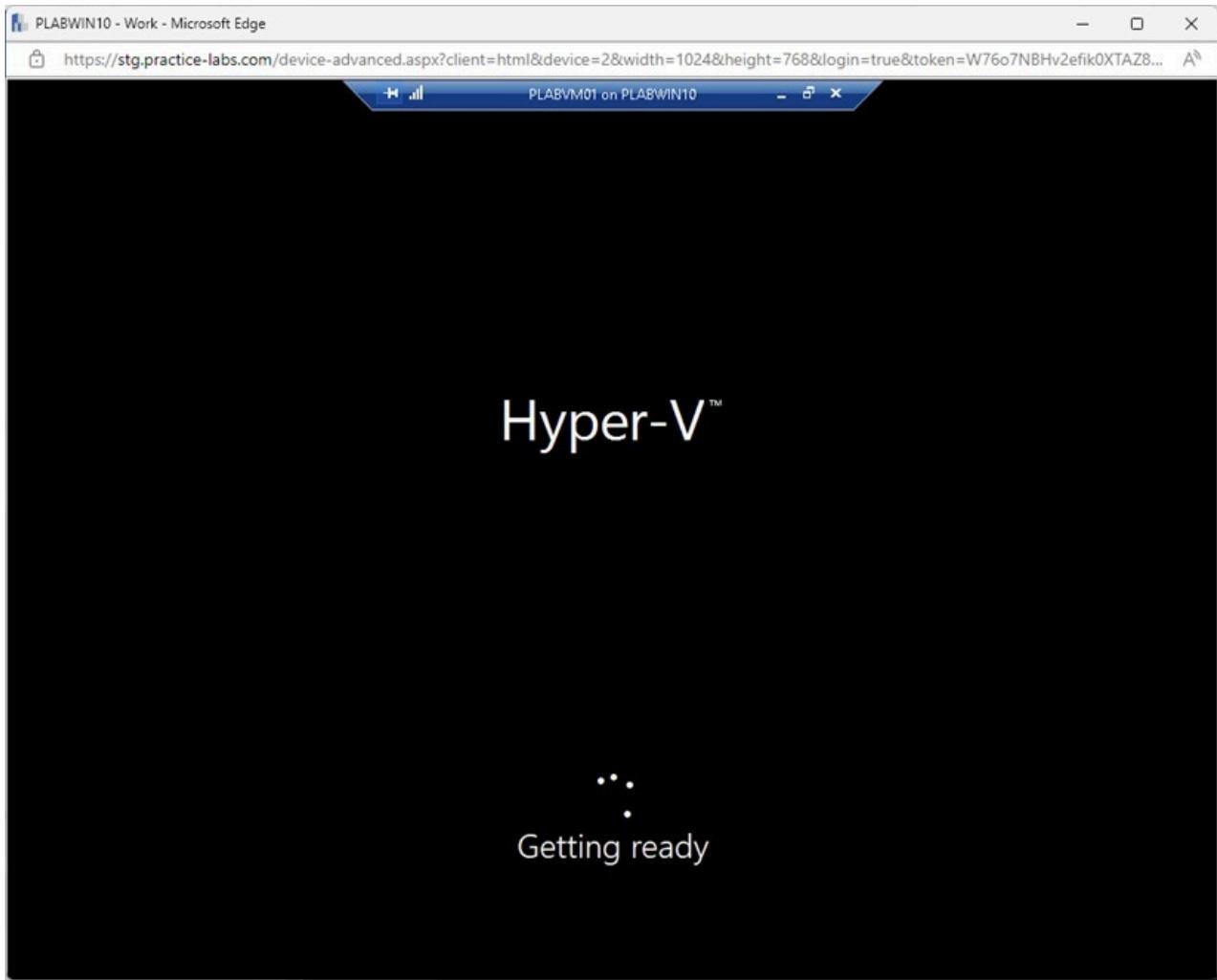


Figure 1.26 Screenshot of PLABWIN10: Displaying the Hyper-V - Getting ready screen in the PLABVM01 on PLABWIN10 connection window.

Step 2

In the **PLABVM01 on PLABWIN10** connection window - **Customize settings** screen, type the following for **Password** and **Reenter password** fields:

Passw0rd

Click **Finish**.

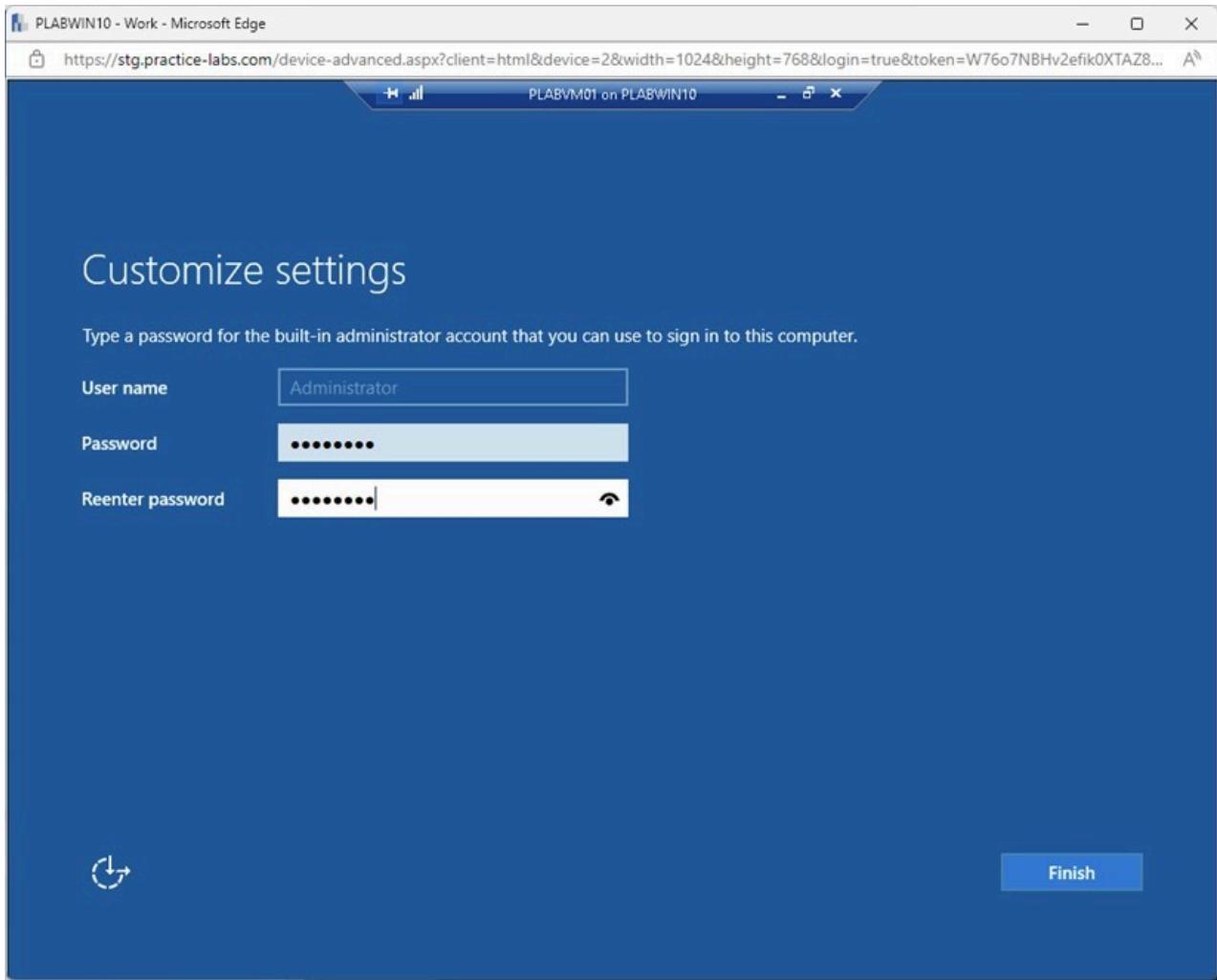


Figure 1.27 Screenshot of PLABWIN10: Displaying the Customize settings screen, showing the required password entered and the Finish button selected.

Step 3

Click in the **PLABVM01 on PLABWIN10** connection window to view the **Administrator** login screen.

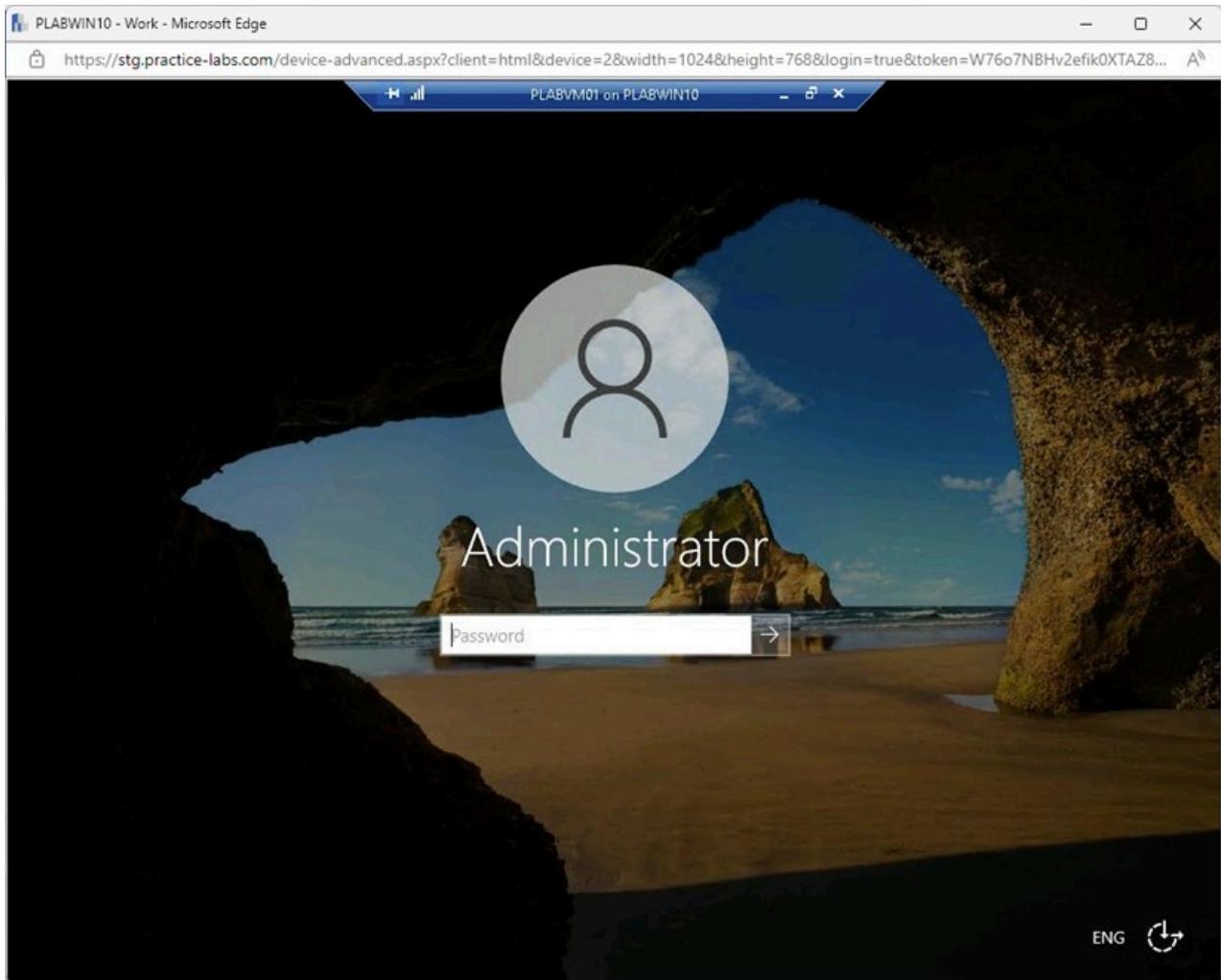


Figure 1.28 Screenshot of PLABWIN10: Displaying the Administrator login screen in the PLABVM01 on PLABWIN10 connection window.

Step 4

In the **PLABVM01 on PLABWIN10** connection window, type the following password for the **Administrator** user:

Passw0rd

Press **Enter**.

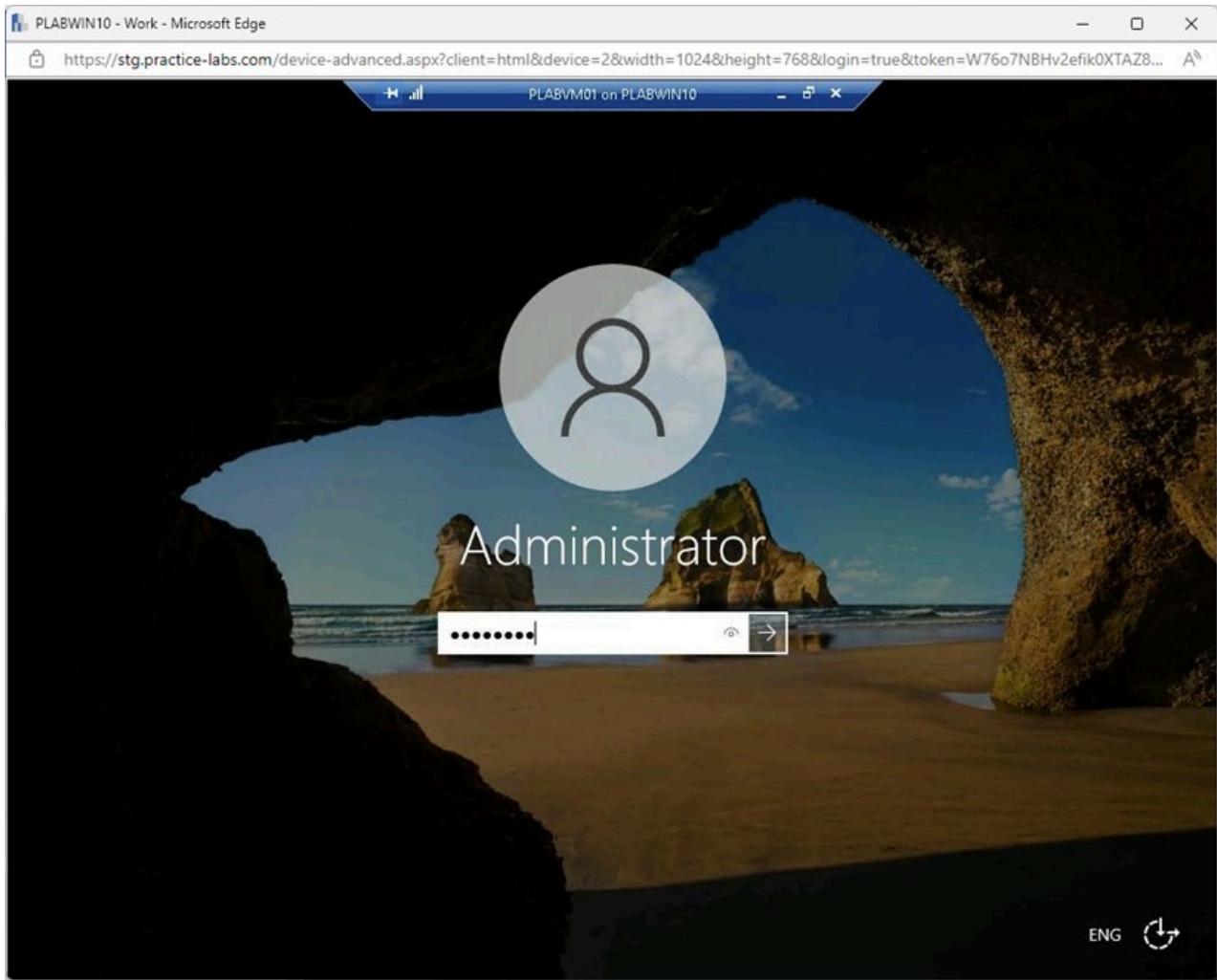


Figure 1.29 Screenshot of PLABWIN10: Displaying typing the required password for the Administrator user in the PLABVM01 on PLABWIN10 connection window.

Step 5

In the **PLABVM01 on PLABWIN10** connection window, select the **Yes** button on the **Networks** flyout pane.

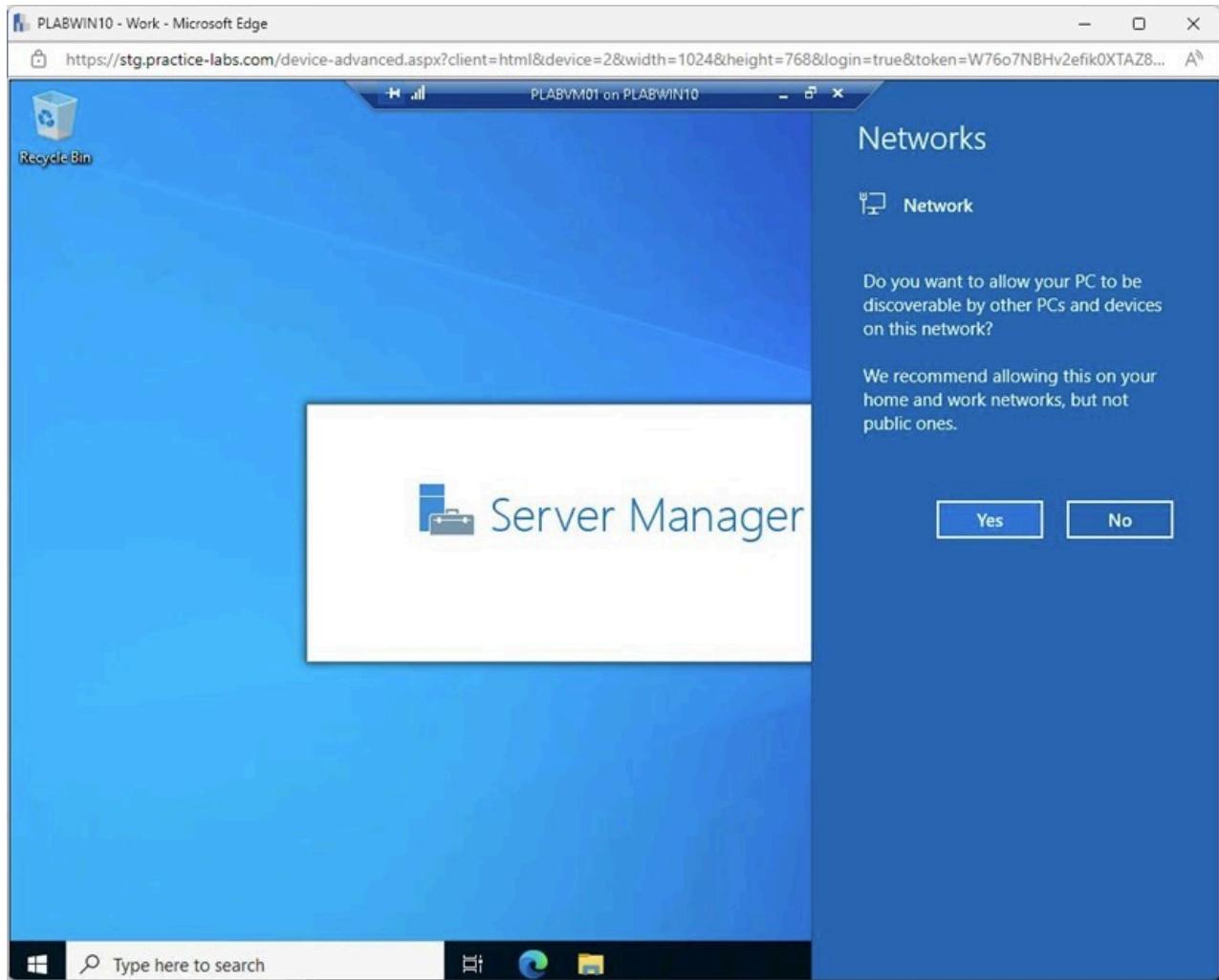


Figure 1.30 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window, showing Yes selected on the Networks flyout pane.

Step 6

In the **Server Manager** message box, select the **Don't show this message again** checkbox and close the message box.

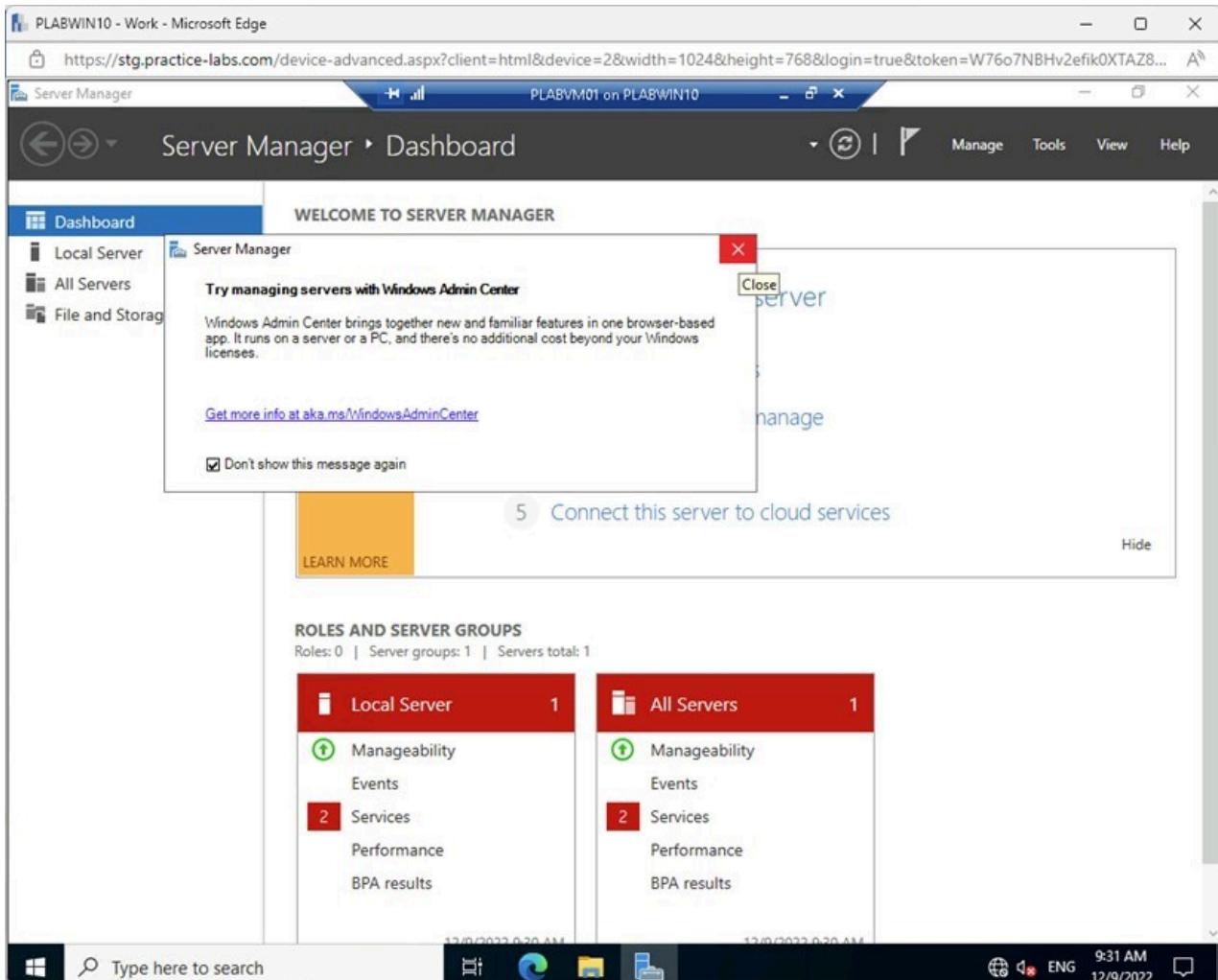


Figure 1.31 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window, showing the required option checked in the Server Manager message box.

Step 7

In the **Server Manager** window, select **Local Server** on the left pane.

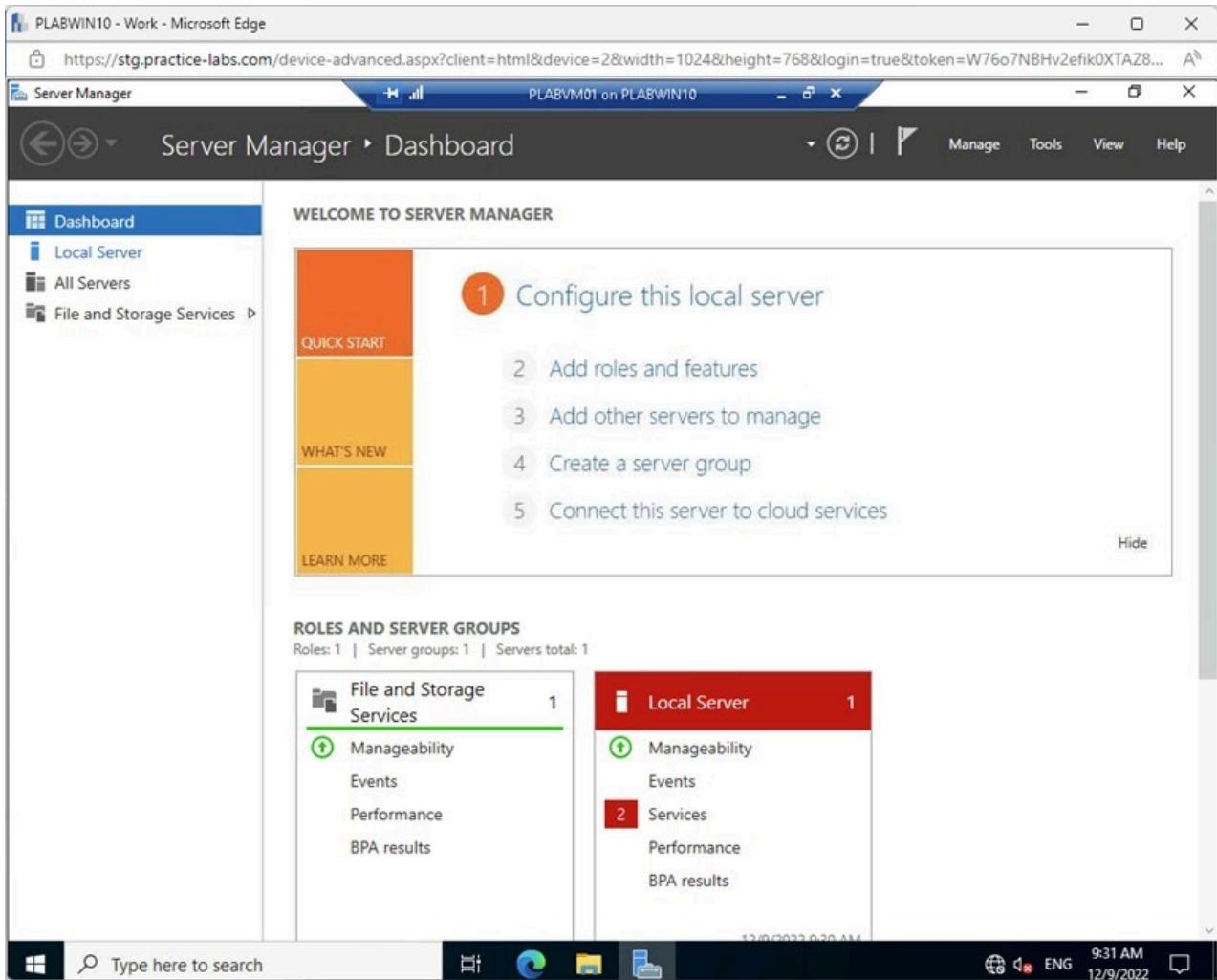


Figure 1.32 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Local Server on the Server Manager window is selected.

Step 8

In the **Server Manager > Local Server** window, in the **PROPERTIES** pane, click the hyperlink that begins with **WIN-***** next to **Computer name**.

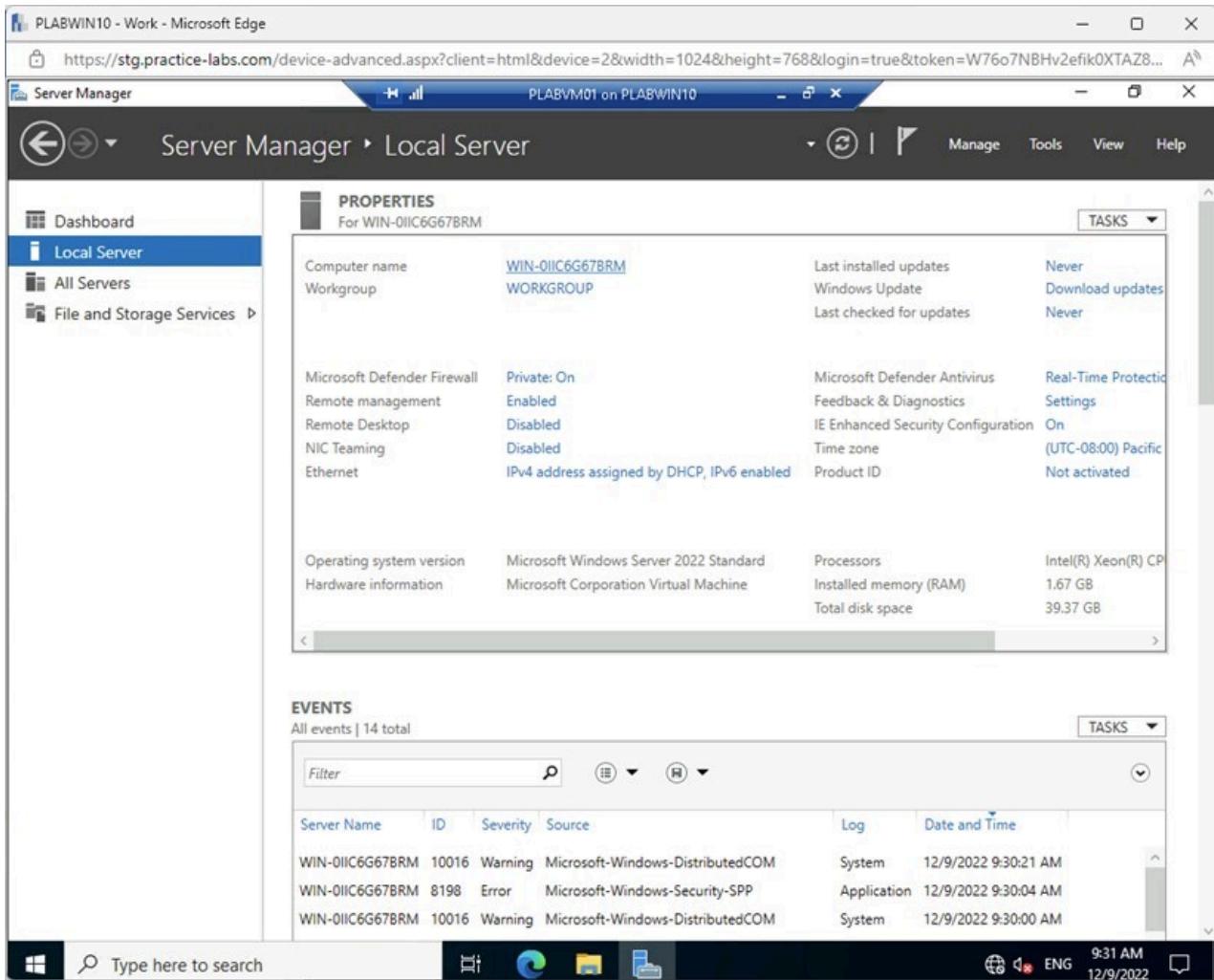


Figure 1.33 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Required computer name is selected on the Server Manager > Local Server window.

Step 9

In the **System Properties** dialog box, click the **Change...** button on the **Computer Name** tab.

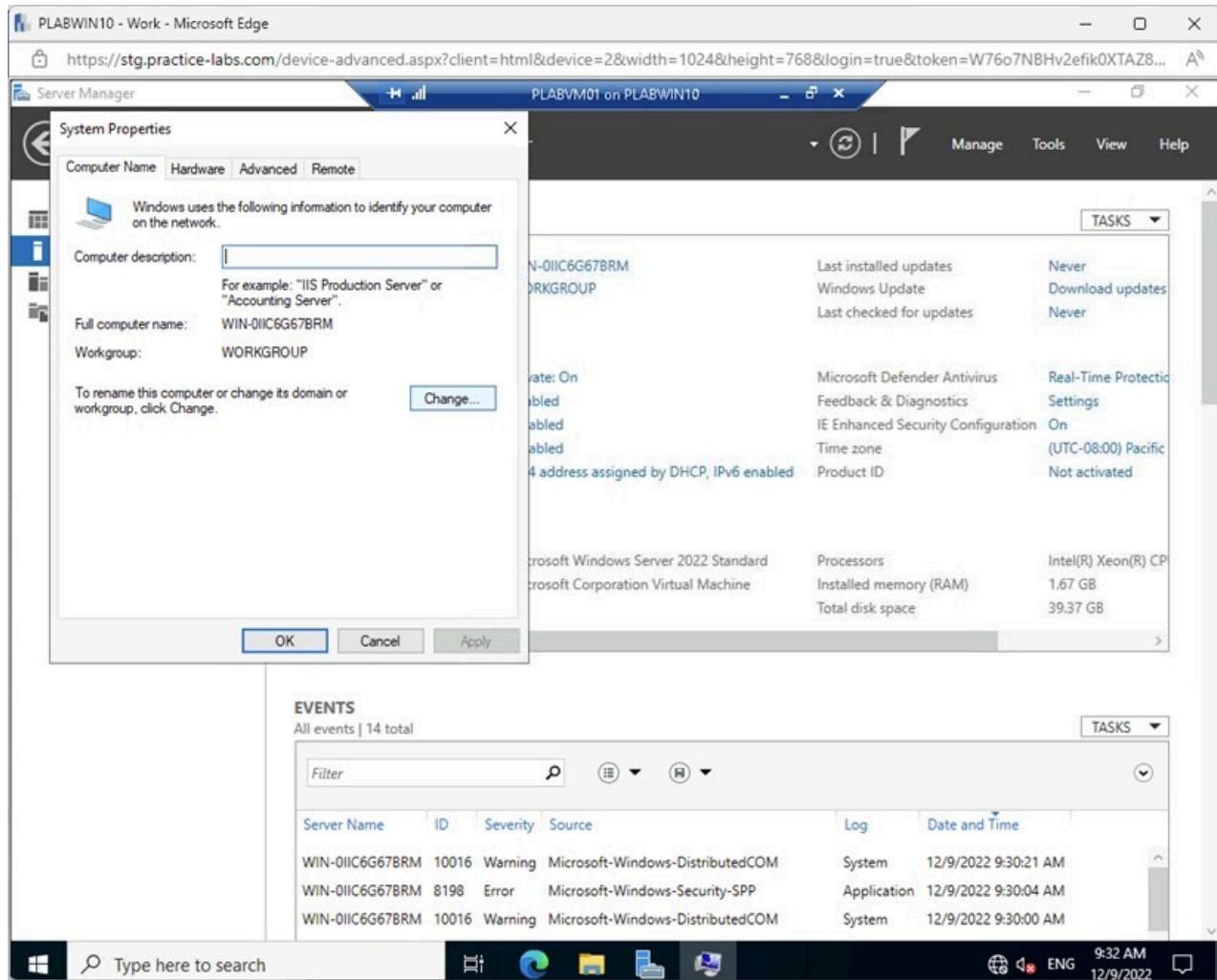


Figure 1.34 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Change button on the System Properties dialog box is selected.

Step 10

In the **Computer Name/Domain Changes** dialog box, under the **Computer name** field, clear the default name and type the following:

PLABSRV01

Click **OK**.

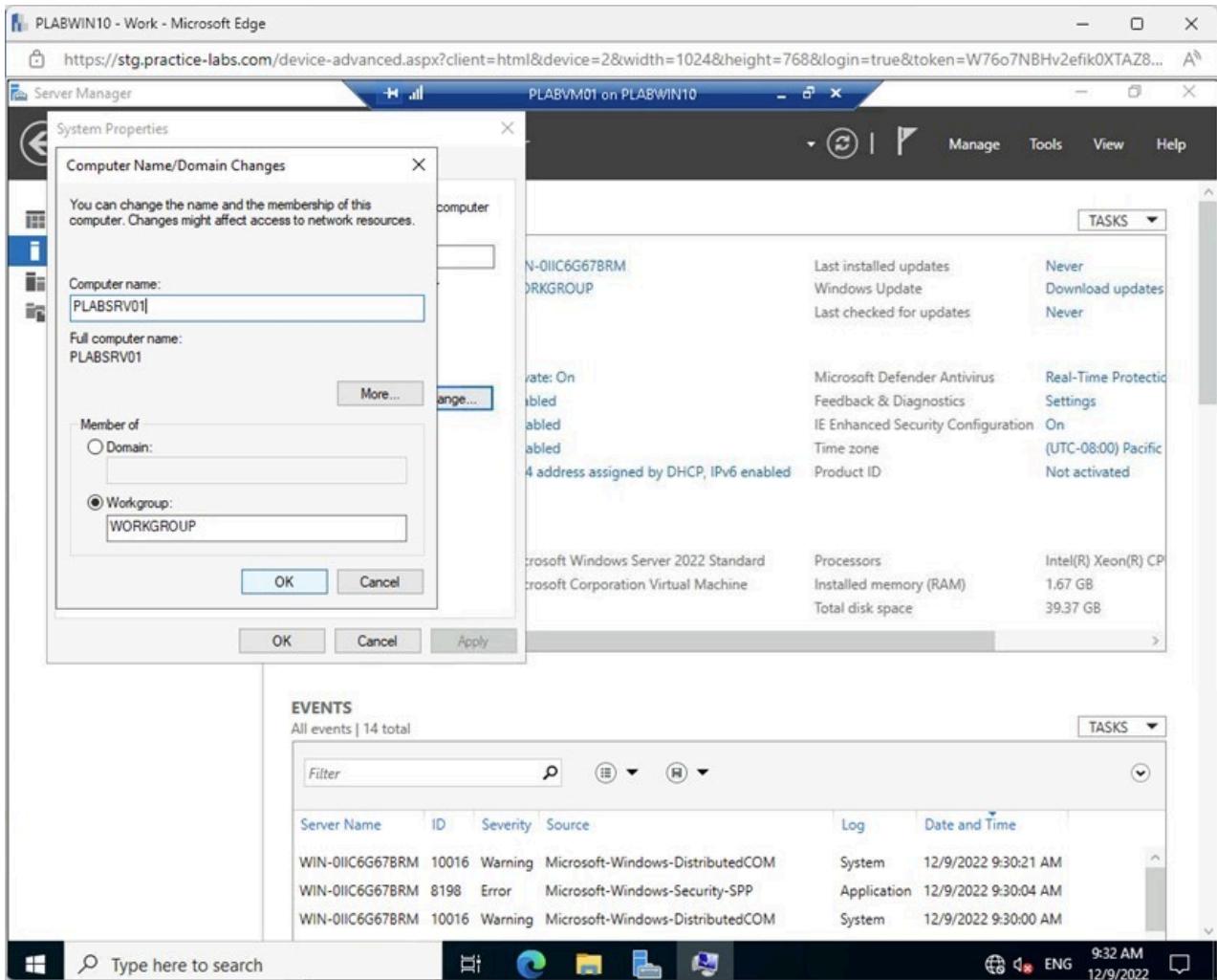


Figure 1.35 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Required Computer name on the Computer Name/Domain Changes dialog box is entered.

Step 11

In the **Computer Name/Domain Changes** pop-up box, click **OK**.

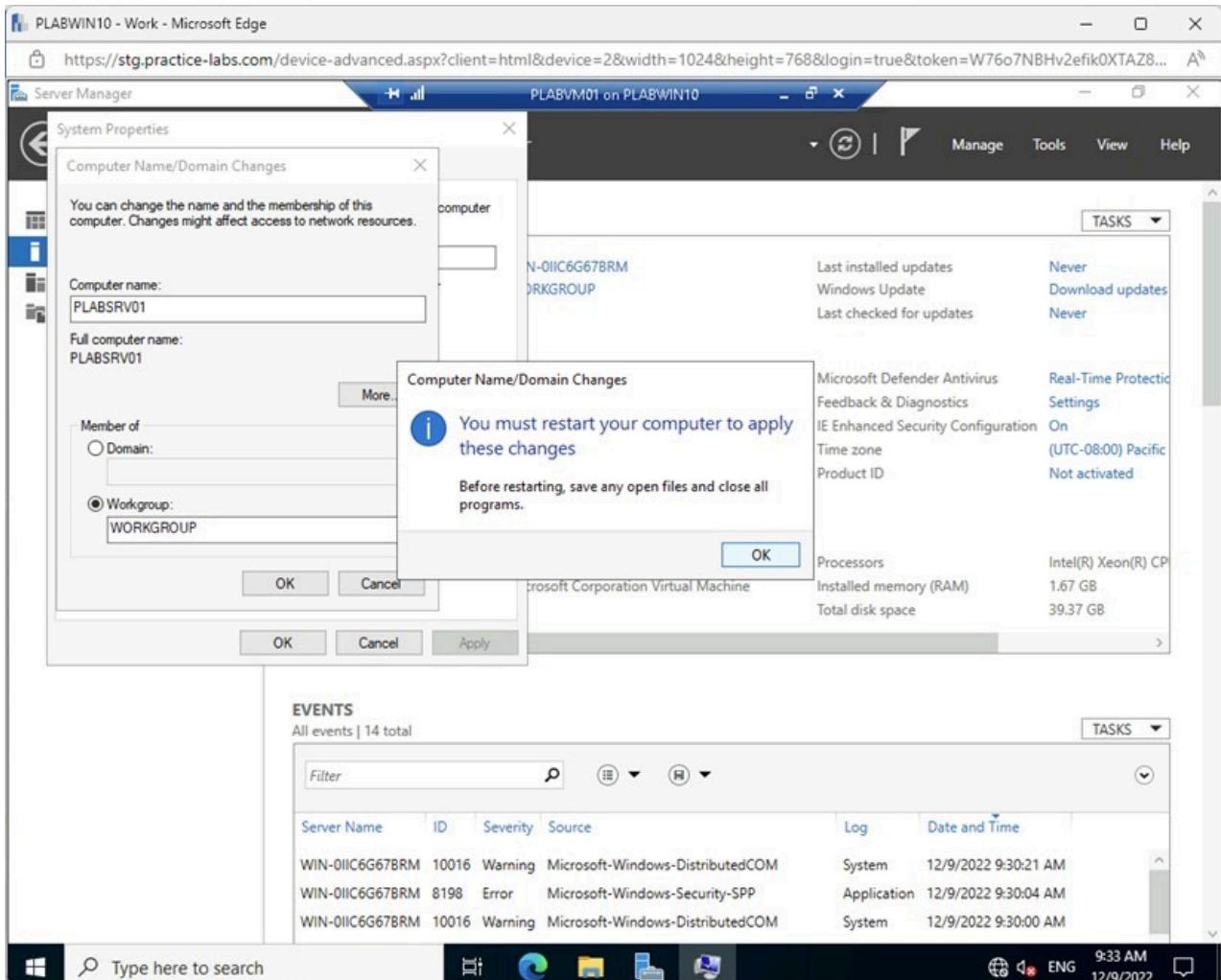


Figure 1.36 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. OK button on the Computer Name/Domain Changes pop-up box is selected.

Step 12

In the **System Properties** dialog box, click **Close**.

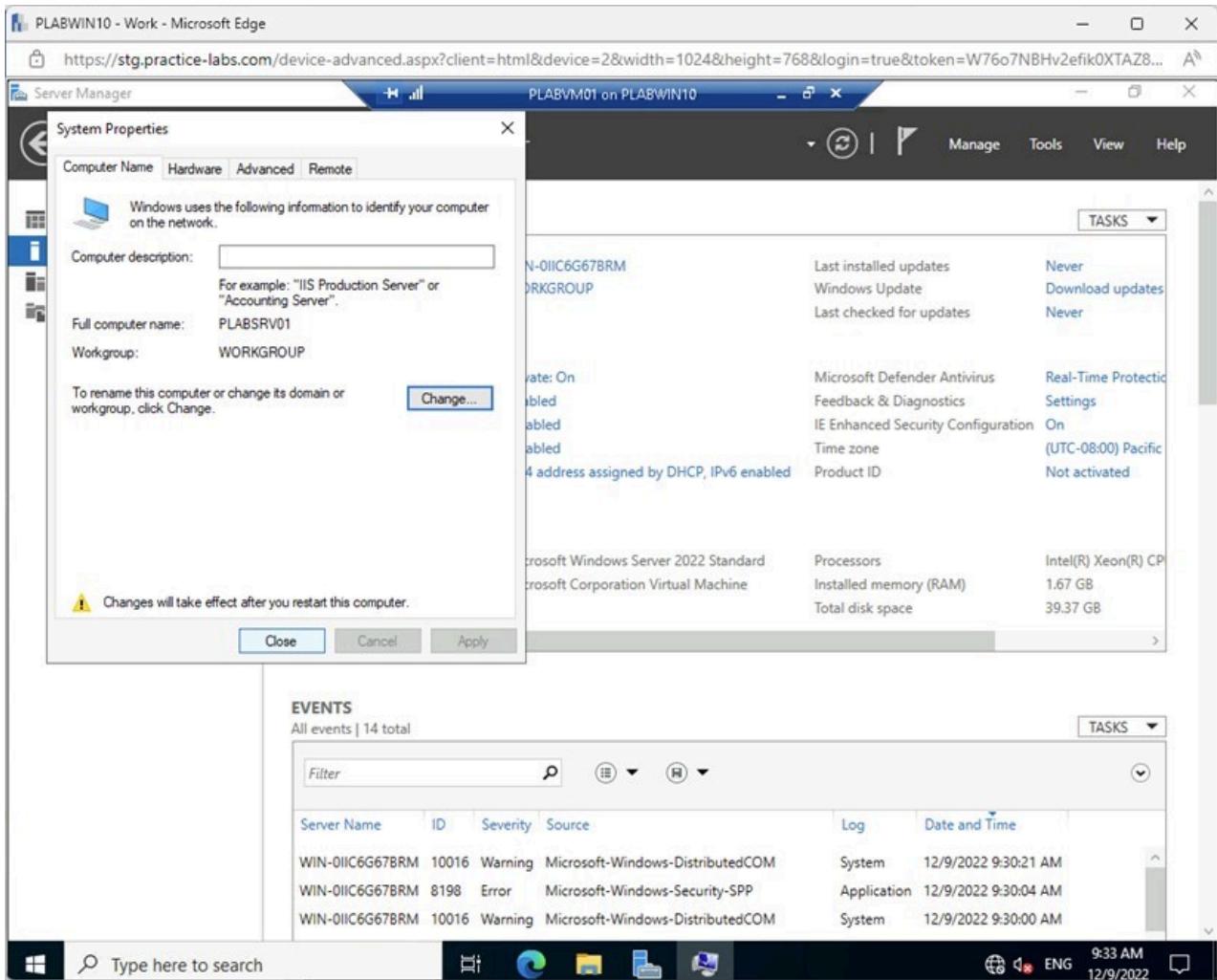


Figure 1.37 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Close button on the System Properties dialog box is selected.

Step 13

In the **Microsoft Windows** pop-up box, click **Restart Now**.

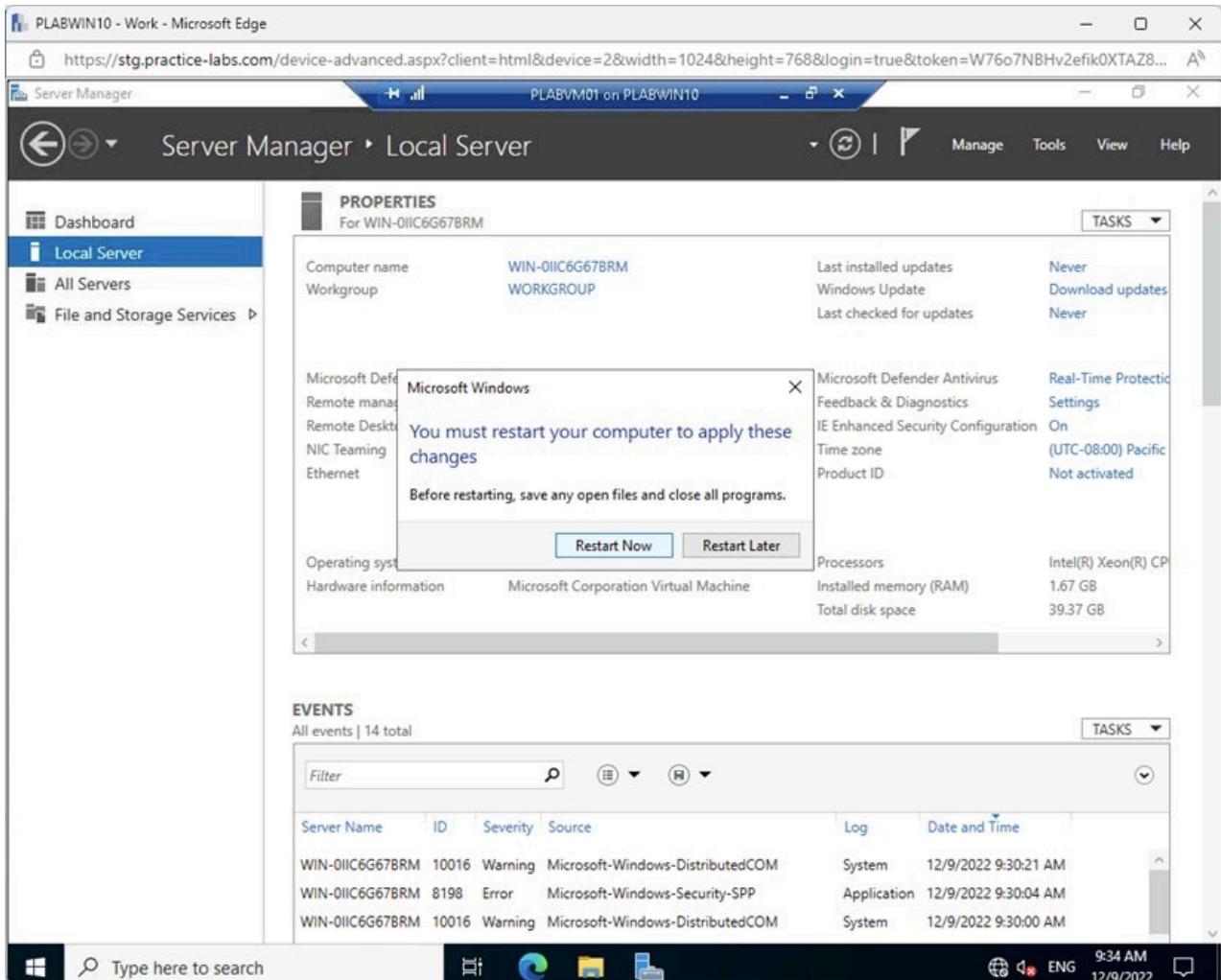


Figure 1.38 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Restart Now button on the Microsoft Windows pop-up box is selected.

Note: Please wait for the server to reboot.

Step 14

In the **PLABVM01 on PLABWIN10** connection window, type the following password for the **Administrator** user:

Passw0rd

Press **Enter**.

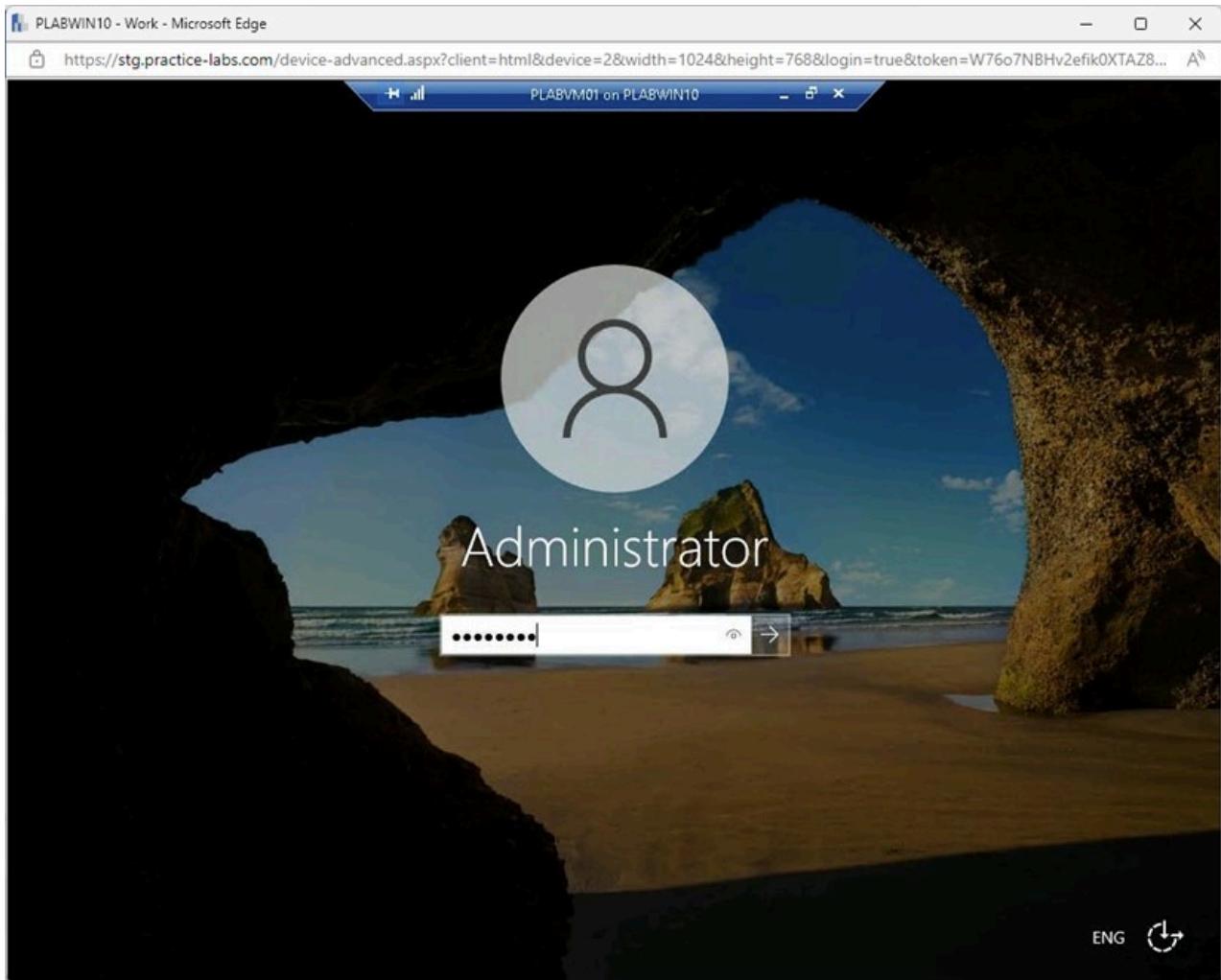


Figure 1.39 Screenshot of PLABWIN10: Displaying typing the required password for the Administrator user in the PLABVM01 on PLABWIN10 connection window.

Step 15

In the **Server Manager** window, select **Local Server** on the left pane.

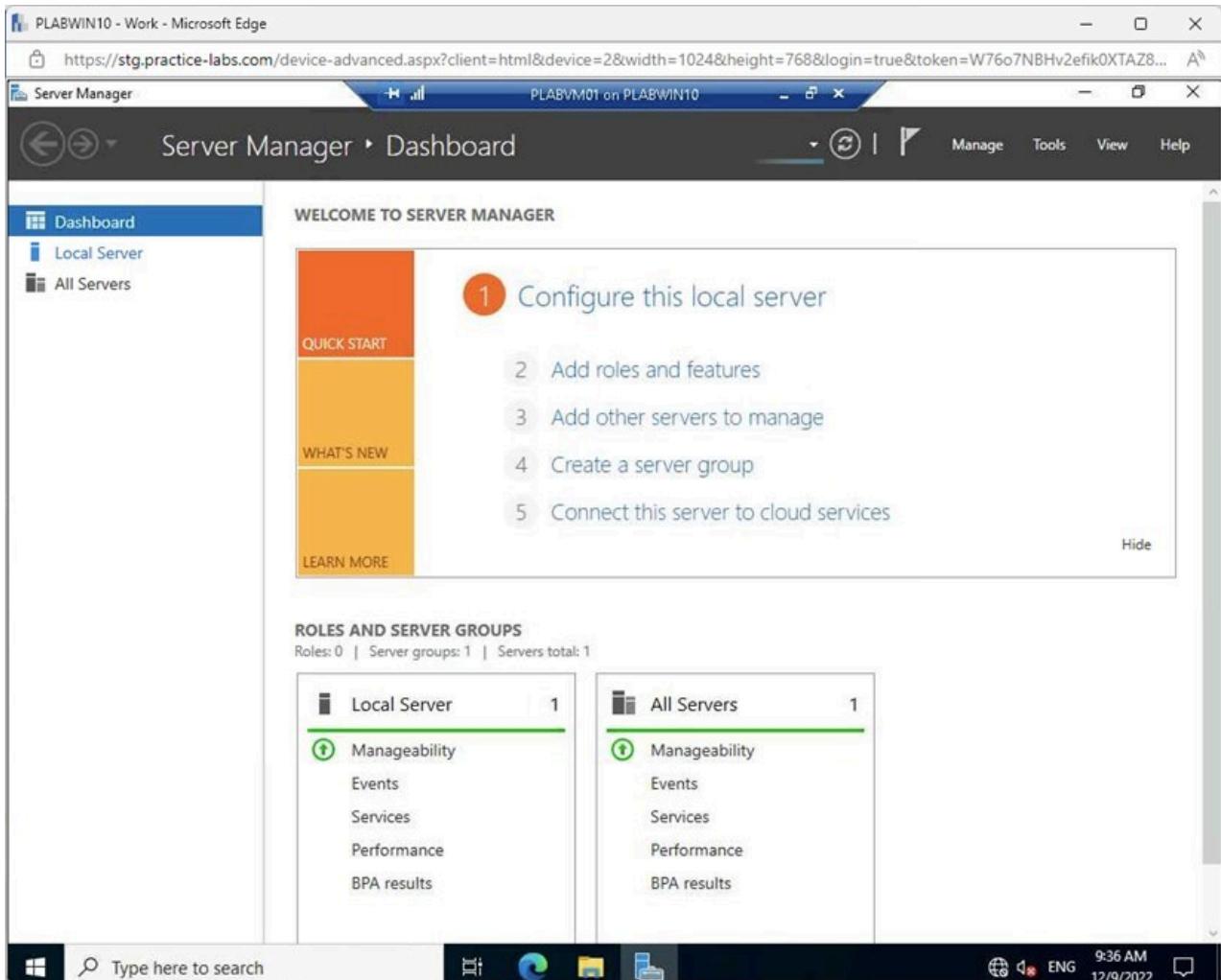


Figure 1.40 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Local Server on the Server Manager window is selected.

Step 16

In the **Server Manager > Local Server** window, in the **PROPERTIES** pane, click the hyperlink **(UTC-08:00) Pacific Time (US & Canada)** next to **Time zone**.

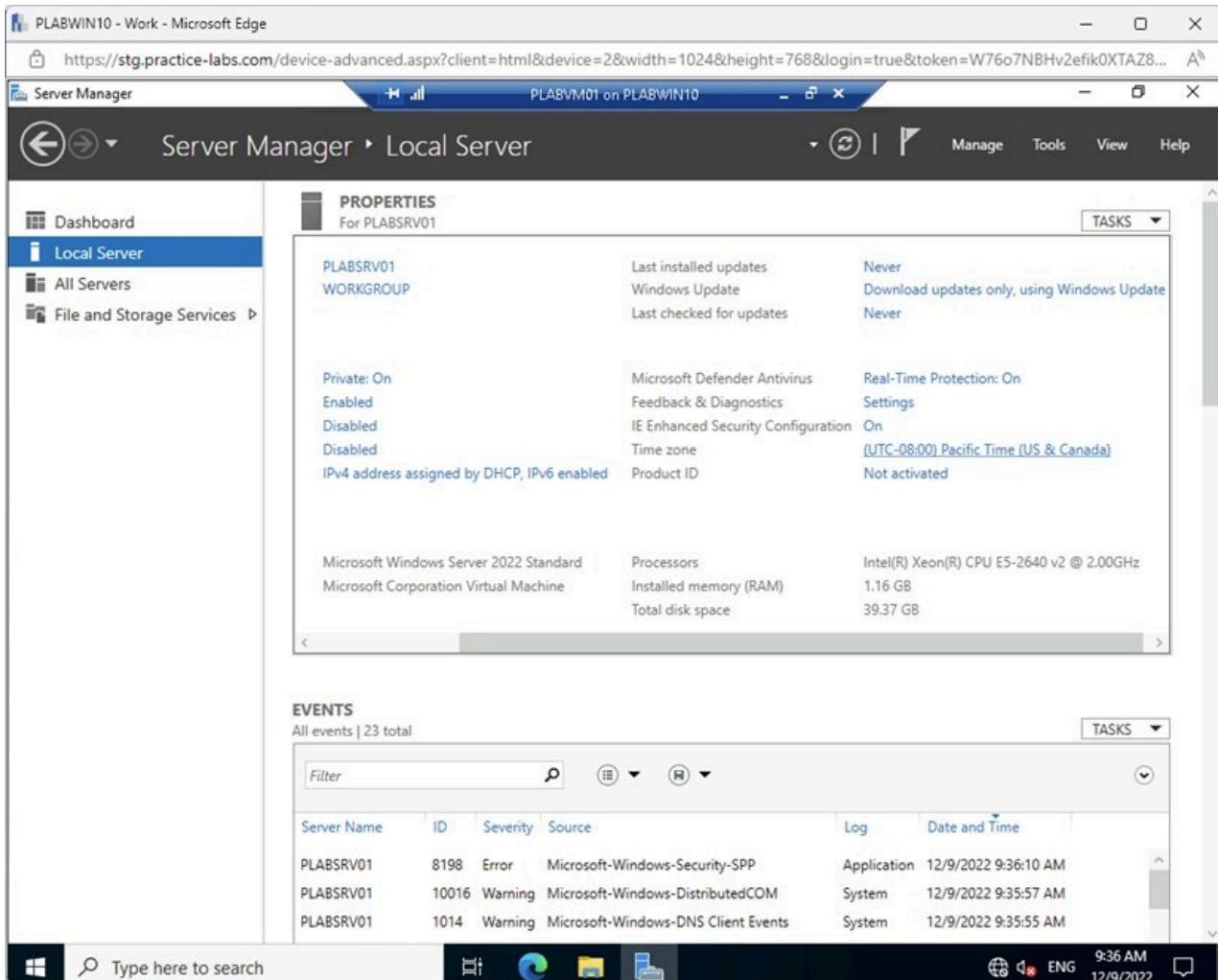


Figure 1.41 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Required Time zone is selected on the Server Manager > Local Server window.

Note: To view the **(UTC-08:00) Pacific Time (US & Canada)** hyperlink, you may have to use the horizontal scroll bar at the bottom of the **PROPERTIES** pane in the **Server Manager > Local Server** window.

Step 17

In the **Date and Time** dialog box, select the **Change time zone...** button under the **Time zone** field.

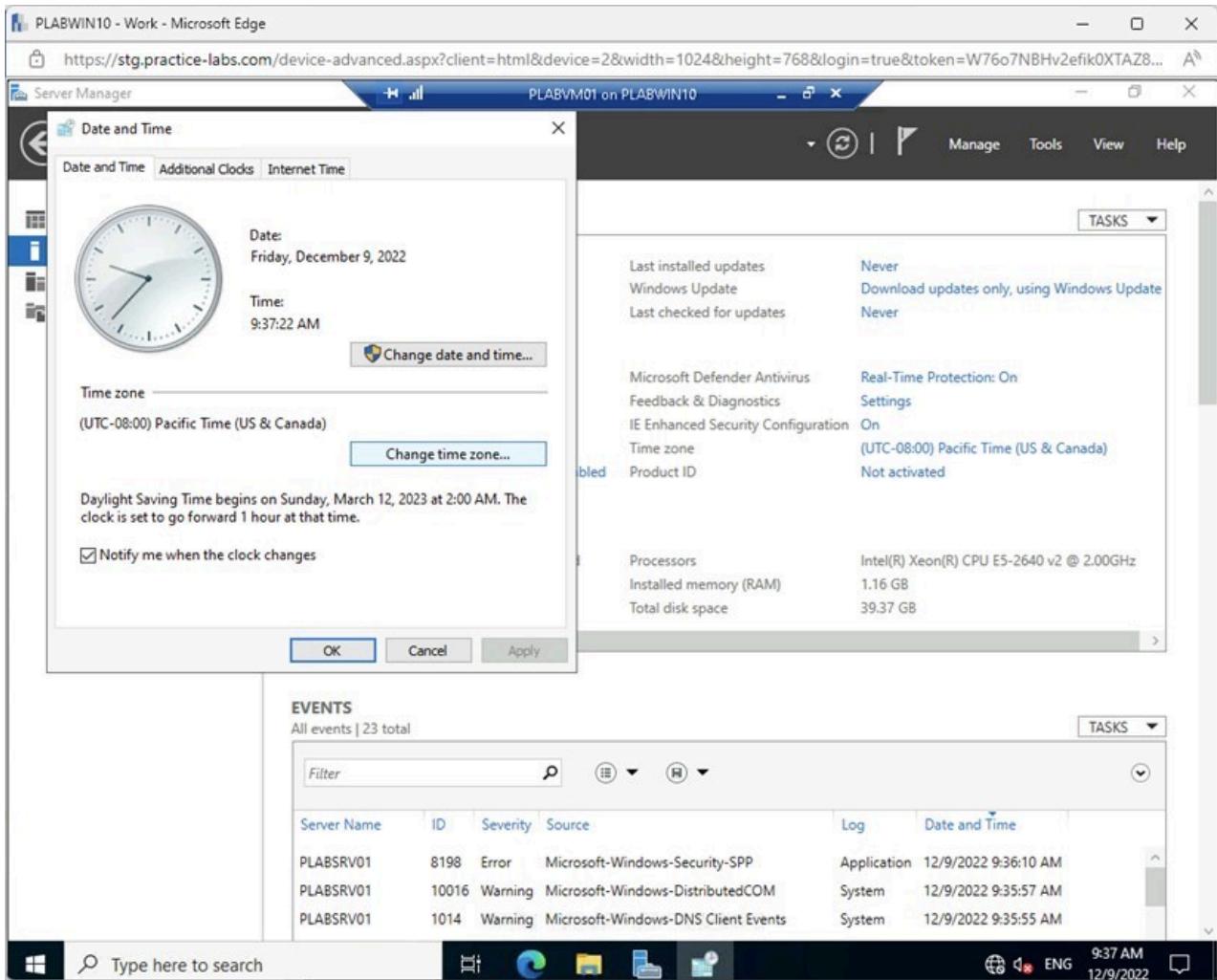


Figure 1.42 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Change time zone button is selected in the Date and Time dialog box.

Step 18

In the **Time Zone Settings** dialog box, click the dropdown arrow under **Time zone**.

Select your local time zone and click **OK**.

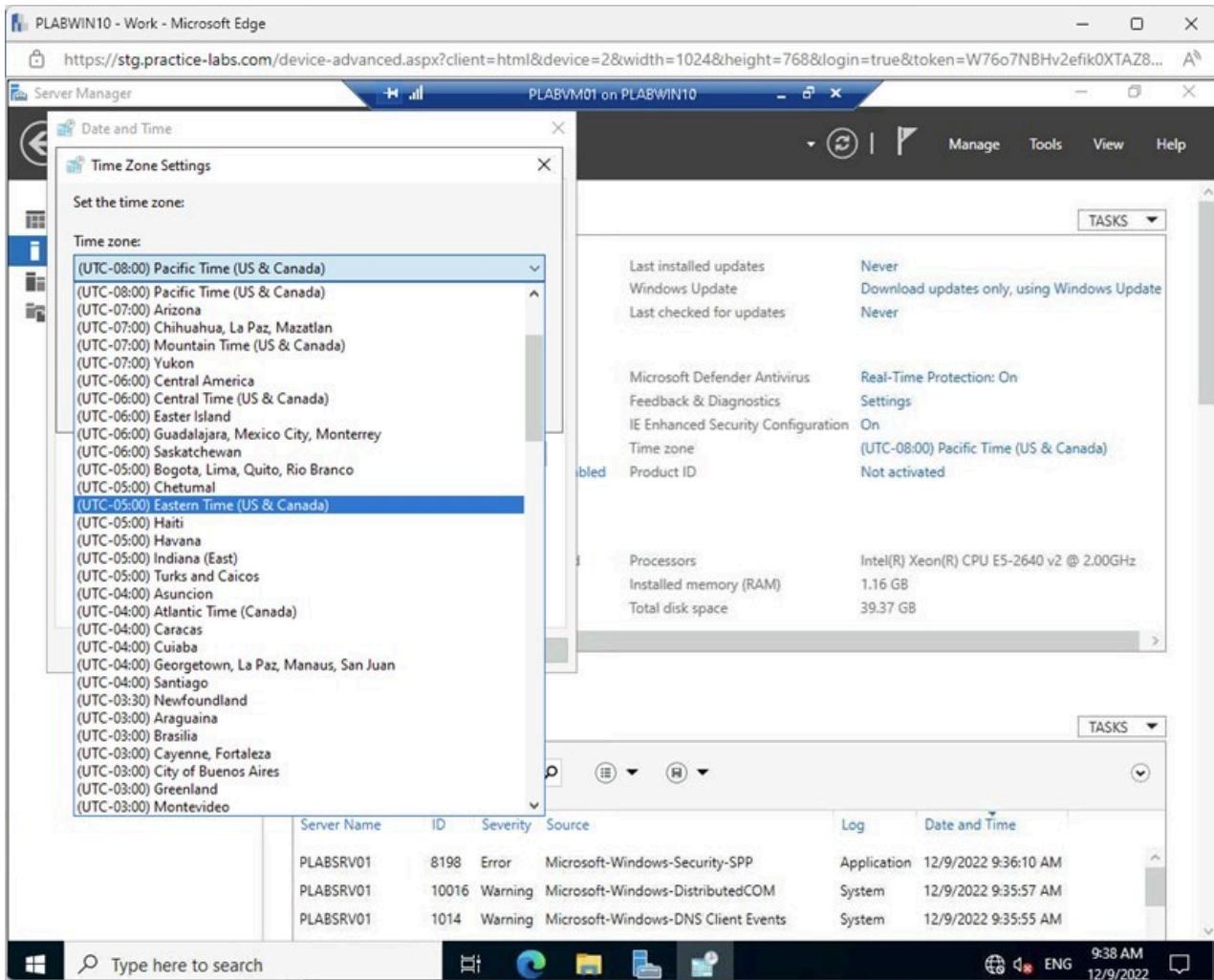


Figure 1.43 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Required Time zone is selected in the Time Zone Settings dialog box.

Step 19

In the **Date and Time** dialog box, under **Time zone**, review the configuration change and click **OK**.

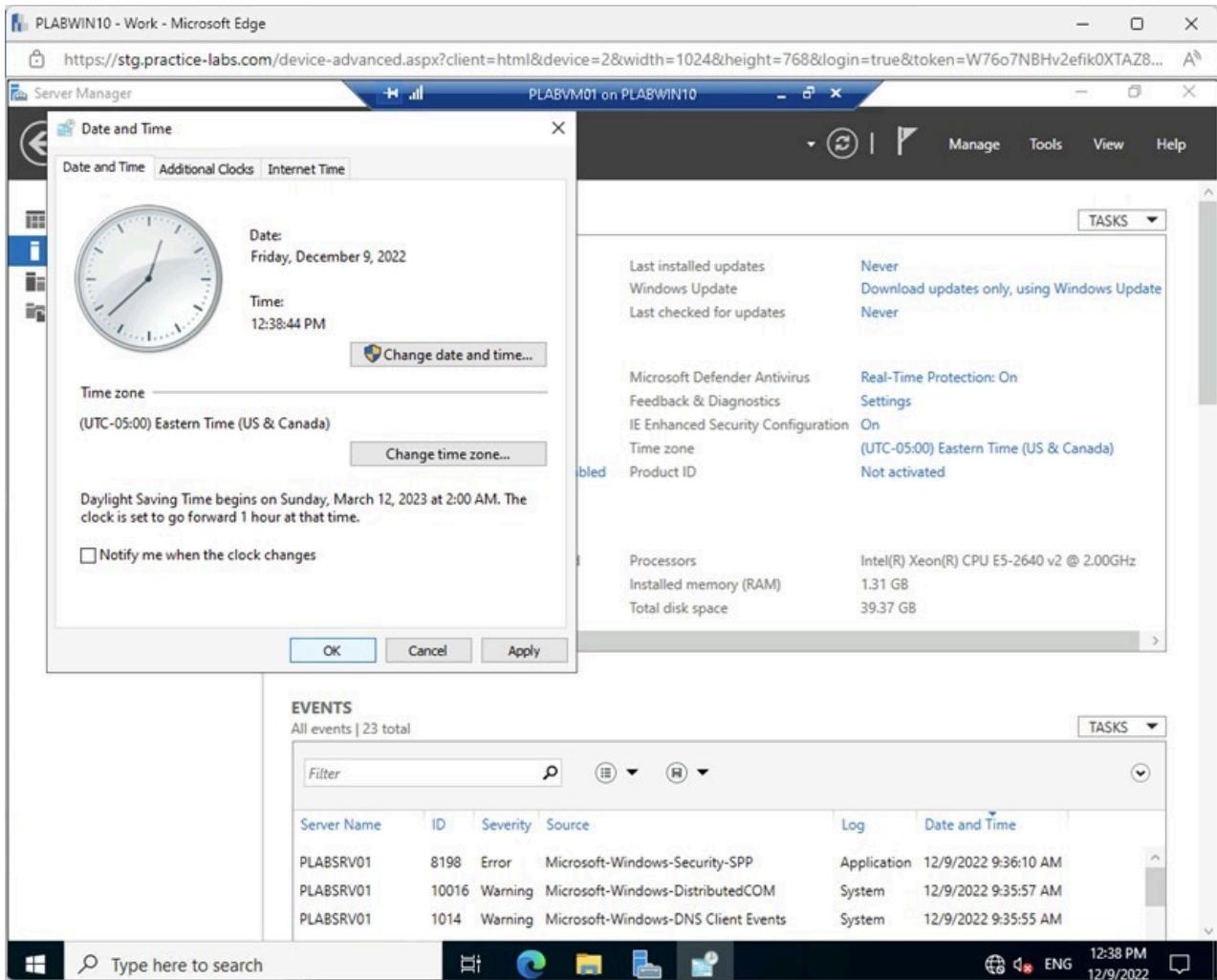


Figure 1.44 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. OK button is selected in the Date and Time dialog box.

Step 20

Back on the **Server Manager > Local Server** window, in the **PROPERTIES** pane, select the hyperlink **IPv4 address assigned by DHCP, IPv6 enabled** next to **Ethernet**.

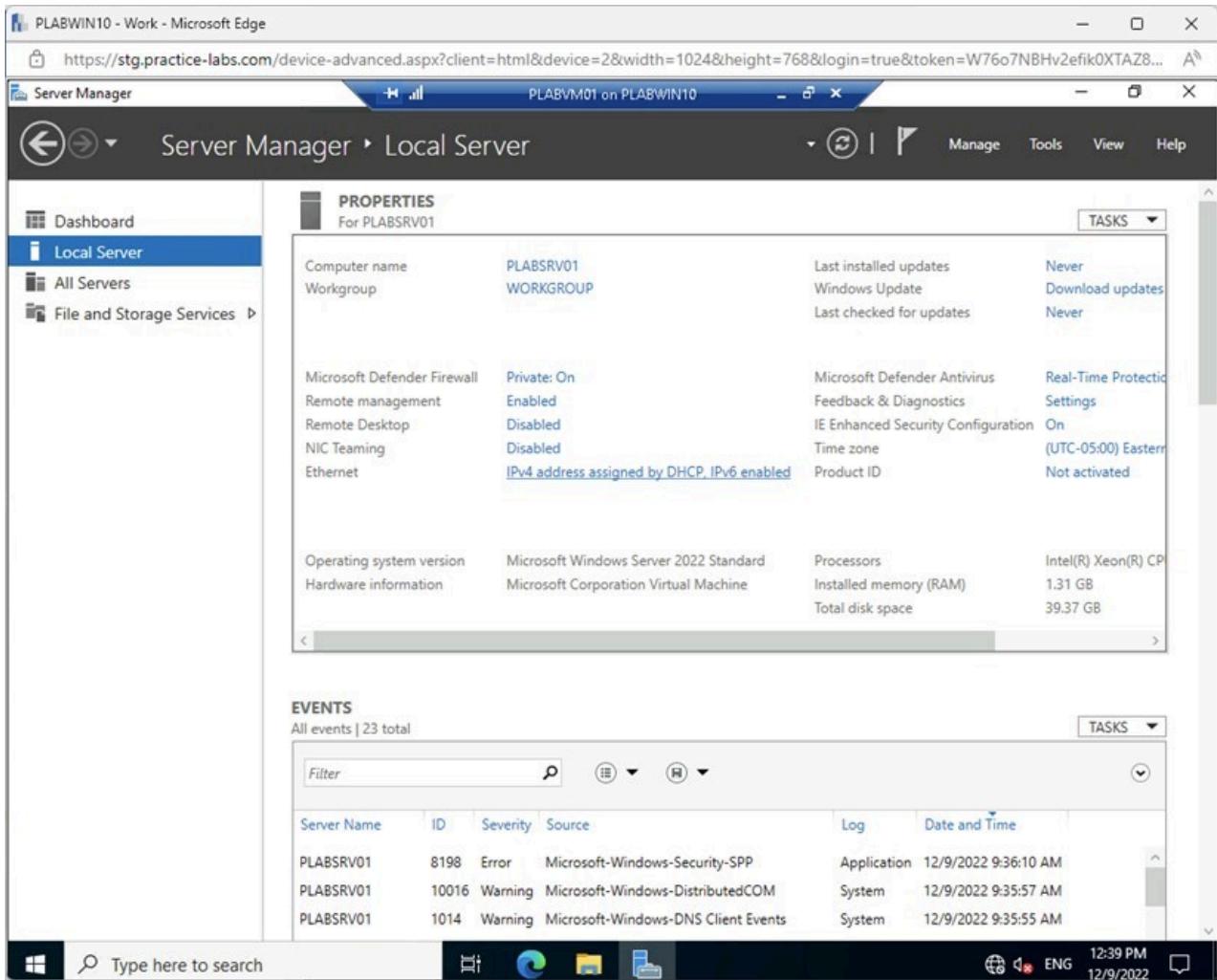


Figure 1.45 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Required option is selected on the Server Manager > Local Server window.

Step 21

In the **Network Connections** window, select and right click on **Ethernet**.

Select **Properties** from the context menu

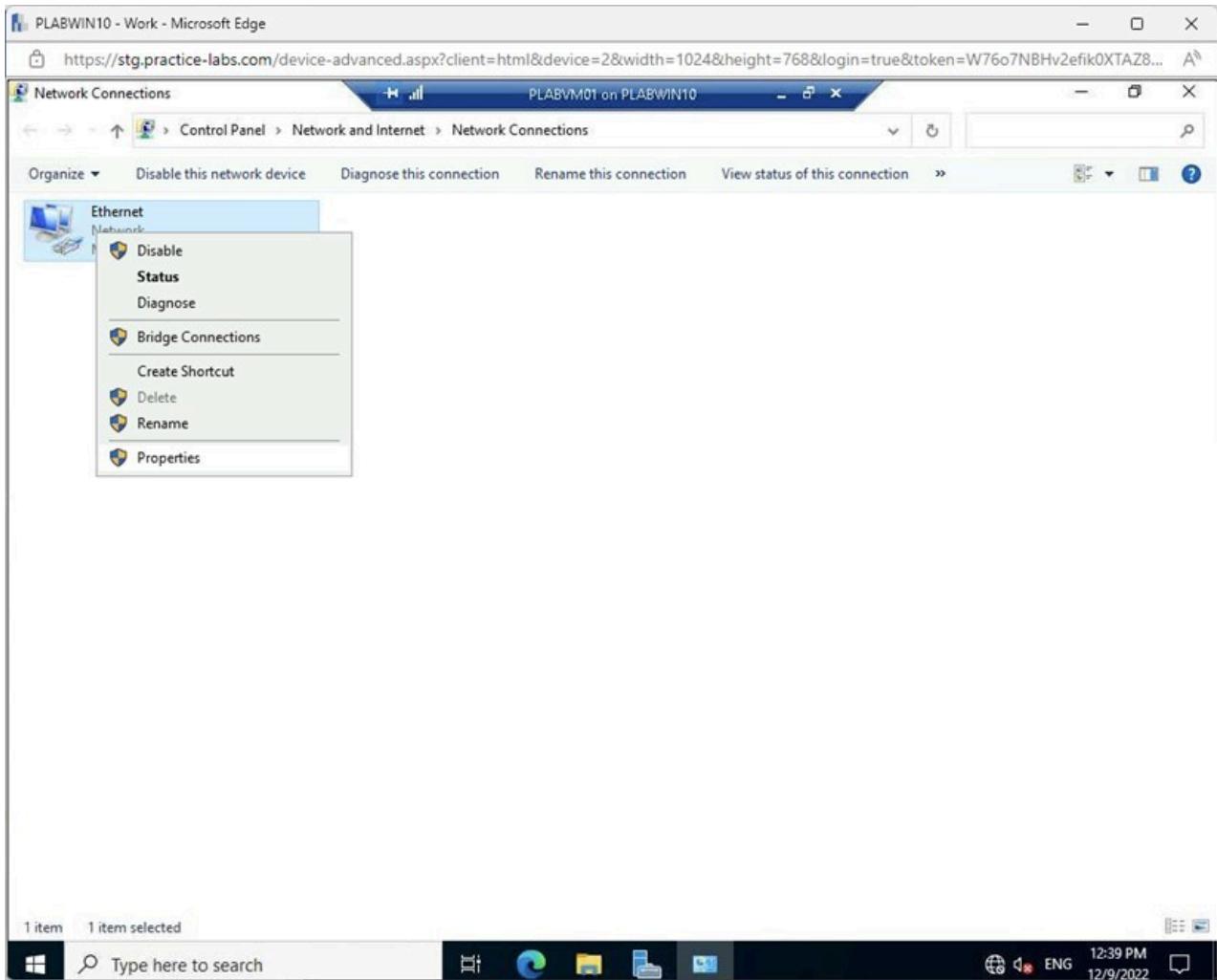


Figure 1.46 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Network Connections window is displayed, showing Ethernet right-clicked and Properties is selected.

Step 22

In the **Ethernet Properties** dialog box, select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.

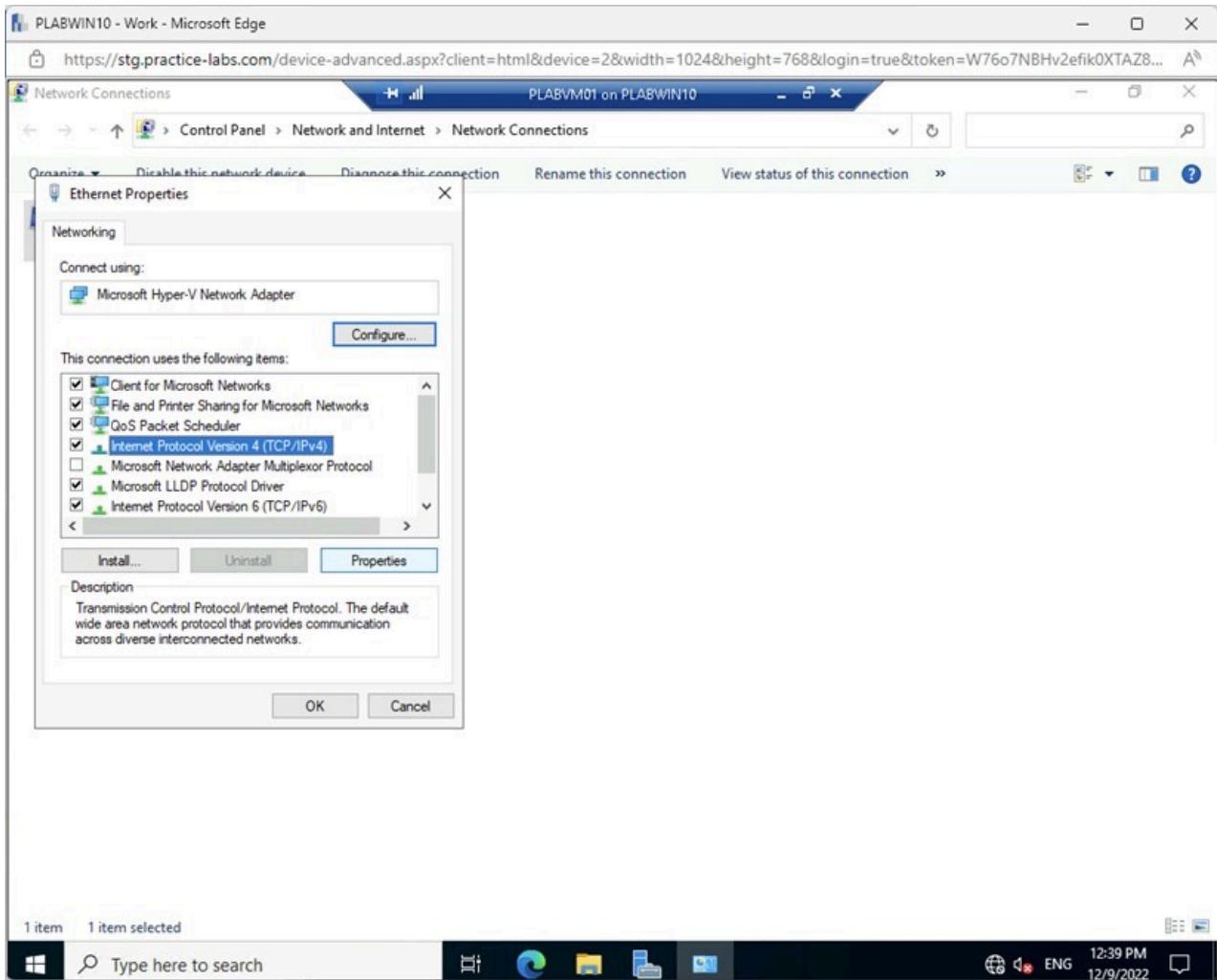


Figure 1.47 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Ethernet Properties dialog box is displayed, showing the Properties button selected.

Step 23

In the **Internet Protocol Version 4 (TCP/IPv4) Properties** dialog box, select the radio button next to **Use the following DNS server addresses** and type the following:

Preferred DNS server: 8.8.8.8
Alternate DNS server: 8.8.4.4

Click **OK**.

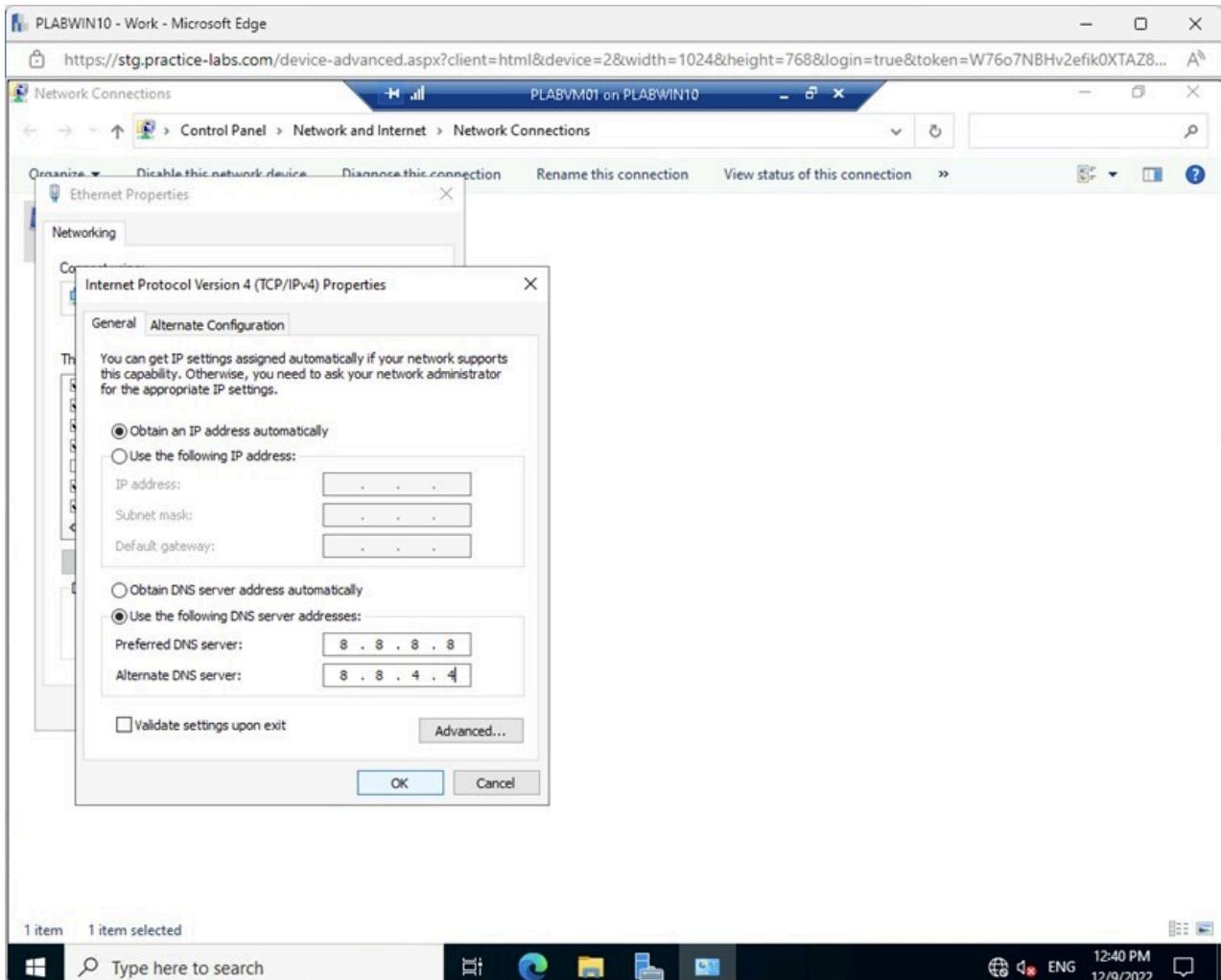


Figure 1.48 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Internet Protocol Version 4 (TCP/IPv4) Properties dialog box is displayed, showing the required settings performed and the OK button selected.

Step 24

In the **Ethernet Properties** dialog box, click **Close**.

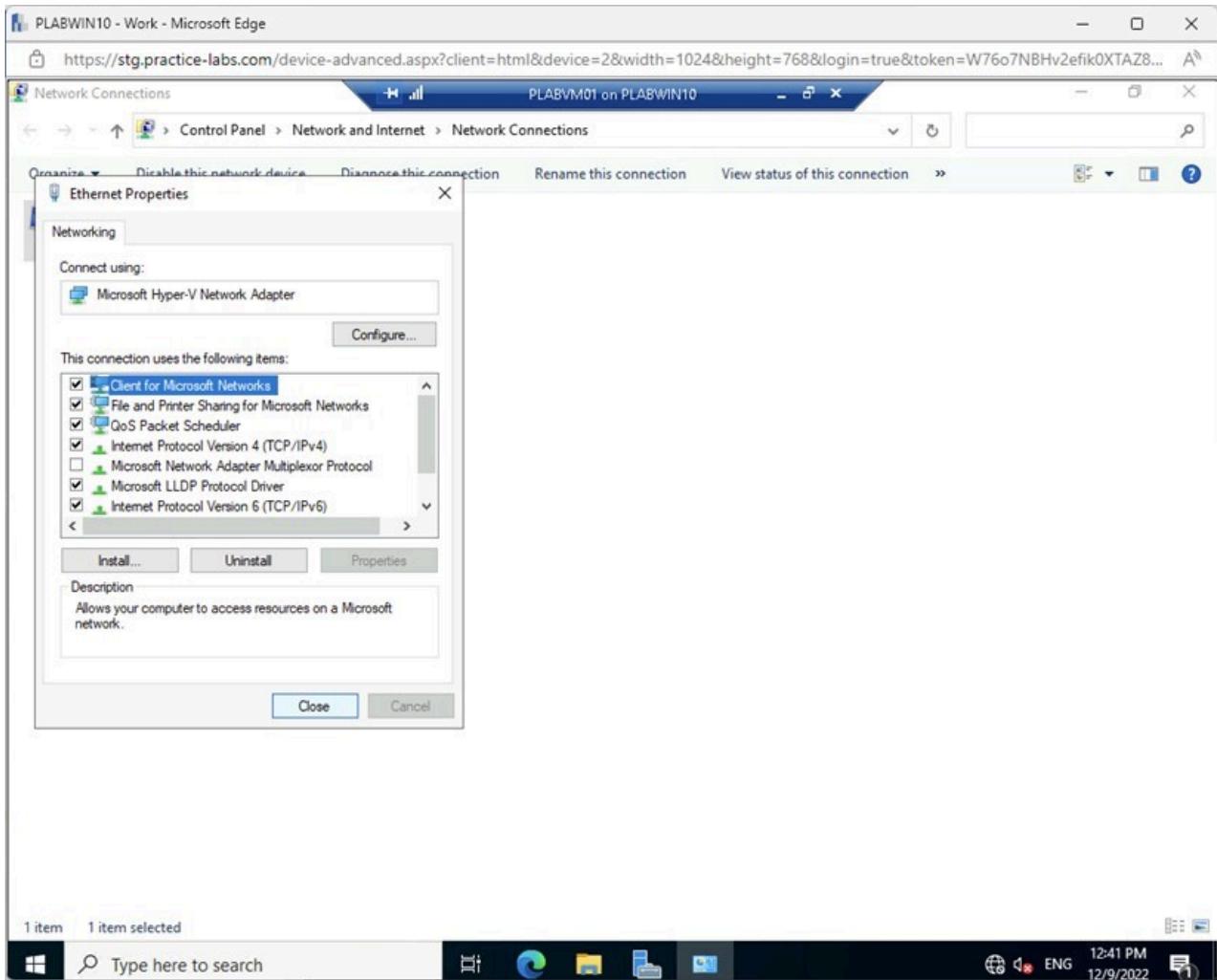


Figure 1.49 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Close button in the Ethernet Properties dialog box is selected.

Step 25

Close the **Network Connections** window.

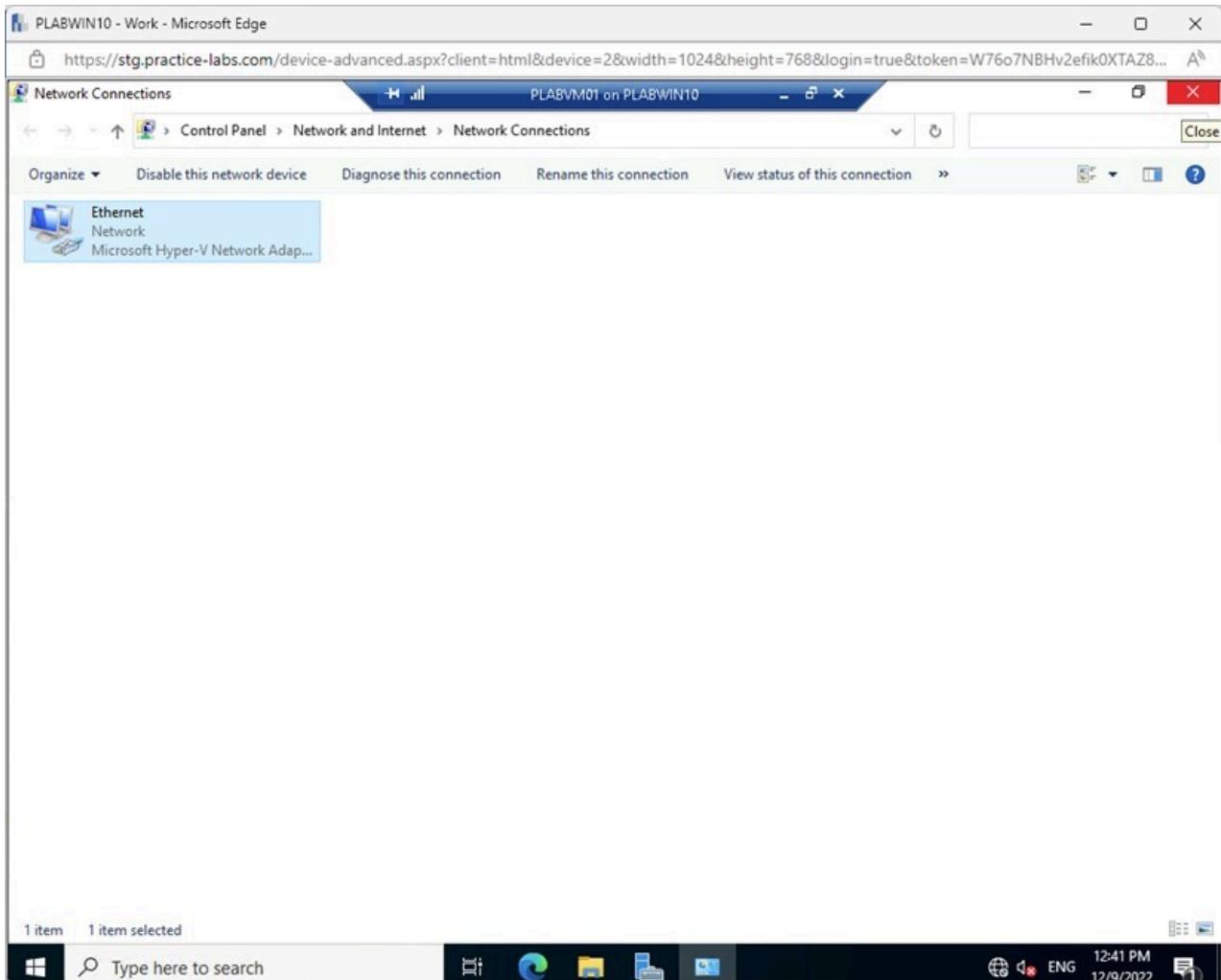


Figure 1.50 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Close icon in the Network Connections window is selected.

Step 26

In the **Server Manager > Local Server** window, in the **PROPERTIES** pane, select the hyperlink **Download updates only, using Windows Update** next to **Windows Update**.

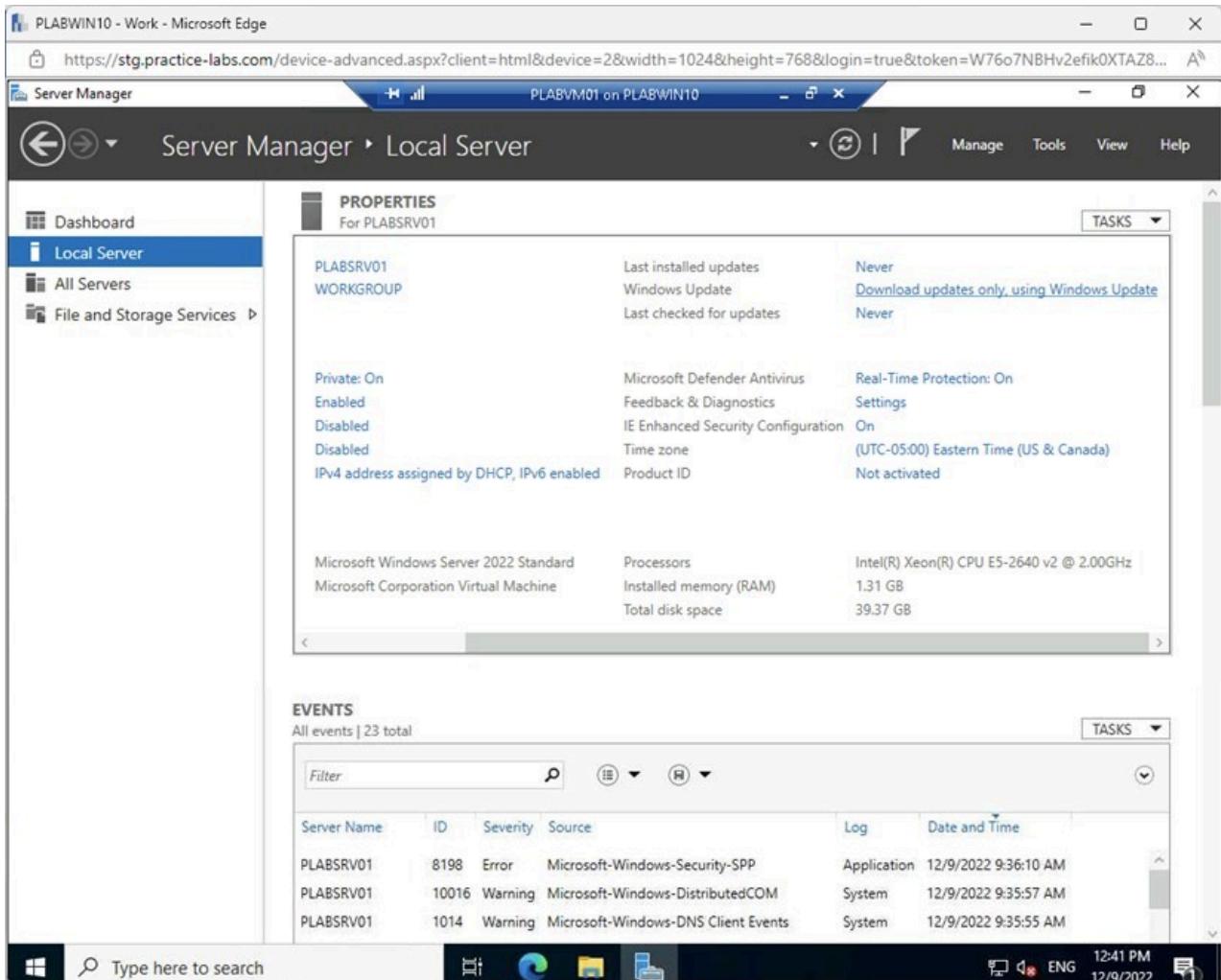


Figure 1.51 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Required option is selected on the Server Manager > Local Server window.

Note: To view the **Download updates only, using Windows Update** hyperlink, you may have to use the horizontal scroll bar at the bottom of the **PROPERTIES** pane in **Server Manager**.

Step 27

In the **Settings - Windows Update** pane, click the **Check for updates** button.

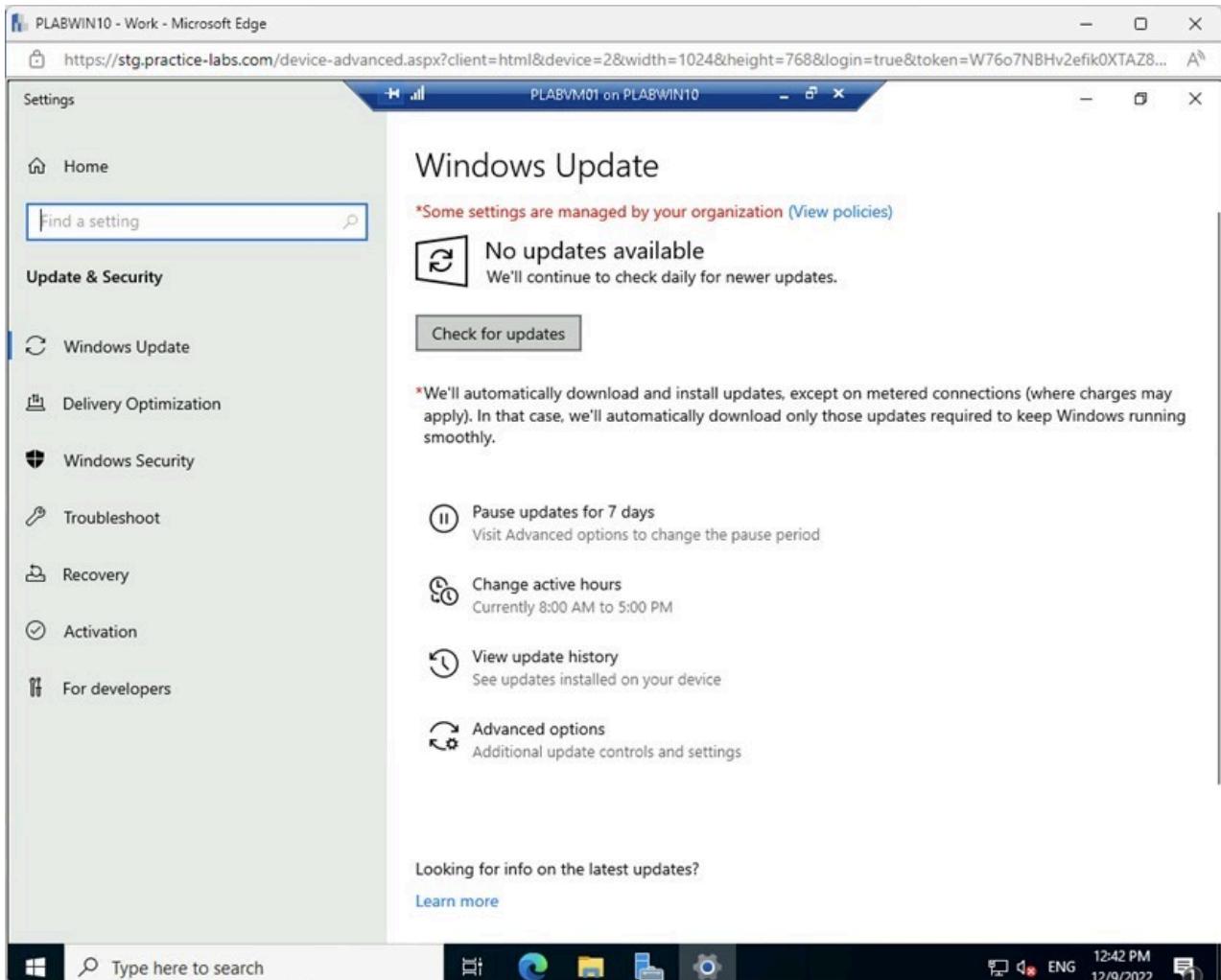


Figure 1.52 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Check for updates button in the Settings - Windows Update pane is selected.

Note: This process could take several minutes.

Step 28

Notice how the Windows updates start to download and install.

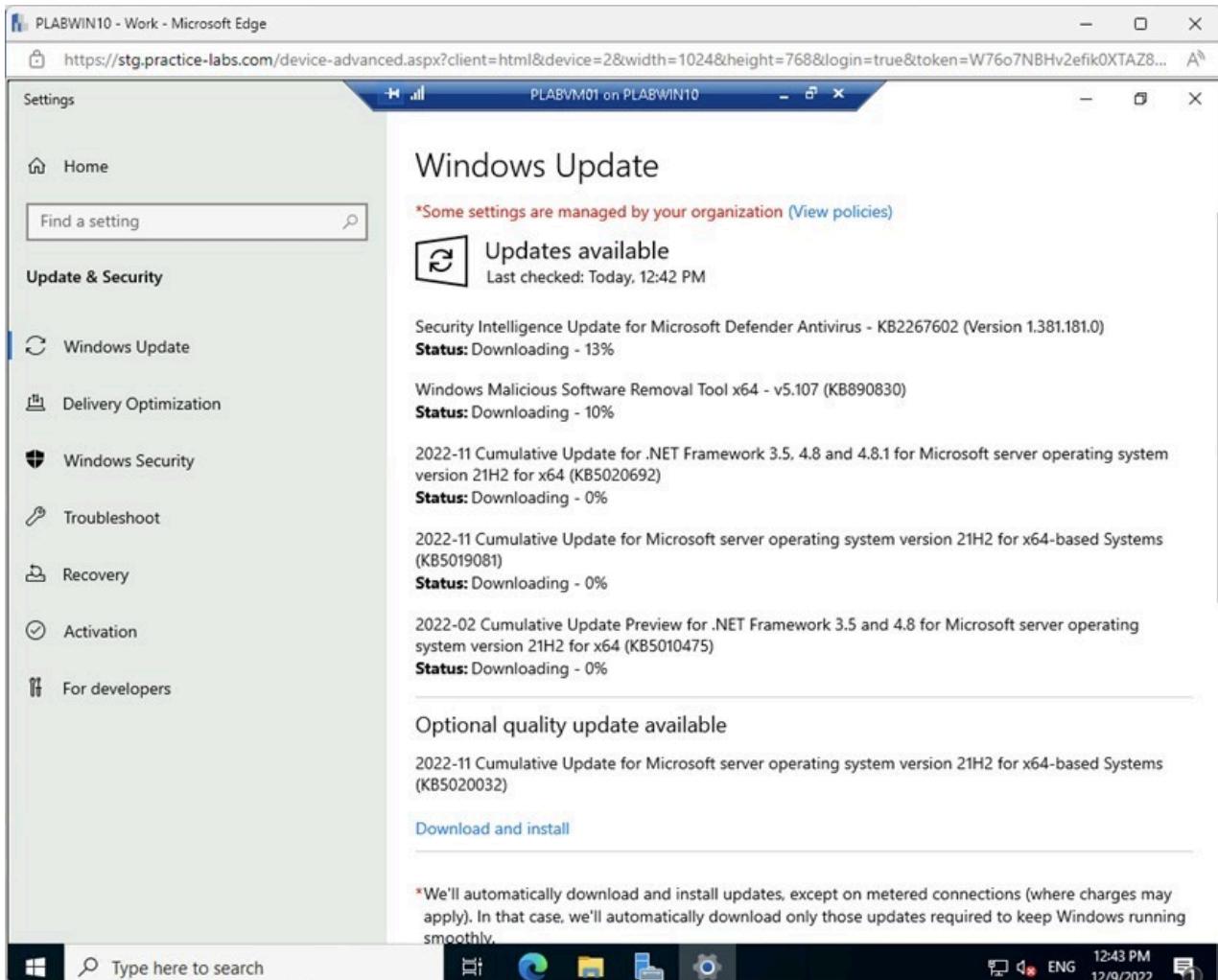


Figure 1.53 Screenshot of PLABWIN10: Displaying the PLABVM01 on PLABWIN10 connection window. Status of the different windows updates is shown in the Settings - Windows Update pane.

Note: Completing the Windows Update process is not required for this lab. This is for demonstration purposes.

Step 29

Click the **Close** icon on the **PLABVM01 on PLABWIN10** connection window.

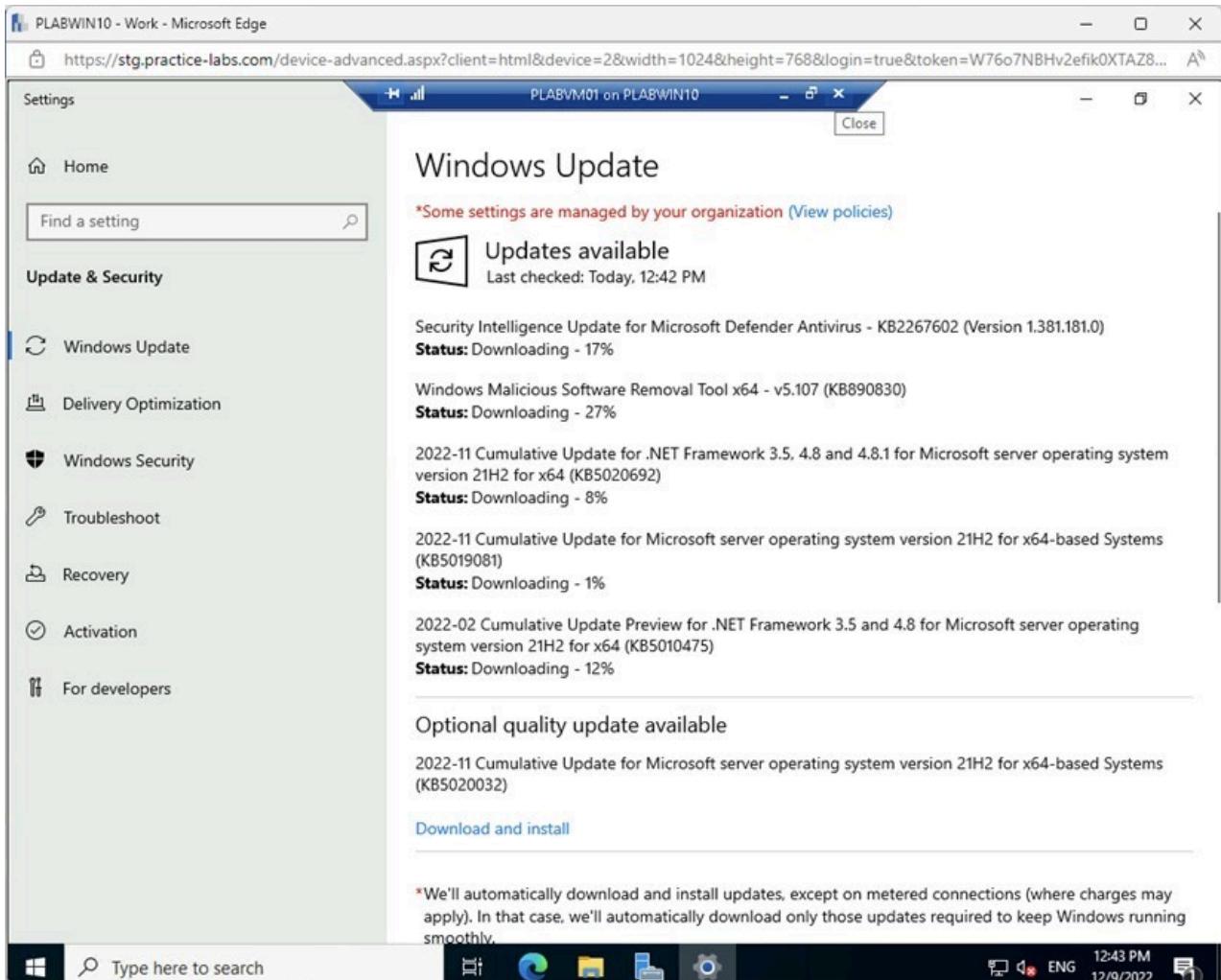


Figure 1.54 Screenshot of PLABWIN10: Displaying closing the PLABVM01 on PLABWIN10 connection window.

Step 30

In the **Hyper-V Manager** window, under the **Virtual Machines** pane, select and right click on **PLABVM01** and select **Turn off**.

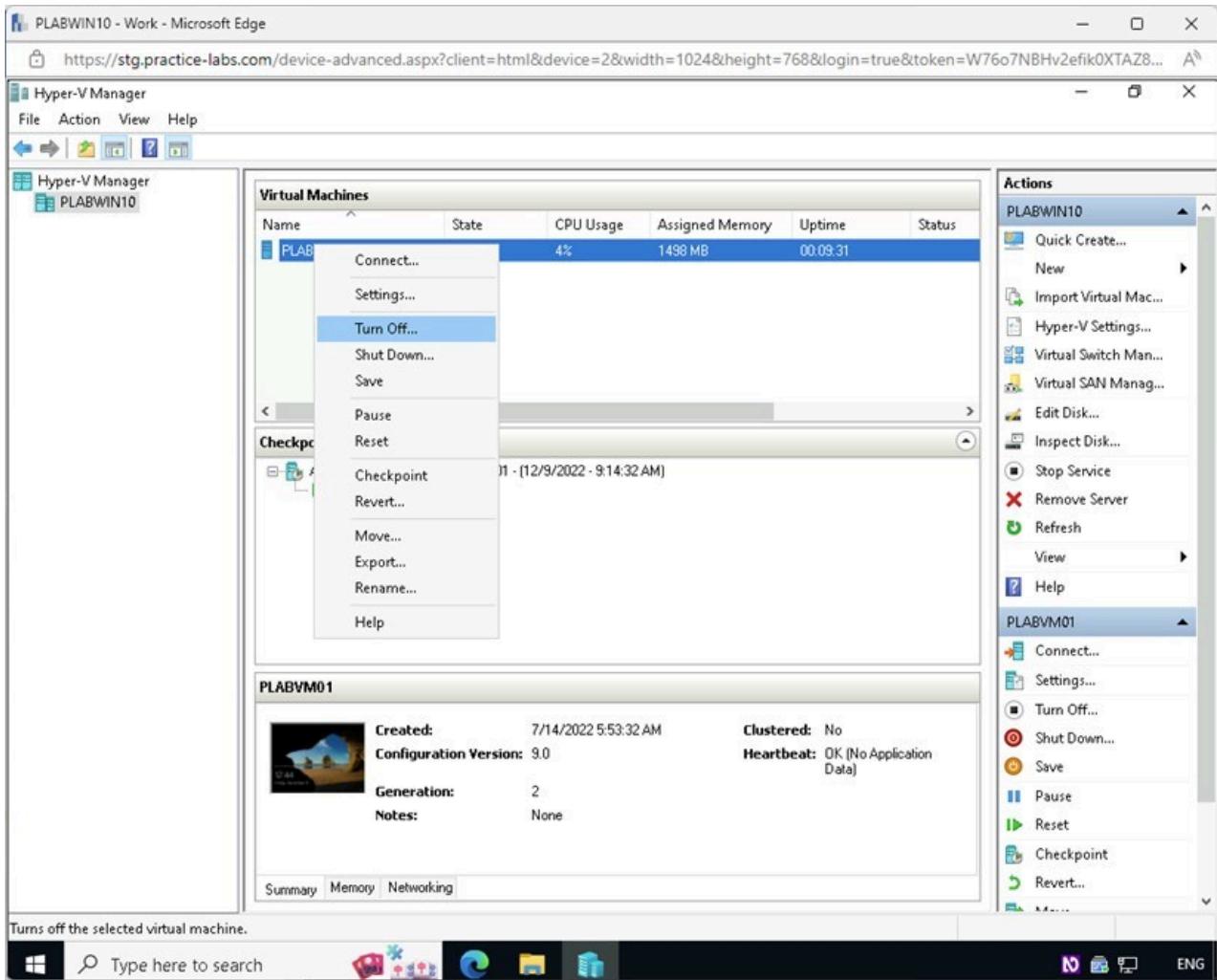


Figure 1.55 Screenshot of PLABWIN10: Displaying right-clicking on PLABVM01 and selecting Turn off in the Hyper-V Manager window.

Keep all devices that you have powered on in their current state and proceed to the review section.

Review

Well done, you have completed the **Server Operating Systems Installation Methods** Practice Lab.

Summary

You completed the following exercise:

- Exercise 1 - Perform a Local Installation of Windows Server 2022

You should now be able to:

- Prepare a Windows Virtual Machine
- Install the Windows Server 2022 Operating System
- Configure Windows Server 2022

Feedback

Shutdown all virtual machines used in this lab. Alternatively, you can log out of the lab platform.