Lab 1 Deploying and Configuring Virtual Machines

Objective: Create and prepare a virtual machine for use

In this lab, you perform the following tasks:

1. Access Your Student Desktop

2. Create a Virtual Machine

3. Install VMware Tools

4. Copy Files to the Desktop

In this lab, you use vSphere Client to perform the tasks.

Task 1: Access Your Student Desktop

The system assigned to you serves as an end-user terminal. You access and manage the lab environment from the student desktop.

1. Connect to the lab environment using Remote Desktop Connection.

2. Log in to your student desktop login as vclass\administrator with the password VMware1!.

Task 2: Create a Virtual Machine

You create a virtual machine based on specific requirements, such as a particular operating system or hardware configuration. You create a virtual machine that you use in this task only. In subsequent tasks, prebuilt virtual machines are in place.

1. From your student desktop , connect to your VMware Host Client.

    a. Click the Firefox icon from the taskbar of your student desktop.

2. Log in with the host user name root and the password VMware1!.

3. The Host Client opens with **Host** selected in the Navigator pane.

    storage **new datastor** Create New VMFS datastore name `Class-datasotre`

4. In the right pane, click **Create/Register VM** to open the New virtual machine wizard.

5. On the Select creation type page, verify that **create a new virtual machine** is selected and click **Next**.

6. On the Select a name and guest OS page, configure settings for your virtual machine.

    a. Name your virtual machine `Win01`.

    b. From the **Compatibility** drop-down menu, select **ESXi 6.7 virtual machine**.

    c. From the **Guest OS family** drop-down menu, select **Windows**.

7. On the Select storage page, select the **Class-Datastore** datastore and click **Next**.

8. On the Customize settings page, configure settings.

   a. From the **CPU** drop-down menu, select **1**.

   b. Enter `1024 MB` in the **Memory** text box and enter `12 GB` in the **Hard Disk 1 Thin** text box.

   c. Find CD/DVD Drive 1 and select **Datastore ISO file** from the drop-down menu.

   d. In the Datastore browser window, select `Class-Datastore` for the sa-esxi-01.vclass.local ESXi host.

   e. From the Class-Datastore, navigate to the Windows 10 operating system ISO image:

      `en_windows_8_enterprise_version_1607_9714415.iso`

   f. Click **Select**.

   g. Click the arrow next to CD/DVD Drive 1.

   h. Verify that the **Connect at power on** check box is selected and click **Next**.

9. On the Ready to Complete page, review the information and click **Finish**.

10. In the Navigator pane, verify that the virtual machine number count is 4.

11. In the Navigator pane, select **Virtual Machines** and verify that your newly created virtual machine appears in the right pane.

12. Click on the **Win01** virtual machine name in the right pane.

> **NOTE**
>
> Be sure to click the name of the VM, not just the row. The center pane will update to display information about the selected virtual machine.

13. Examine the General Information pane, Hardware Configuration pane, and Resource Consumption pane to review the current settings.

14. In the Hardware Configuration pane, expand **Hard disk 1** and record the information.

   • Backing _____

   • Capacity _____

   • Thin provisioned _____

> **NOTE**
>
> In a production environment, the next step is to install an operating system to the new virtual machine. In order to conserve class and lab time, task 3 uses a prebuilt virtual machine with a Guest operations system already installed.

Task 3: Install VMware Tools

The virtual machine used to continue the lab has the operating system installed and optimized. To continue, you install VMware Tools™ in the Win10-01 virtual machine using your keyboard.

1. In VMware Host Client for sa-esxi-01.vclass.local Navigator pane, click **Virtual Machines**.

2. In the center pane, right-click your **Win01** virtual machine and select **Power > Power on**.

3. Once the VM has completely powered on, right-click your Win10-01 virtual machine and select **Console > Open console in a new tab**.

4. You are logged in to the Win10-01 virtual machine as vclass\administrator with the password VMware1!.

5. In VMware Host Client for sa-esxi-01.vclass.local, right-click your Win10-01 virtual machine and select **Guest OS > Install VMware Tools**.

6. Return to the Win10-01 Console tab, right-click the **Win01 Console** tab and select **Reload Tab** from the drop-down menu.

7. Using your keyboard, click the **Tab key** to navigate to and select the **Windows Start** icon in the lower left corner of the Win01 desktop.

8. Once the Windows Start icon is selected, press the **Enter** key on your keyboard.

    The Windows Start menu opens.

9. Press the **Tab** key twice to select the second column of the Windows Start menu.

10. Press the **downward arrow** key until **Windows System** is selected, then press the **Enter** Key.

11. Press the **downward arrow** key until **This PC** is selected, then press the **Enter** Key.

    The PC window opens.

12. Press the right arrow once, then press the **downward arrow** until **DVD Drive (D:)** is selected.

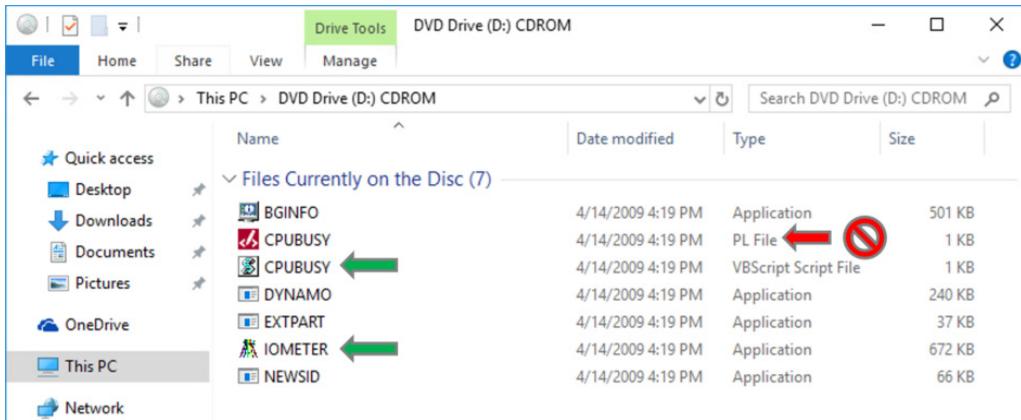13. Press the **Enter** key

    VMware Tool Setup opens.

14. Install VMware Tools.

    a. On the Welcome to the installation wizard for VMware Tools page, press the **Enter** key to select **Next**.

    b. On the Choose Setup Type page, validate that **Typical** is selected.

    c. Press the **Tab** key twice to select **Next**, then press the **Enter** key.

    d. On the Ready to Install VMware Tools page, press the **Enter** key to select **Install**.

    e. When the installation is complete, press the **Enter** key to select **Finish**.

    f. When the Windows request to restart message appears, press the **Enter** key to select **Yes** to proceed.

15. After the login page appears in the virtual machine console, you are logged in

    Leave the virtual machine console open for the next task.

Task 4: Copy Files to the Desktop

You mount an ISO image to the virtual machine's CD/DVD drive so that the files can be copied to the virtual machine desktop for use in later labs.

1. In VMware Host Client for sa-esxi-01.vclass.local, right-click virtual machine **Win01** and select **Edit Settings**.

2. Expand **CD/DVD Drive 1** by clicking the arrow next to it.

3. Select **Datastore ISO** from the **CD/DVD Drive 1** drop-down menu.

4. In the Datastore browser window, browse to **Class-Datastore** for the sa-esxi-01.vclass.local ESXi host.

5. From the Class-Datastore, select **ClassFiles-vSphere.iso** and click **Select**.

6. Verify that the **Connect at power on** check box is selected for CD/DVD Drive 1, and click **Save**.

7. Return to the **Win10-01-Console** tab.

8. Click the Windows **Start** icon and navigate to **Windows System > This PC**.

9. Double-click the DVD drive (D:) shortcut to open the **ClassFiles-vSphere.iso** image.

10. Copy the `CPUBUSY` VBScript Script file (not `CPUBUSY PL File`) and the `IOMETER` application file from the DVD drive (D:) to the virtual machine's desktop for use in later labs.

a. Press the **Ctrl** key to select the files and drag **CPUBUSY VB Script File** and **IOMETER** application to the Win10-01 desktop.

b. Close the DVD Drive (D:) CDROM screen.

c. Close the **Win10-01 - Console** tab.

11. Return to VMware Host Client and disconnect the virtual machine from `Classfiles-vSphere.iso` on the CD/DVD drive.

a. In VMware Host Client, right-click the **Win10-01** virtual machine and select **Edit Settings**.

b. In Virtual Hardware, locate **CD/DVD Drive 1**.

c. From the drop-down menu, select **Host device**.

d. Deselect the **Connect** check box next to **CD/DVD Drive 1**.

e. Click **Save**.

12. Log out of Host Client (SA-ESXi-01) and close the Firefox Web Browser.

13. Inform your instructor that you have completed this lab. If prompted, continue to the next lab.