Lab 3 Accessing iSCSI Storage

Objective: Configure access to an iSCSI datastore

In this lab, you perform the following tasks:

1. Validate an Existing ESXi Host iSCSI Configuration

2. Add a VMkernel Port Group to a Standard Switch

3. Configure the iSCSI Software Adapter

4. Connect the iSCSI Software Adapters to Storage

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

Task 1: Validate an Existing ESXi Host iSCSI Configuration

You use VMkernel interfaces to provide network connectivity for your hosts and to handle other types of traffic, such as VMware vSphere® vMotion® traffic, storage traffic, and VMware vSphere® Fault Tolerance traffic. In this task, you validate an existing VMkernel and iSCSI software adapter configuration on your first host.

1. In vSphere Client, click the **Menu** icon and select **Hosts and Clusters**.

2. In the Navigator pane, select **sa-esxi-01.vclass.local**.

3. In the right pane, the **Configure** tab is open.

4. In the center pane, select **Storage** > **Storage Adapters**.

## Task 2: Add a VMkernel Port Group to a Standard Switch

In this task you configure a VMkernel Port Group on your second host.

1. In the Navigator pane, select **sa-esxi-01.vclass.local**.

2. On the **Configure** tab, select **Networking** > **VMkernel adapters**.

3. Click the **Add Networking** icon.

   The Add Networking wizard appears.

4. On the Select connection type page, verify that **VMkernel Network Adapter** is selected and click **Next**.

5. On the Select target device page, click **Select an existing standard switch**.

6. Click **Browse** and select **vSwitch0**.

7. Click **OK**.

8. Click **Next**.

9. On the Port properties page, configure the VMkernel network settings.

   a. Enter `IP Storage` in the **Network label** text box and click **Next**.

   b. On the IPv4 settings page, click **Use static IPv4 settings**.

   c. In the **IPv4 address** text box, enter `172.20.10.61`.

   d. Enter `255.255.255.0` in the **Subnet mask** text box.

   e. Verify that the default gateway is set to 172.20.10.10.

   f. Click **Next**.

10. On the Ready to complete page, click **Finish**.

Task 3: Configure the iSCSI Software Adapter

You configure the iSCSI software adapter on your ESXi hosts and verify its iSCSI name.

1. In the Navigator pane, select ESXi host **sa-esxi-01.vclass.local**.

2. On the **Configure** tab, navigate to **Storage** and select **Storage Adapters**.

3. Click the **Add Software Adapter** icon (the plus sign).

   The Add Software Adapter wizard opens.

4. **Add software iSCSI adapter** is selected.

5. Click **OK**.

6. In the Storage Adapters list, scroll down and select the newly created iSCSI software adapter.
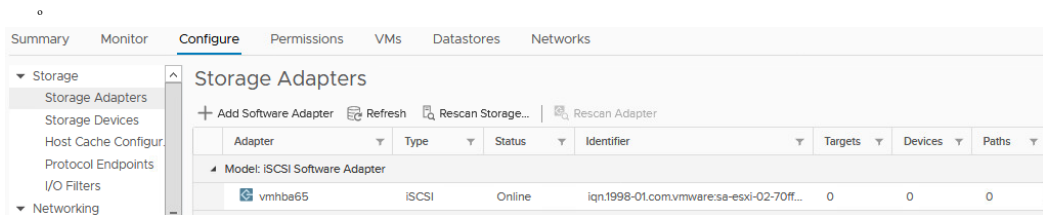
7. In the Adapter pane, click the **Properties** tab.

8. Verify that the adapter status is Enabled.

9. Click **Edit** next to General.

10. Verify that the name shown in the **iSCSI Name** text box matches `iqn.1998-01.com.vmware:sa-esxi-01-########`.

    # represents characters that might change.

11. Click **OK**.

Task 4: Connect the iSCSI Software Adapters to Storage

You connect the iSCSI adapters on the ESXi hosts to directly connect to a remote iSCSI target on the IP network.

1. In the Storage Adapter pane, click the **Network Port Binding** tab.

2. Click the **Add** icon (the plus sign).

3. Select the **IP Storage** check box and click **OK**.

4. In the Storage Adapter pane, click **Dynamic Discovery,** and click **Add**.

5. On the Add Send Target Server page, enter `172.20.10.10` for the iSCSI server name in the **iSCSI Server** text box and click **OK**.

6. Monitor the Recent Tasks pane and wait for the task to complete.

7. Click the **Rescan Storage Adapters** icon.

8. When the rescan storage message appears, click **OK** and wait for the task to complete.

9. In the Storage Adapter pane, click the **Devices** tab.

10. Verify that five LUNs appear and record the values.

     • LUN number_____

     • Capacity _____

     • Operational state_____

     • Hardware Acceleration_____

    The LUNs are hosted by an iSCSI provider and are used to create datastores in later labs.

11. Compare the results for both the hosts.

12. Leave vSphere Client open for the next lab.

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