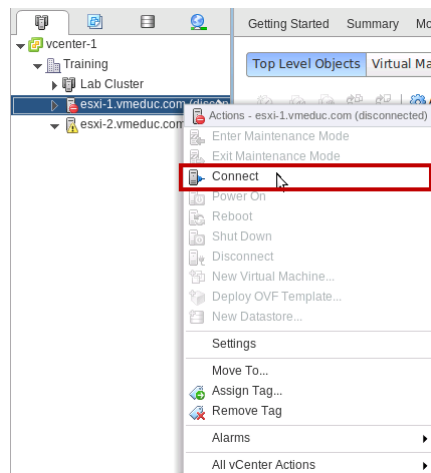


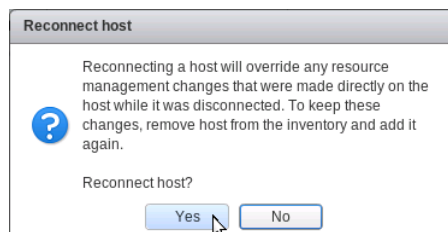
In the following pages, you will find instructions addressing possible problems you may encounter in completing each of the labs. Make sure you refer to these instructions as you complete the relevant lab tasks.

Possible Problems (General)

When the system first starts, it's possible that the infrastructure may not connect correctly. This can be identified by a red symbol appearing on the relevant infrastructure. If you encounter any problems, right click on the problem entry and click **Connect** on the pop-up menu:



The system will then show a dialog, click **Yes** to confirm the (re-)connection:

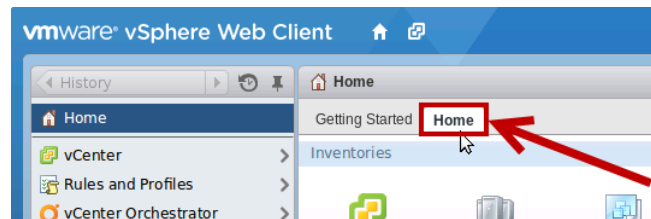


Possible Problems with Lab 10. Managing VMware vSphere VMFS

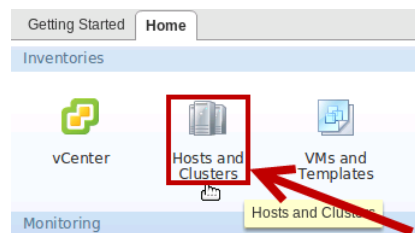
Part 1. Review Your Shared Storage Configuration

5. On the Home tab, click the Hosts and Clusters icon in the main workspace area.

Start by clicking on the Home tab, as indicated.

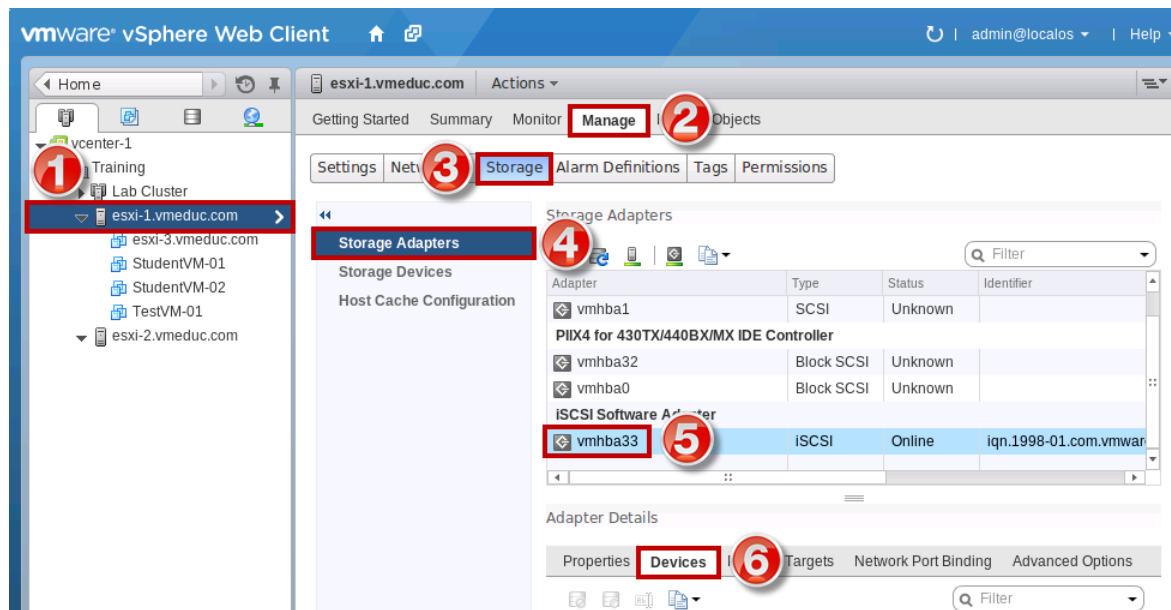


You can now click on the Hosts and Clusters icon in the Inventories section, as indicated.



Steps 6-9.

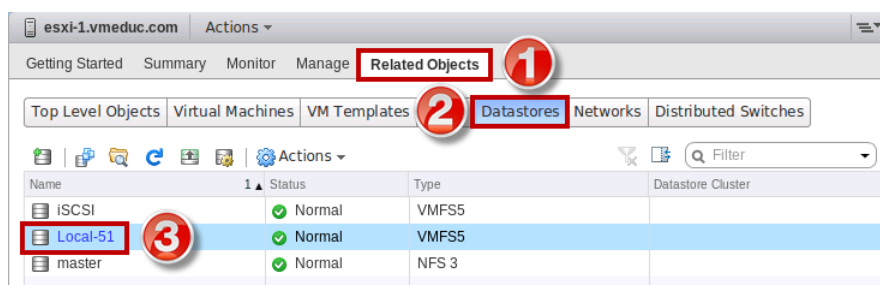
The following figure illustrates the sequence of items to click for these steps.



Part 2. Change the Name of a VMFS Datastore

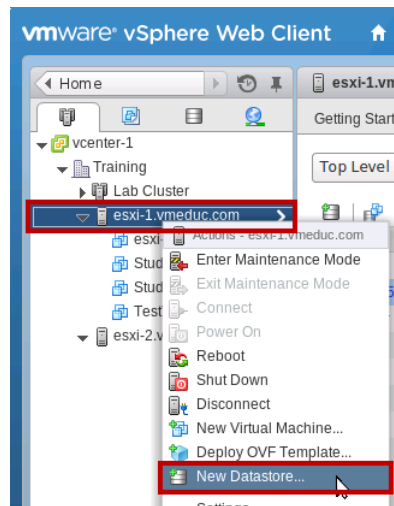
Steps 1-3.

The following figure illustrates the sequence of items to click for these steps.



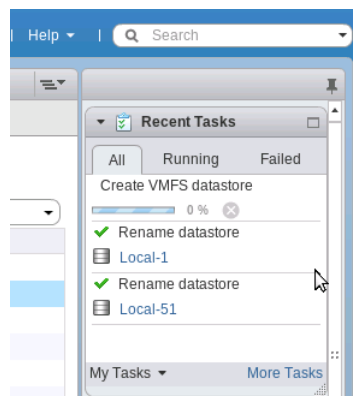
Part 3. Create VMFS Datastores

1. In the Object Navigator pane, right-click the **esxi-1.vmeduc.com** host server, then choose **New Datastore**. The New Datastore wizard appears.



10. Wait for the task to complete. Monitor its completion in the Recent Tasks pane.

The Recent Tasks pane is located towards the top-right of the web browser window.



14. Repeat the previous steps to add a datastore named **Shared-02** using **LUN 2** as a **VMFS-5** file system while maximizing the available space.

The following five figures illustrate the key entries in the New Datastore dialog.

Figure 1.

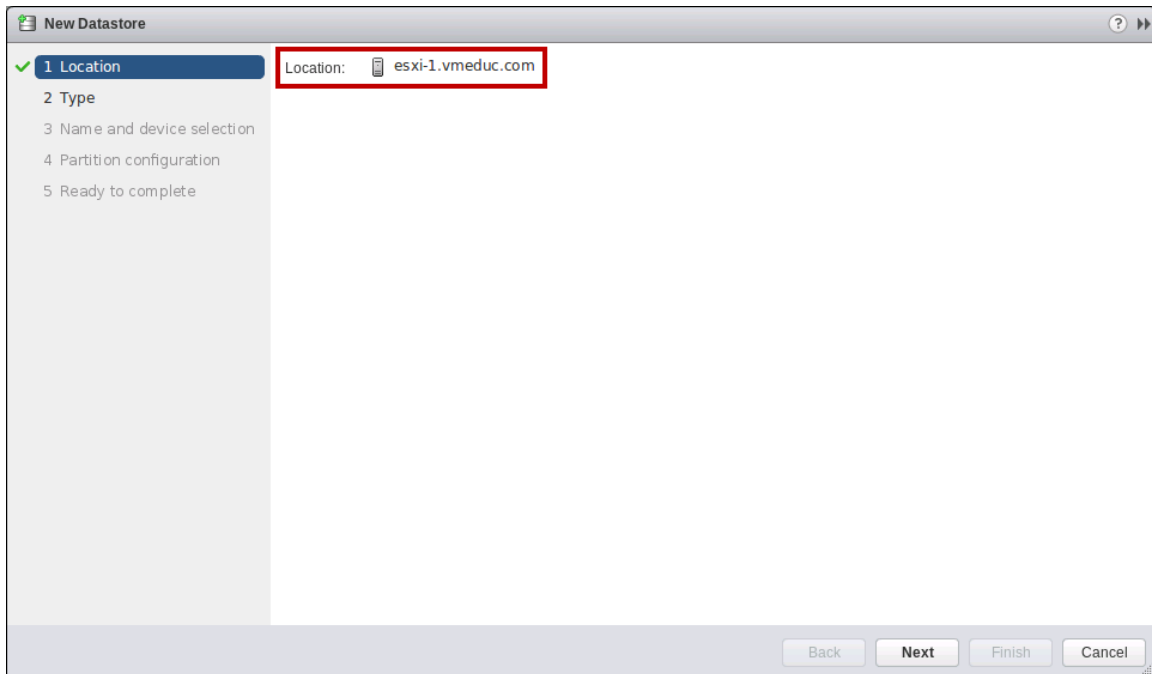
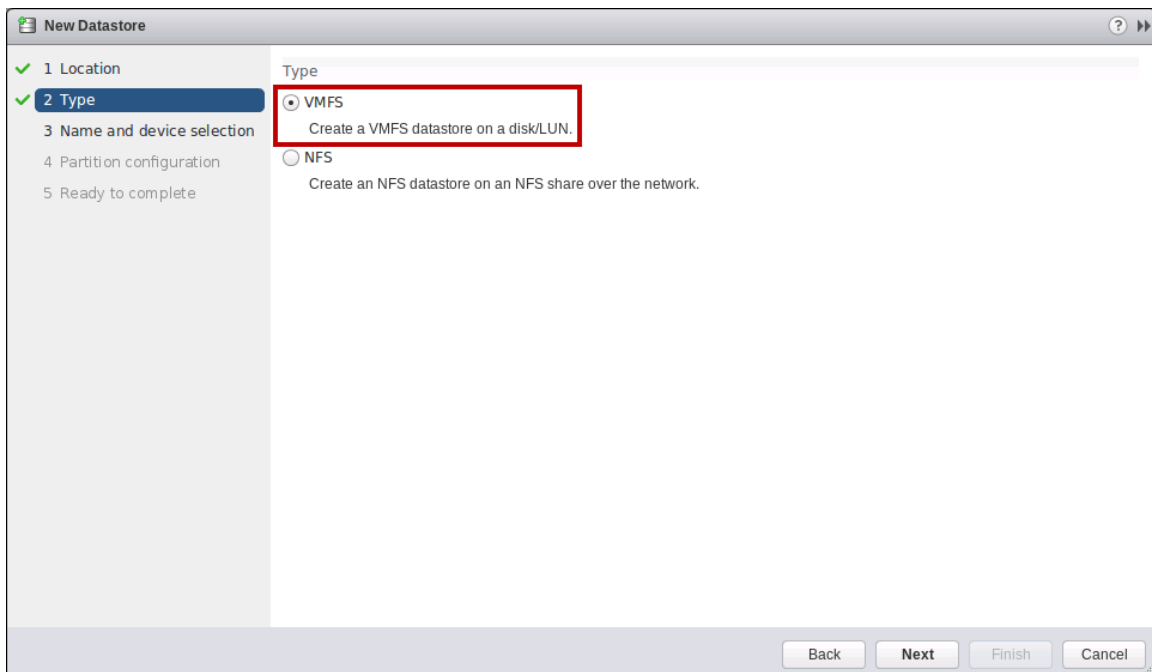


Figure 2.



[illegible]

New Datastore

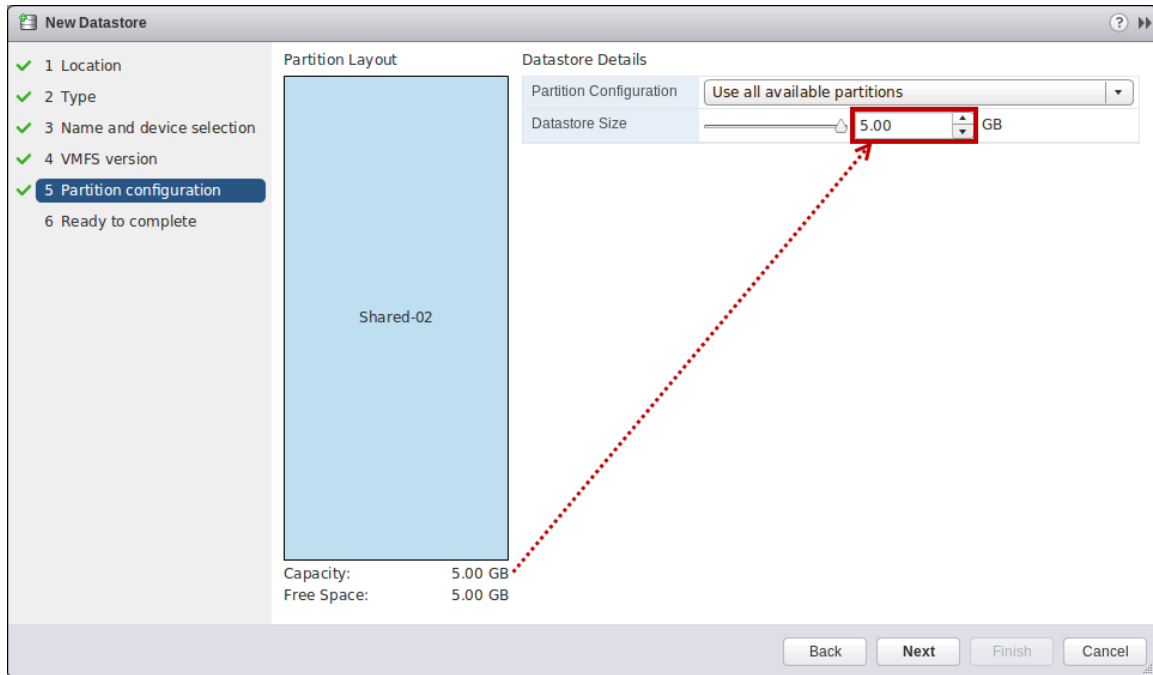
- ✓ 1 Location
- ✓ 2 Type
- ✓ 3 Name and device selection
- ✓ 4 VMFS version
- 5 Partition configuration
- 6 Ready to complete

☒ VMFS 5
VMFS 5 enables 2+TB LUN support.

☐ VMFS 3
VMFS 3 allows the datastore to be accessed by ESX/ESXi hosts of version earlier than 5.0.

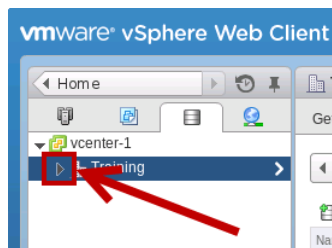
Back Next Finish Cancel

Figure 5.



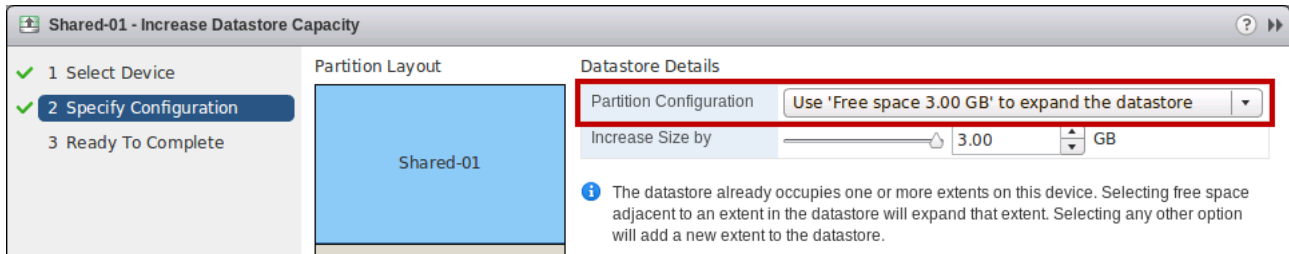
16. You should now see the two new datastores listed in the Object Navigator pane.

If you can't see the new Shared-01 and Shared-02 datastores, you may first need to expand the Training datacentre by clicking on the triangle next to it, as indicated.

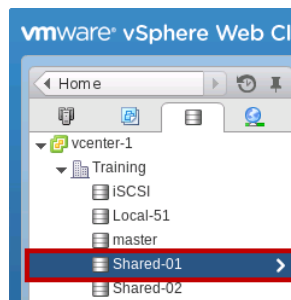


Part 4. Expand the VMFS Datastore to Consume Unused Space on a LUN

4. On the *Specify Configuration* page, **select Use 'Free space 3.00GB' to expand the datastore** from the *Partition Configuration* drop-down box and click **Next**.

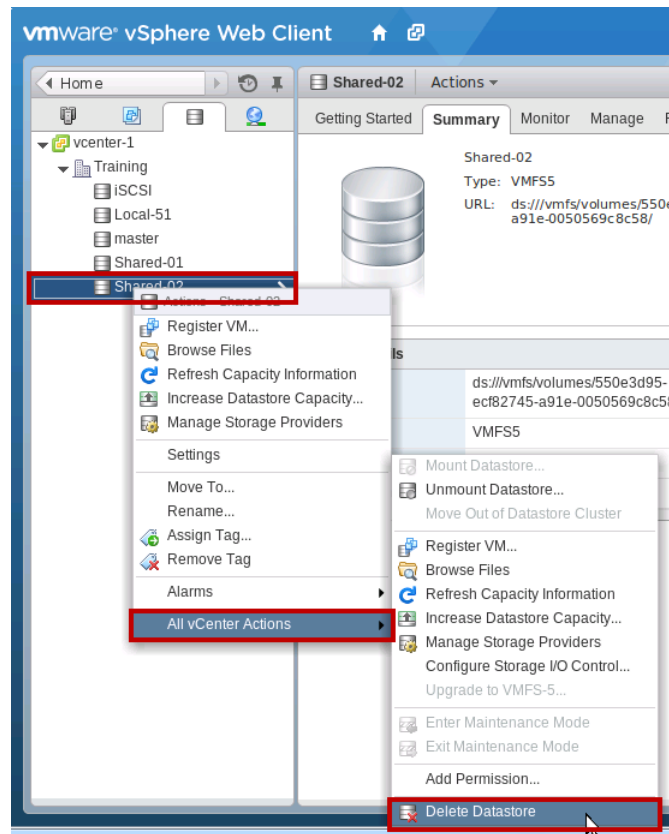


6. After the task is complete, click on **Shared-01** in the *Object Navigator* pane and verify that the size of your datastore has been increased to the maximum capacity (less space for system overhead) of 9.75GB.



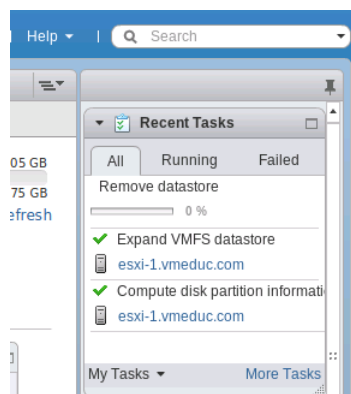
Part 5. Remove a VMFS Datastore

1. In the Datastore inventory view, right-click on **Shared-02**, then choose **All vCenter Actions**, then **Delete Datastore**.



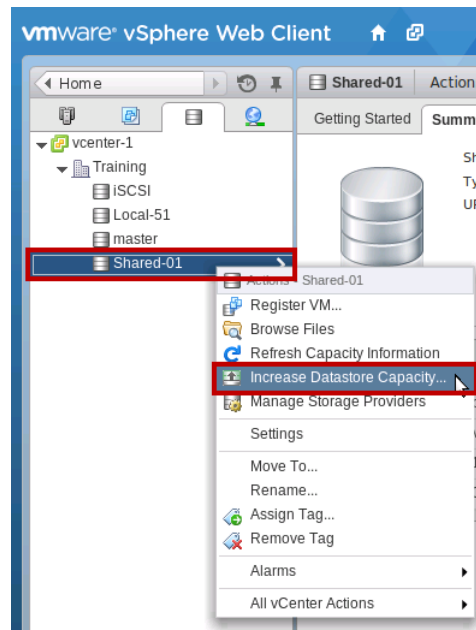
3. Verify that the datastore has been removed from the inventory. This process may take a few minutes.

The progress of this task can be tracked in the Recent Tasks pane at the top-right of the browser window.

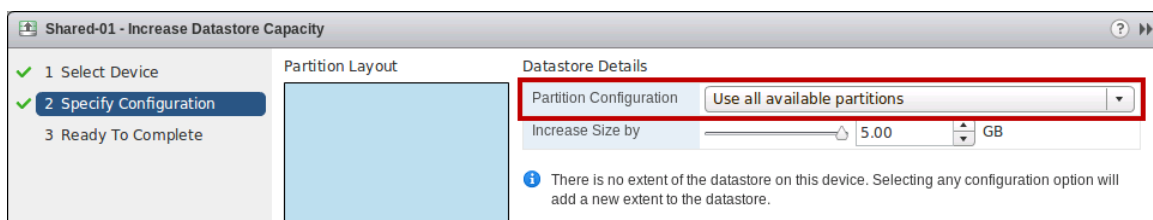


Part 6. Extend a VMFS Datastore

1. In the Datastore inventory view, right-click on **Shared-01**, and then select **Increase Datastore Capacity**.

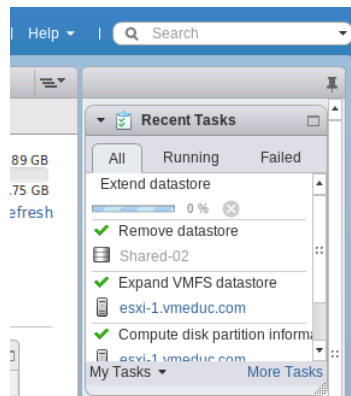


3. On the Specify Configuration page, select **Use all available partitions** in the Partition Configuration, and click **Next**.



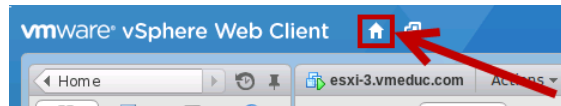
5. After the task is complete, verify that the capacity of the Shared-01 datastore has updated to 14.5GB.

The progress of this task can be tracked in the Recent Tasks pane at the top-right of the browser window.



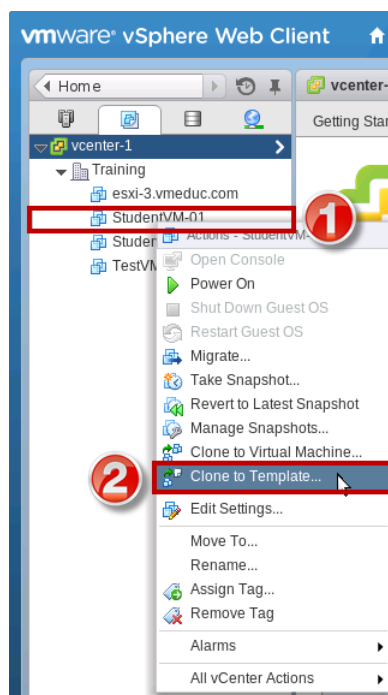
Possible Problems with Lab 11. Using Templates and Clones

The start of this lab task assumes that you have just started an equipment POD. In this case, we already have a running POD, so begin the new lab by clicking on the Home button, then continuing the instructions from Step 5.



Part 1. Clone a Virtual Machine to a Template

7. Right click on the StudentVM-01 in the inventory view and select Clone to Template.



11. On the Select storage page, click the drop-down box next to Select virtual disk format: and select Thin provision

12. Make sure iSCSI is highlighted and click Next.

Note that you may need to repeat Step 11 after completing Step 12, which can reset the virtual disk format.

StudentVM-01 - Clone Virtual Machine To Template

1 Edit settings

- 1a Select a name and folder
- 1b Select a compute resource
- 1c Select storage**
- 2 Ready to complete

Select virtual disk: **1** Thin Provision **3**

VM Storage Policy: None

The following datastores are accessible from the destination resource that you selected. Select the destination datastore for the virtual machine configuration files and all of the virtual disks.

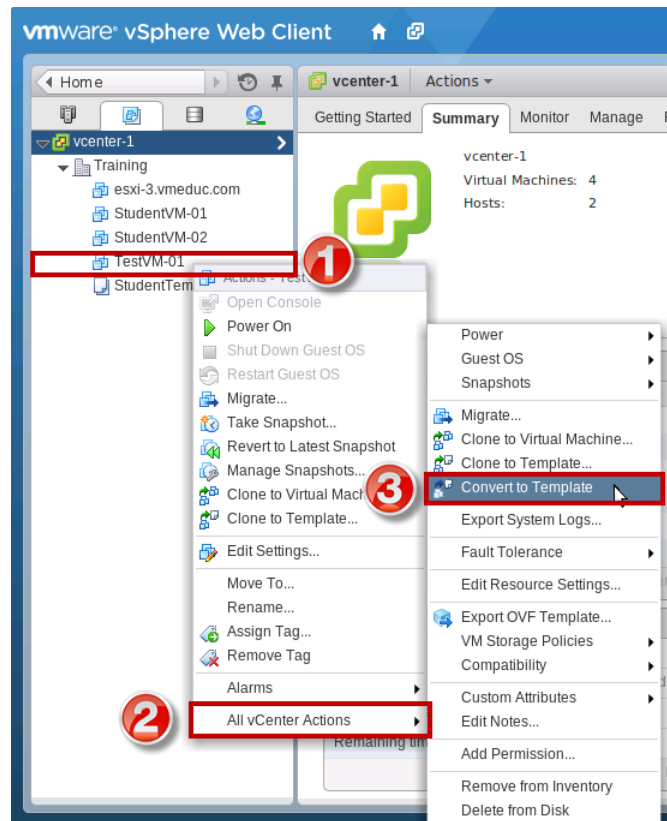
Name	Capacity	Provisioned	Free	Type	Storage DRS
master	18.76 GB	7.71 GB	17.26 GB	NFS	
Shared-01	14.50 GB	900.00 MB	13.62 GB	VMFS 5	
Local-51	9.75 GB	20.78 GB	7.42 GB	VMFS 5	
iSCSI	6.75 GB	8.35 GB	4.60 GB	VMFS 5	

Compatibility:

Back Next Finish Cancel

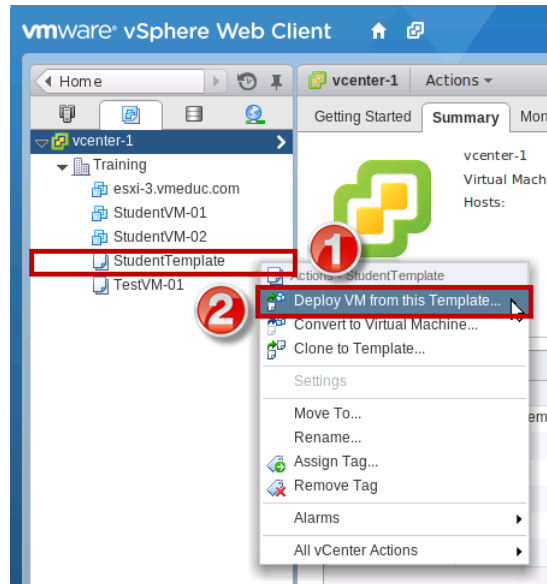
Part 2. Convert a Virtual Machine to a Template

12. Make sure iSCSI is highlighted and click Next.

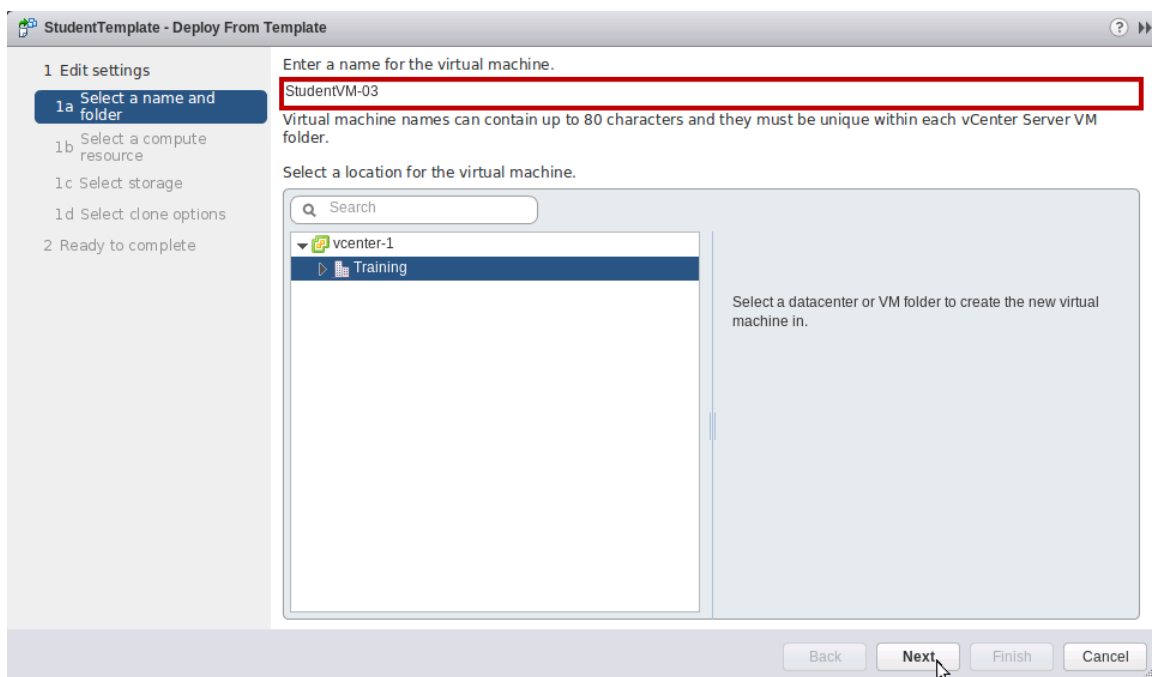


Part 3. Deploy a Virtual Machine from a Template

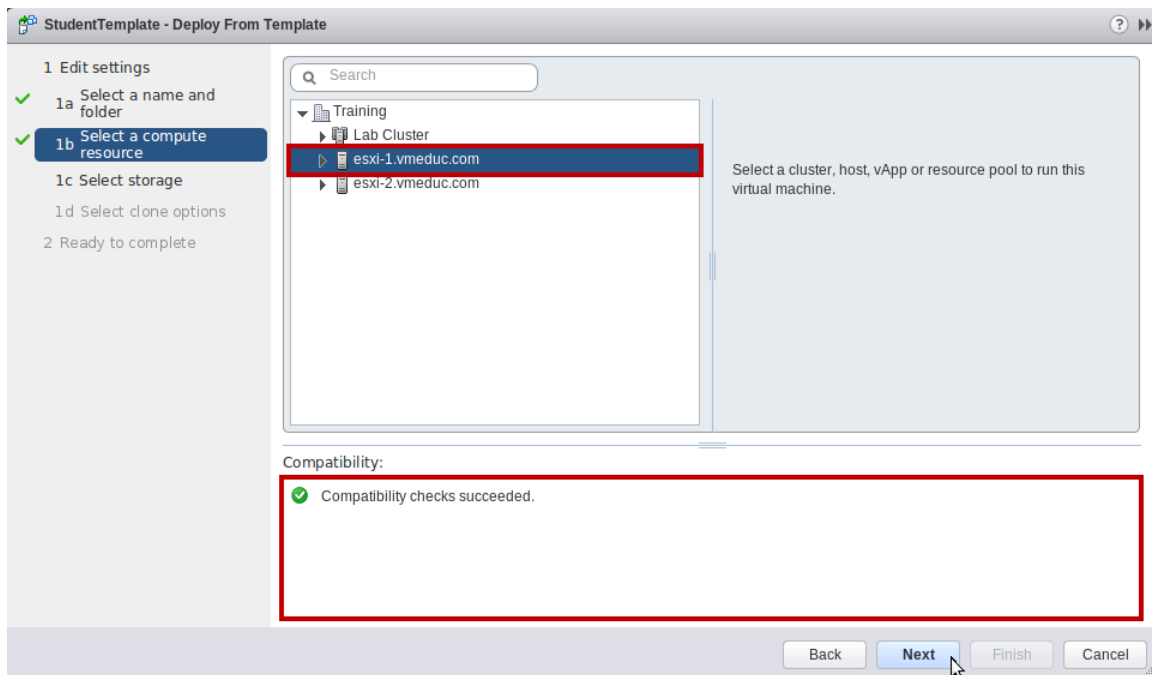
1. In the Object Navigator pane, right-click *StudentTemplate* and select *Deploy VM from this Template* from this Template.



2. On the *Select a name and folder* page, use *StudentVM-03* as the name for the virtual machine and click *Next*.



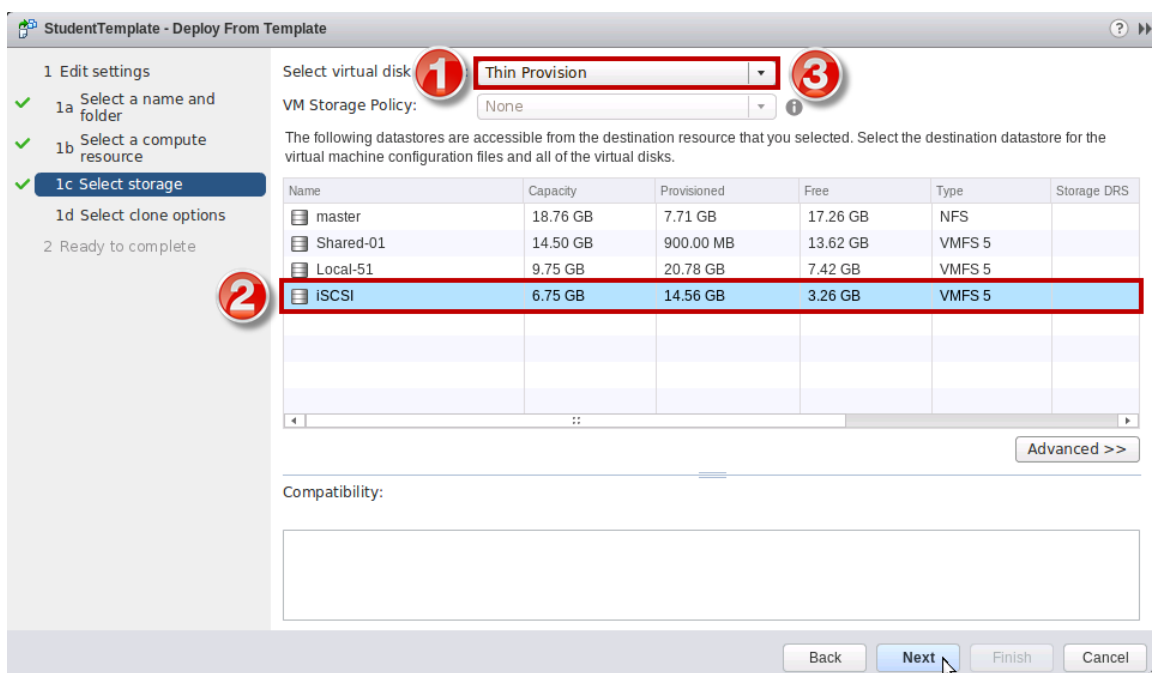
3. On the *Select a compute resource* page, select the *esxi-1.vmeduc.com* host. When you select the host, a validation window will open and close and the *Compatibility* check should have succeeded. Click *Next*.



4. On the *Select storage* page, click the drop-down box next to *Select virtual disk format*: and select *Thin Provision*.

5. Make sure *iSCSI* is highlighted and click *Next*.

As previously, note that you may need to repeat Step 4 after completing Step 5, which can reset the virtual disk format.



6. On the *Select clone options* page, leave the defaults and click *Next*

The screenshot shows a Windows-style wizard window titled "StudentTemplate - Deploy From Template". On the left is a vertical pane with a list of steps: "1 Edit settings", "1a Select a name and folder", "1b Select a compute resource", "1c Select storage", "1d Select clone options" (which is highlighted with a blue background and a green checkmark), and "2 Ready to complete". The main area of the wizard contains three unchecked checkboxes: "Customize the operating system", "Customize this virtual machine's hardware (Experimental)", and "Power on virtual machine after creation". At the bottom right, there are four buttons: "Back", "Next" (highlighted in blue with a mouse cursor pointing at it), "Finish", and "Cancel".

StudentTemplate - Deploy From Template

1 Edit settings

✓ 1a Select a name and folder

✓ 1b Select a compute resource

✓ 1c Select storage

✓ 1d Select clone options

2 Ready to complete

☐ Customize the operating system

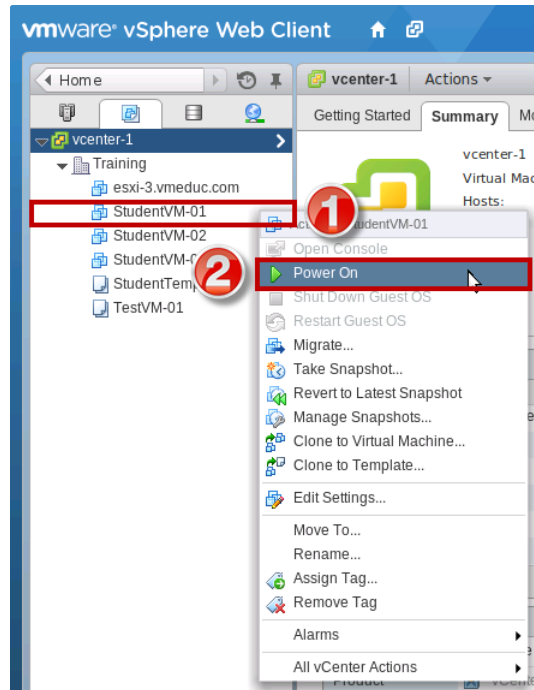
☐ Customize this virtual machine's hardware (Experimental)

☐ Power on virtual machine after creation

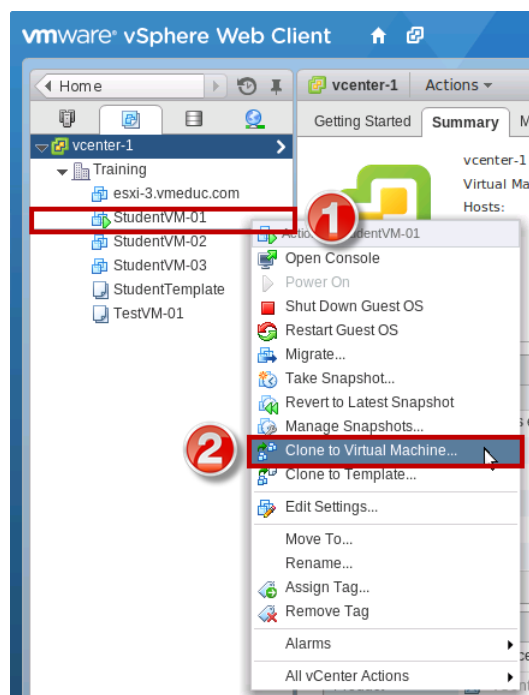
Back Next Finish Cancel

Part 4. Clone a Virtual Machine that is Powered On

1. In the Object Navigator pane, right-click *StudentVM-01* virtual machine and select *Power On*.

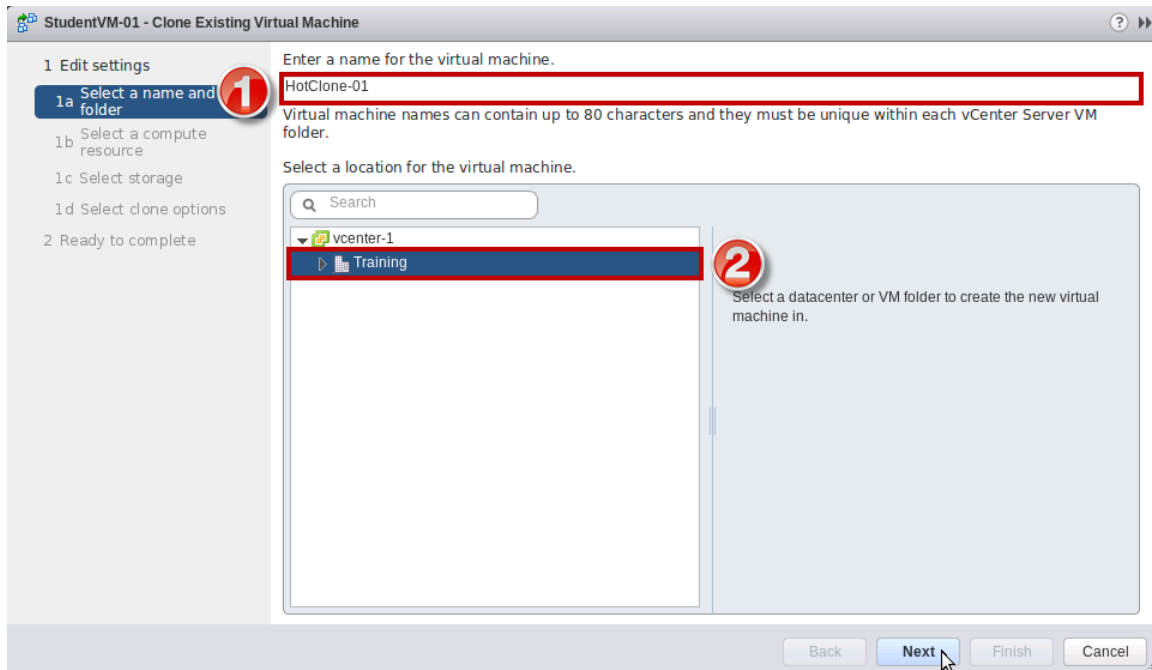


2. Right-click the *StudentVM-01* and select *Clone to Virtual Machine*.

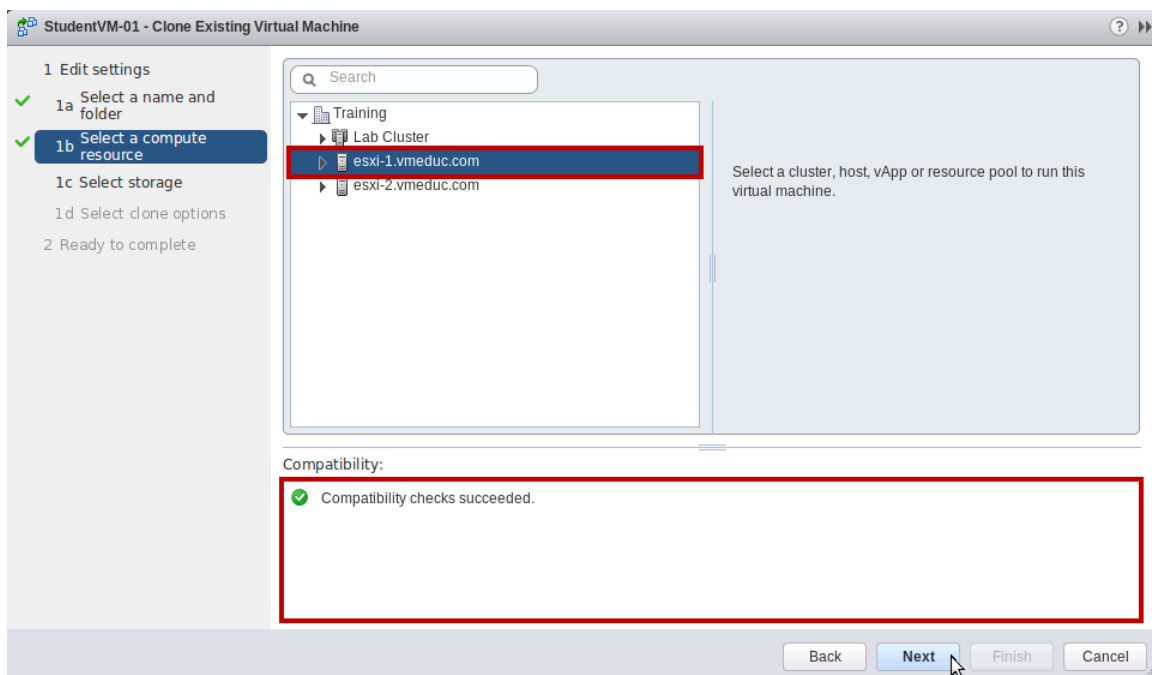


3. On the *Select a name and folder* page, use *HotClone-01* as the name for the virtual machine.

4. Select the *Training* datacentre. Click *Next*.



5. On the *Select a compute resource* page, select *esxi-1.vmeduc.com* host. When you select the host, a validation window will open and close and the *Compatibility* check should have succeeded. Click *Next*.



6. On the Select storage page, click the drop-down box next to Select virtual disk format: and select Thin Provision.

7. Make sure master is highlighted and click Next.

StudentVM-01 - Clone Existing Virtual Machine

1 Edit settings

- 1a Select a name and folder
- 1b Select a compute resource
- 1c Select storage
- 1d Select clone options

2 Ready to complete

Select virtual disk format: **Thin Provision**

VM Storage Policy: None

The following datastores are accessible from the destination resource that you selected. Select the destination datastore for the virtual machine configuration files and all of the virtual disks.

Name	Capacity	Provisioned	Free	Type	Storage DRS
master	18.76 GB	7.71 GB	17.26 GB	NFS	
Shared-01	14.50 GB	900.00 MB	13.62 GB	VMFS 5	
Local-51	9.75 GB	20.78 GB	7.42 GB	VMFS 5	
ISCSI	6.75 GB	20.78 GB	1.92 GB	VMFS 5	

Advanced >>

Compatibility:

StudentVM-01

esxi-1.vmeduc.com

⚠ Copying this virtual machine will cause loss of snapshots at the destination.

Back Next Finish Cancel

8. On the Select clone options page, leave the defaults and click Next.

StudentVM-01 - Clone Existing Virtual Machine

1 Edit settings

- 1a Select a name and folder
- 1b Select a compute resource
- 1c Select storage
- 1d Select clone options

2 Ready to complete

☐ Customize the operating system

☐ Customize this virtual machine's hardware (Experimental)

☐ Power on virtual machine after creation

Back Next Finish Cancel