

Recover a UEFI/GPT Virtual Machine



for ShadowProtect

June 2017



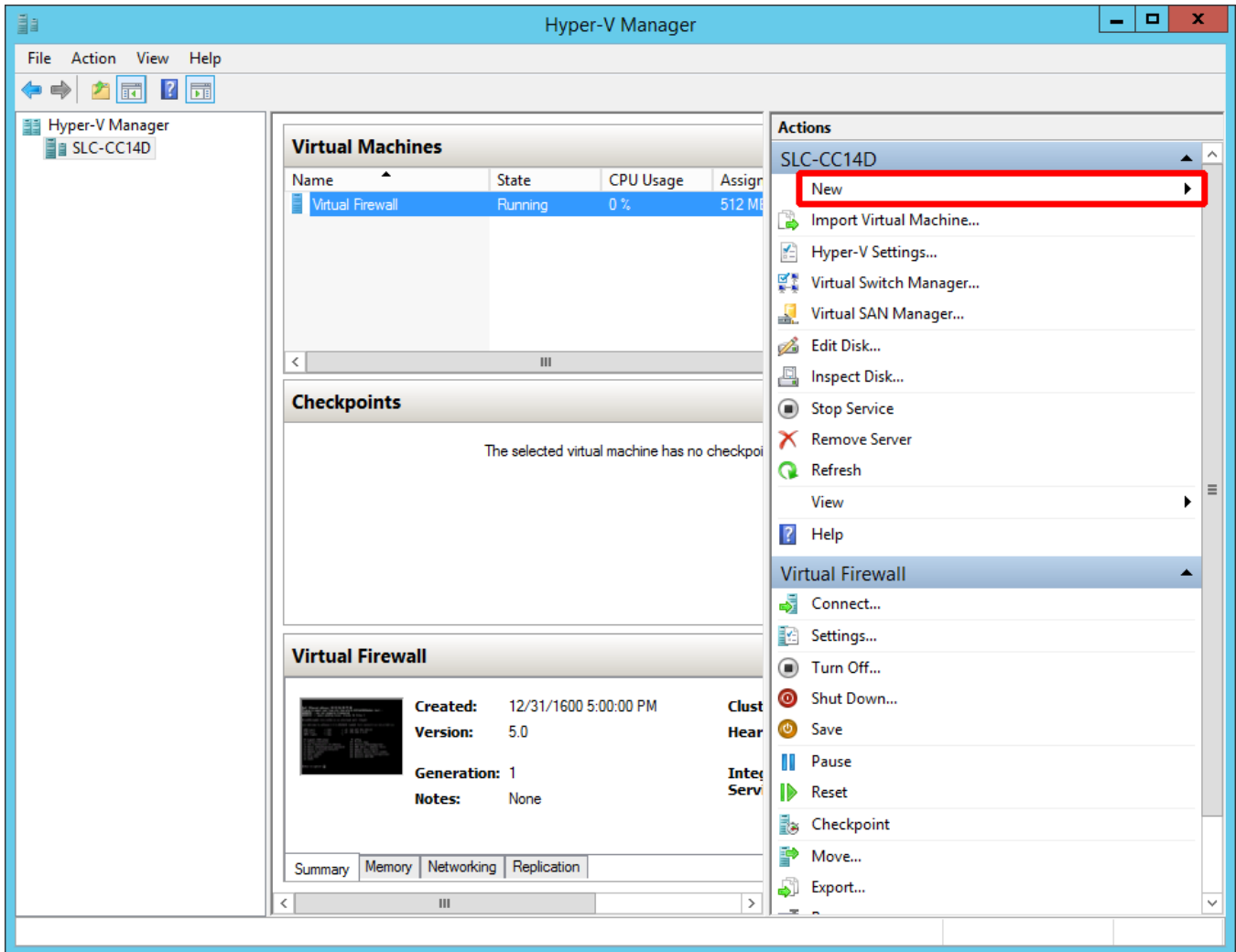
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CREATE A NEW VIRTUAL MACHINE (VM)

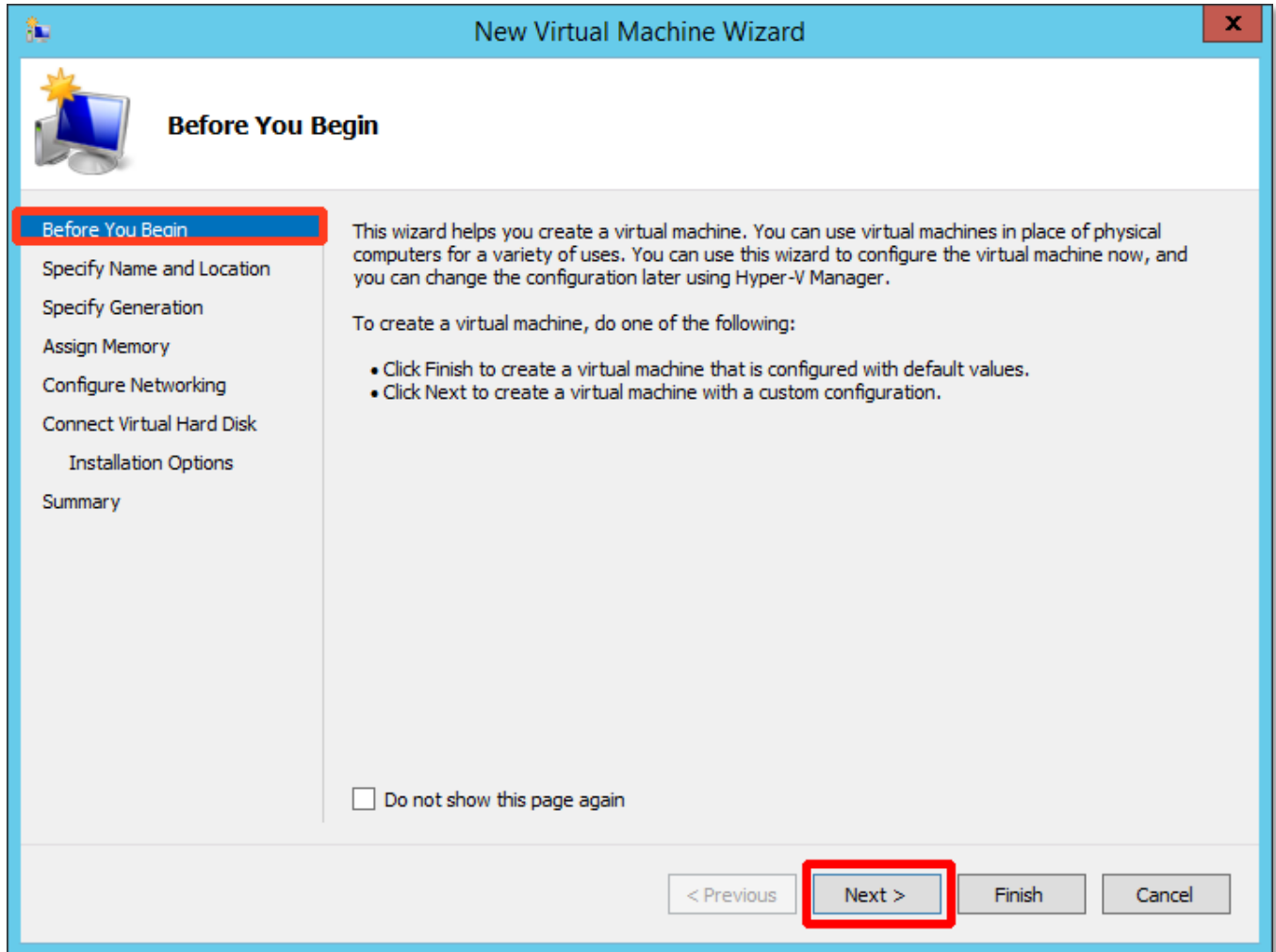
1. Create a new virtual machine (VM) within the Hyper-V Manager:



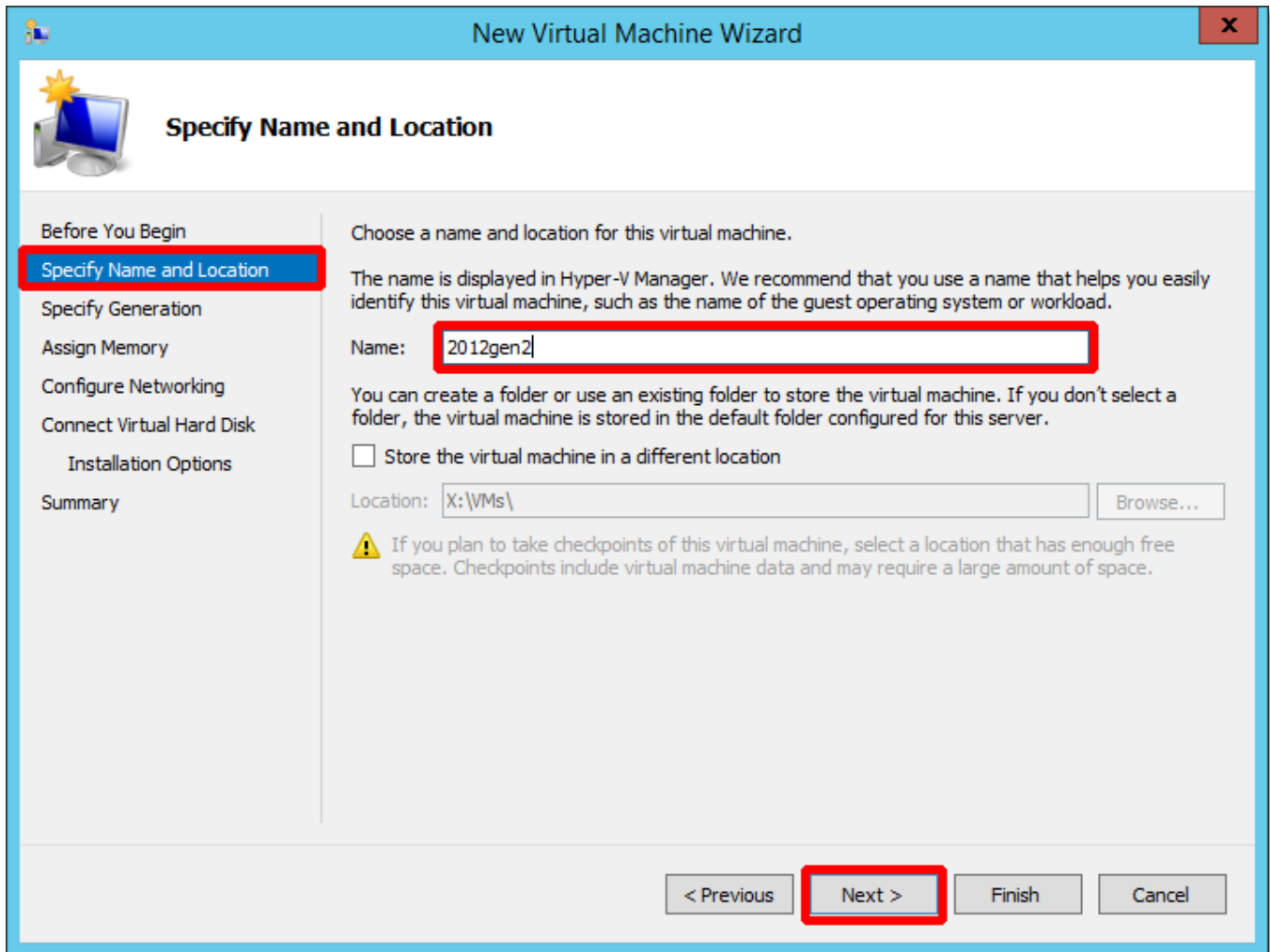
Configure a new VM using the New Virtual Machine Wizard

To customize the configuration of a new VM, you will use the **New Virtual Machine Wizard**.

1. Under the *Before You Begin* navigation menu in the New Virtual Machine Wizard, click **Next** to begin customizing the new VM.



- Specify a name and location for the new VM and click Next:



The screenshot shows the 'New Virtual Machine Wizard' dialog box, specifically the 'Specify Name and Location' step. The dialog has a blue title bar with the text 'New Virtual Machine Wizard' and a close button (X) in the top right corner. On the left side, there is a navigation pane with several steps: 'Before You Begin', 'Specify Name and Location' (highlighted with a red box), 'Specify Generation', 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk', 'Installation Options', and 'Summary'. The main area of the dialog contains the following text and controls:

Specify Name and Location

Choose a name and location for this virtual machine.


The name is displayed in Hyper-V Manager. We recommend that you use a name that helps you easily identify this virtual machine, such as the name of the guest operating system or workload.

Name:

You can create a folder or use an existing folder to store the virtual machine. If you don't select a folder, the virtual machine is stored in the default folder configured for this server.

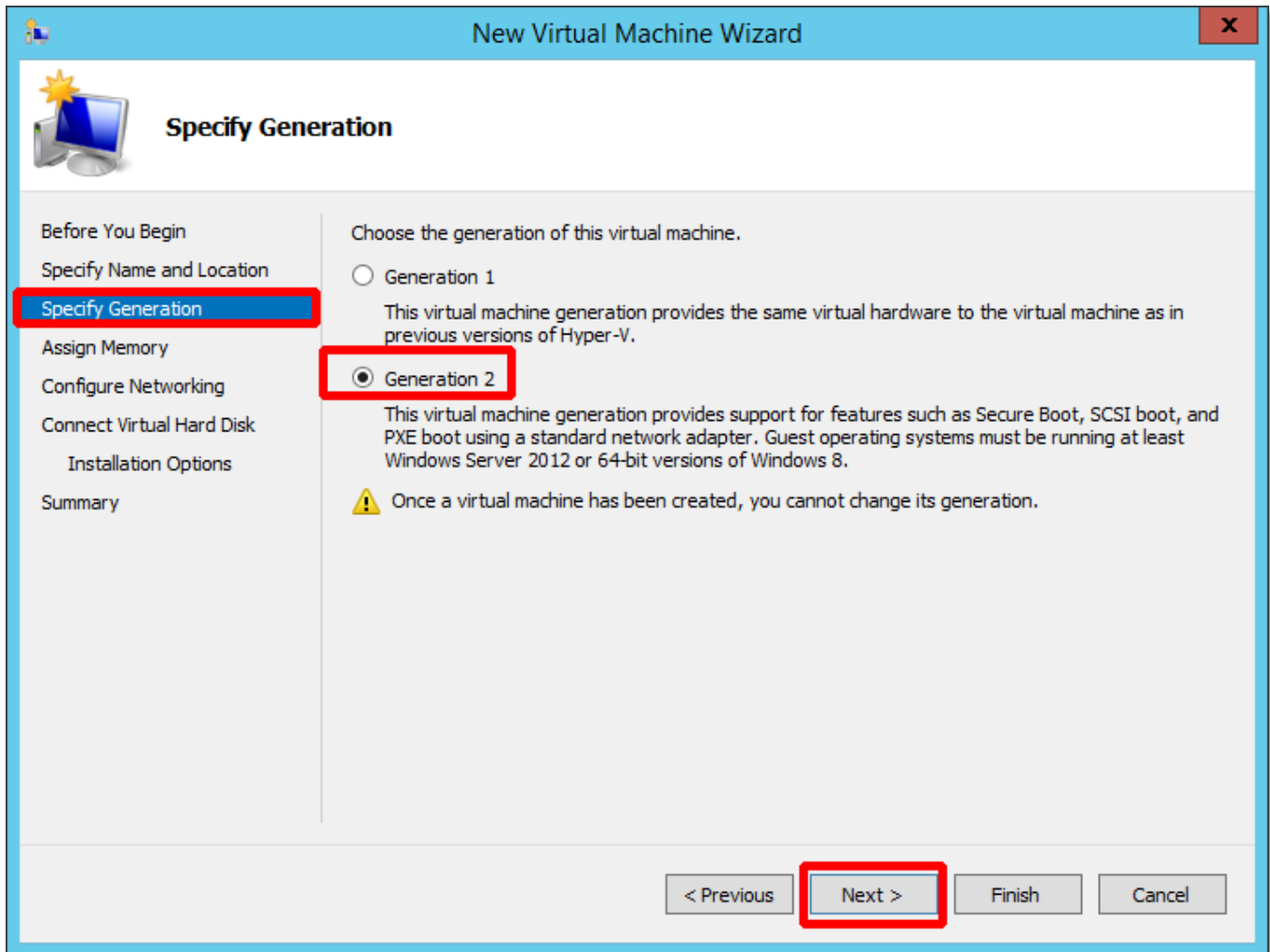
Store the virtual machine in a different location

Location:

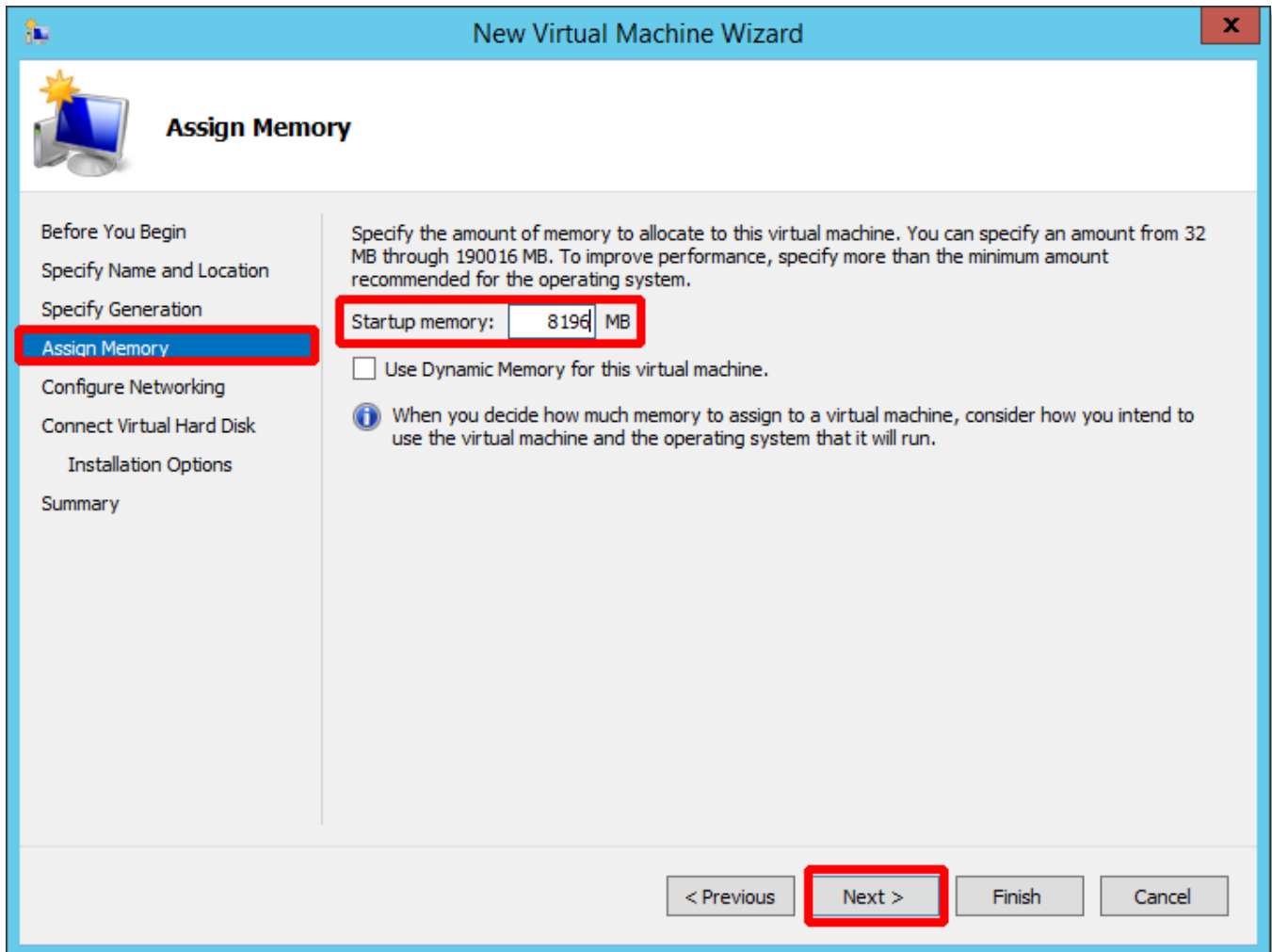
 If you plan to take checkpoints of this virtual machine, select a location that has enough free space. Checkpoints include virtual machine data and may require a large amount of space.

At the bottom of the dialog, there are four buttons: '< Previous', 'Next >' (highlighted with a red box), 'Finish', and 'Cancel'.

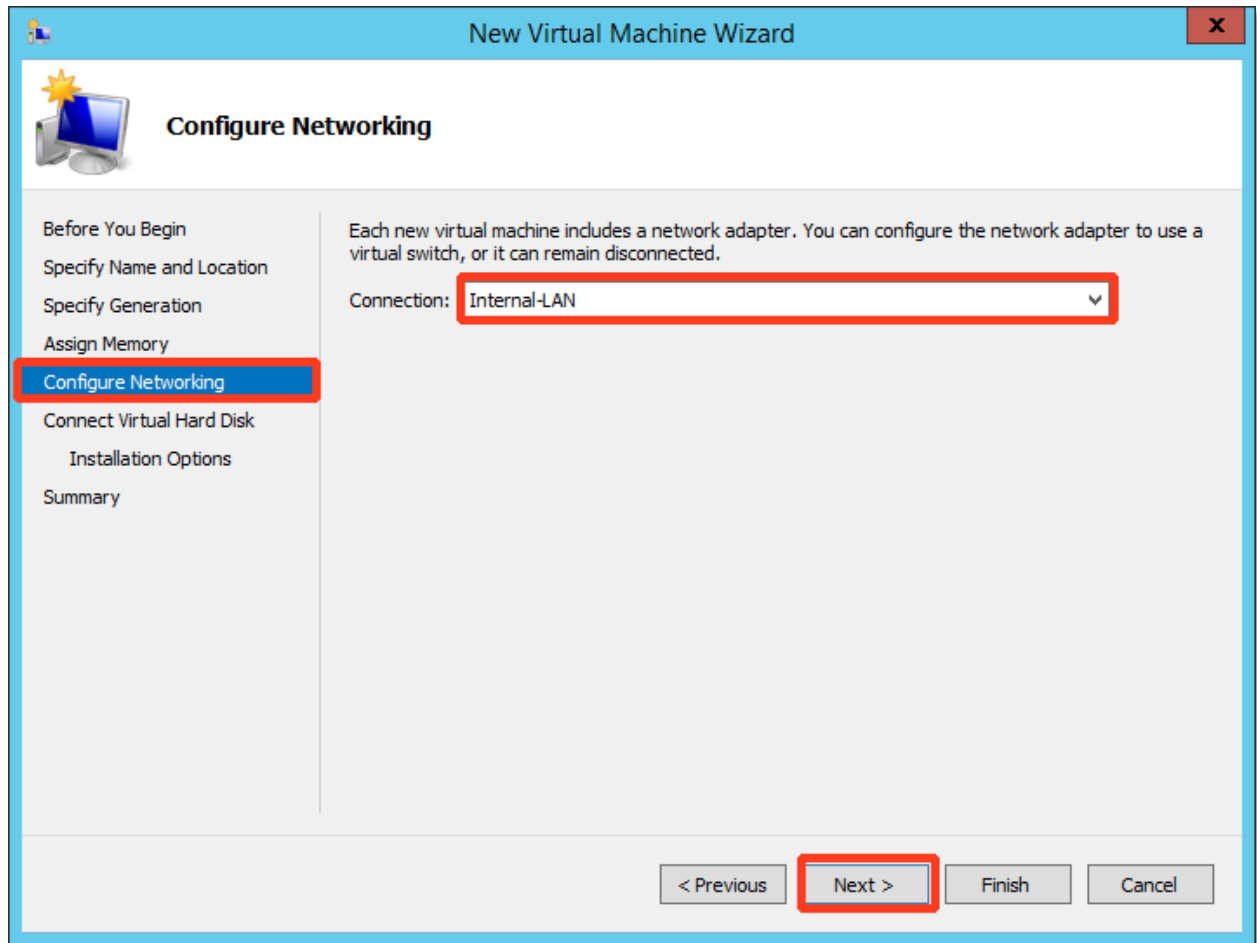
3. In order to recover a EFI/GPT system, go to the *Specify Generation* navigation menu and select **Generation 2** and then click **Next**:



4. Under the *Assign Memory* navigation menu, enter the desired amount of **Startup memory** for this new VM and click **Next** to continue:



5. Under the *Configure Networking* navigation menu, drop-down the **Connection** menu and select **Internal-LAN**. Then click **Next**.



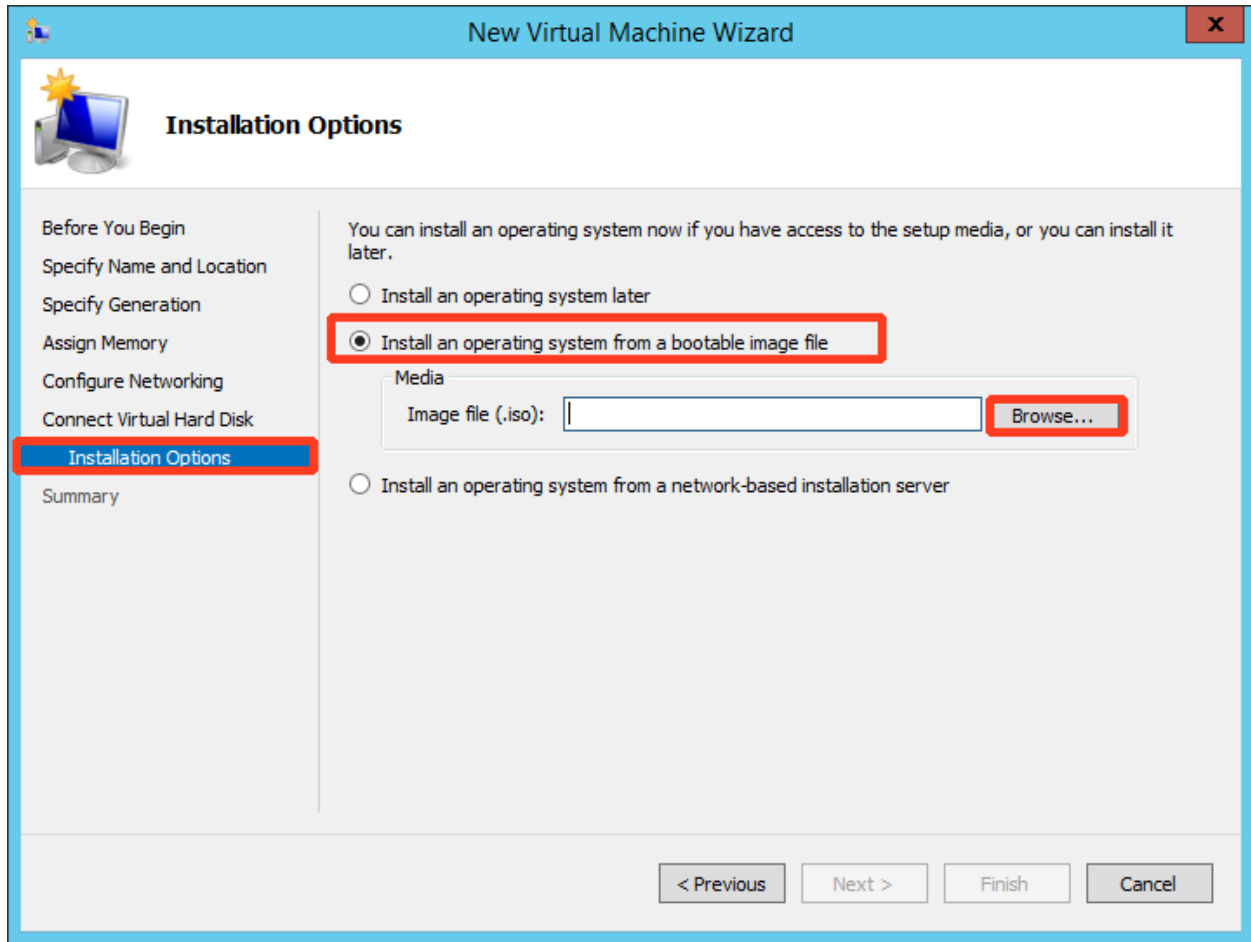
- Under the *Connect Virtual Hard Disk* navigation menu, verify that the **Name** selected is the same name specified in Step 2 above.

Next, configure **Size**. Be certain to provide enough space. The size should be equal to or greater than the volume you are restoring.

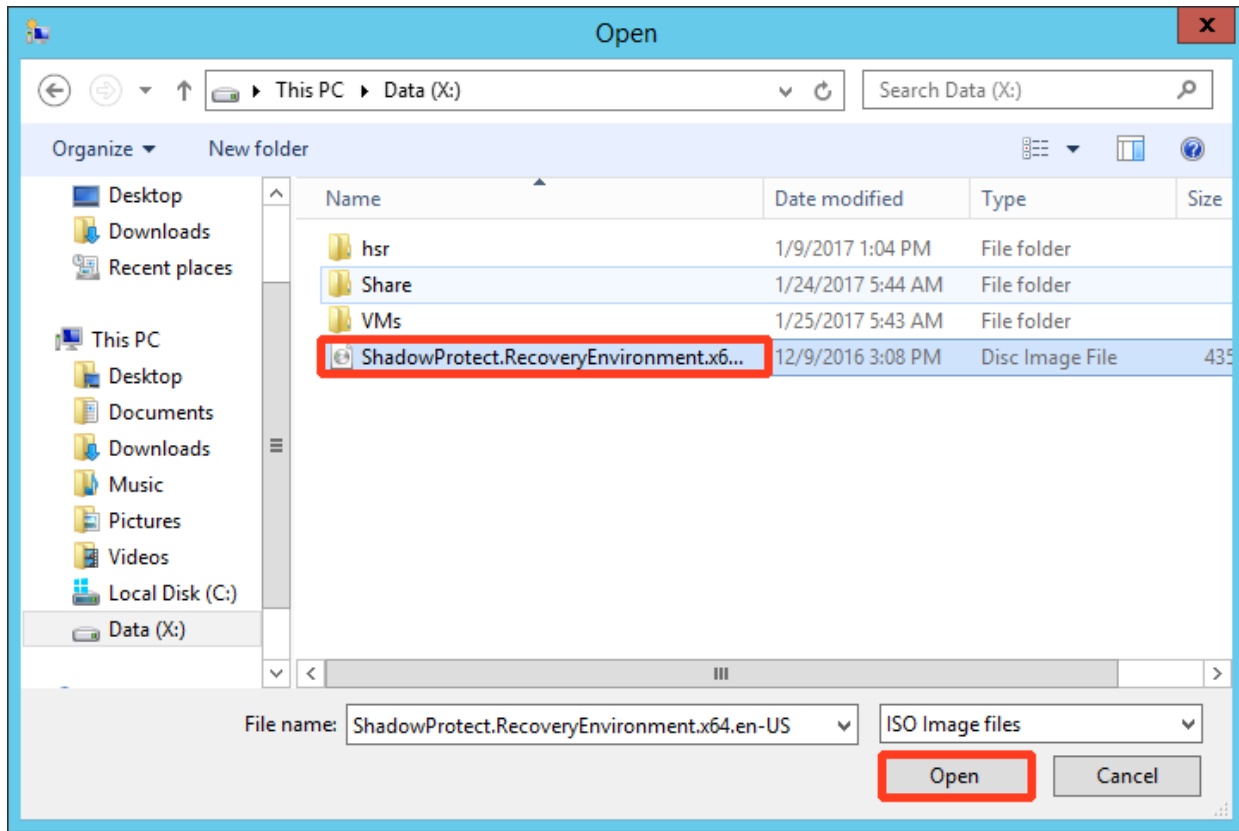
Then, click **Next** to continue.

The screenshot shows the 'New Virtual Machine Wizard' dialog box, specifically the 'Connect Virtual Hard Disk' step. The wizard is titled 'New Virtual Machine Wizard' and has a close button (X) in the top right corner. The main title of the step is 'Connect Virtual Hard Disk'. On the left side, there is a navigation pane with the following steps: 'Before You Begin', 'Specify Name and Location', 'Specify Generation', 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk' (highlighted in blue), 'Installation Options', and 'Summary'. The main area contains the following text: 'A virtual machine requires storage so that you can install an operating system. You can specify the storage now or configure it later by modifying the virtual machine's properties.' There are three radio button options: 1. 'Create a virtual hard disk' (selected): 'Use this option to create a VHDX dynamically expanding virtual hard disk.' Below this are three input fields: 'Name:' with the value '2012gen2.vhdx', 'Location:' with the value 'X:\VMs\', and 'Size:' with the value '1000' GB (Maximum: 64 TB). There is a 'Browse...' button next to the Location field. 2. 'Use an existing virtual hard disk': 'Use this option to attach an existing VHDX virtual hard disk.' Below this is a 'Location:' input field with the value 'X:\VMs\'. There is a 'Browse...' button next to the Location field. 3. 'Attach a virtual hard disk later': 'Use this option to skip this step now and attach an existing virtual hard disk later.' At the bottom of the dialog, there are four buttons: '< Previous', 'Next >' (highlighted in red), 'Finish', and 'Cancel'.

7. Under the *Installation Options* navigation menu, click on **Install an operating system from a bootable image file** and click **Browse**.



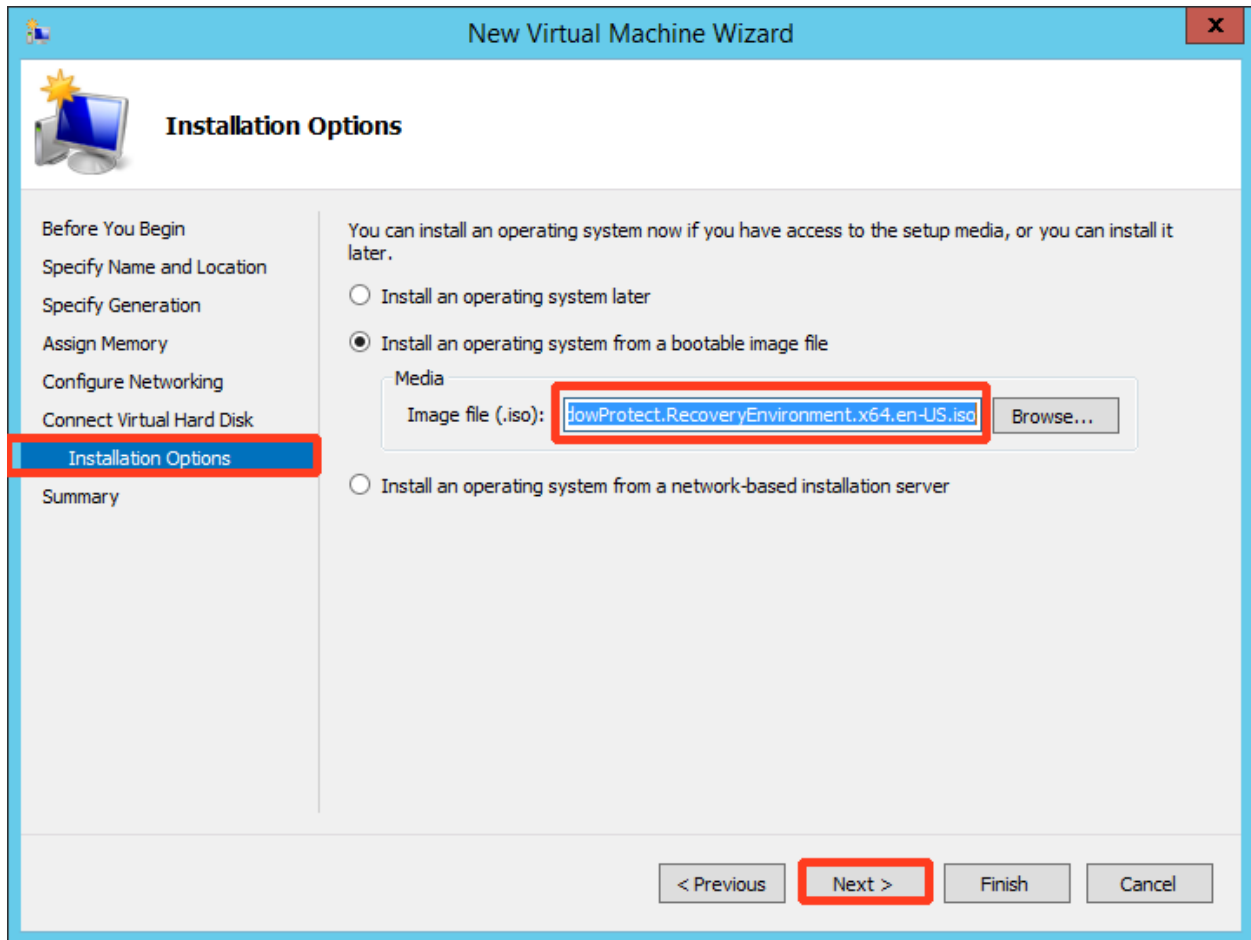
8. Locate the ShadowProtect.Recovery.Environment.x64.en.ISO and click Open.



9. Return to the *Installation Options* navigation menu.

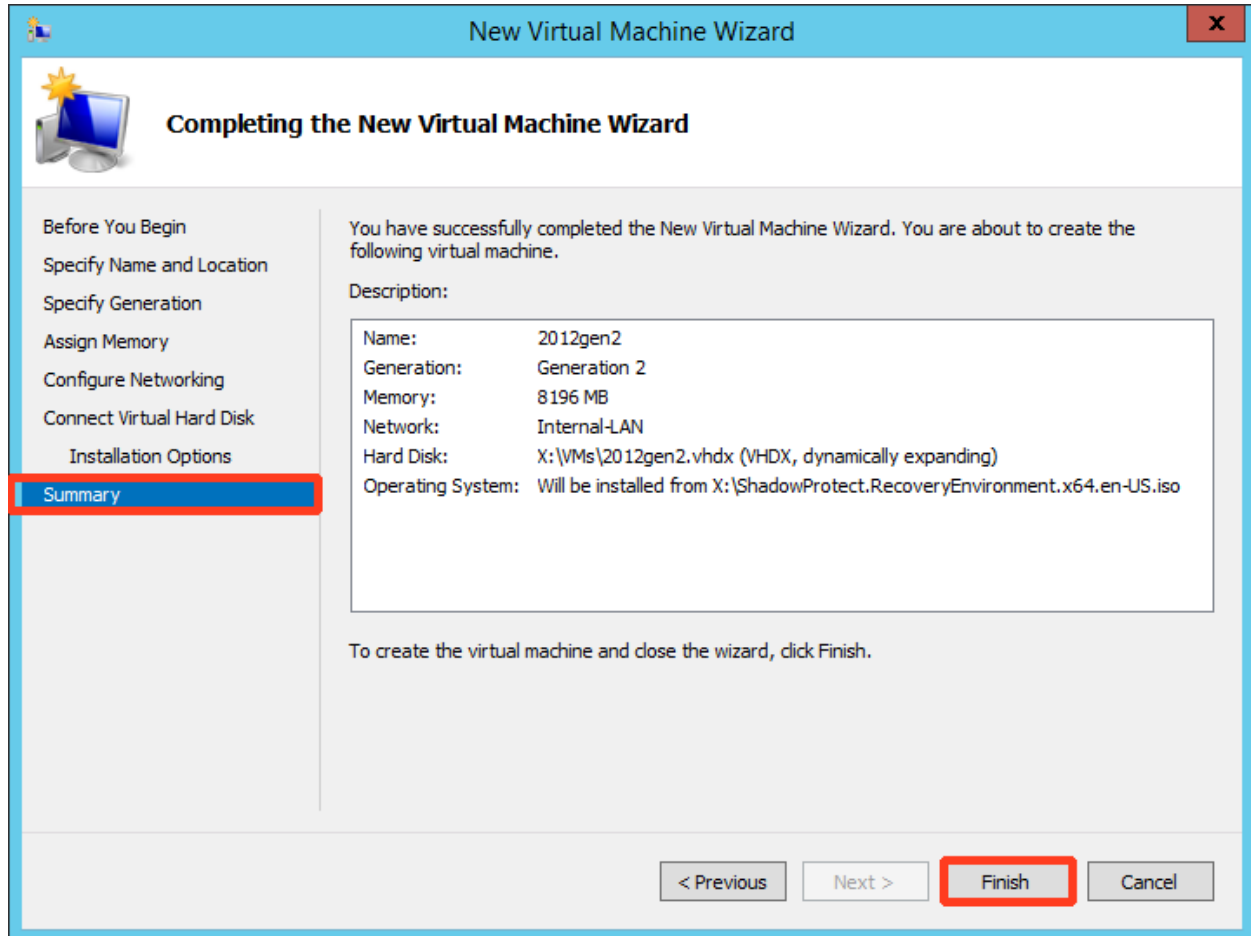
Verify that the *Media* image file displayed is `ShadowProtect.Recovery.Environment.x64.en.ISO`

Click **Next** to continue.



- Under the *Summary* navigation menu, review the customization features you have just configured for this new VM.

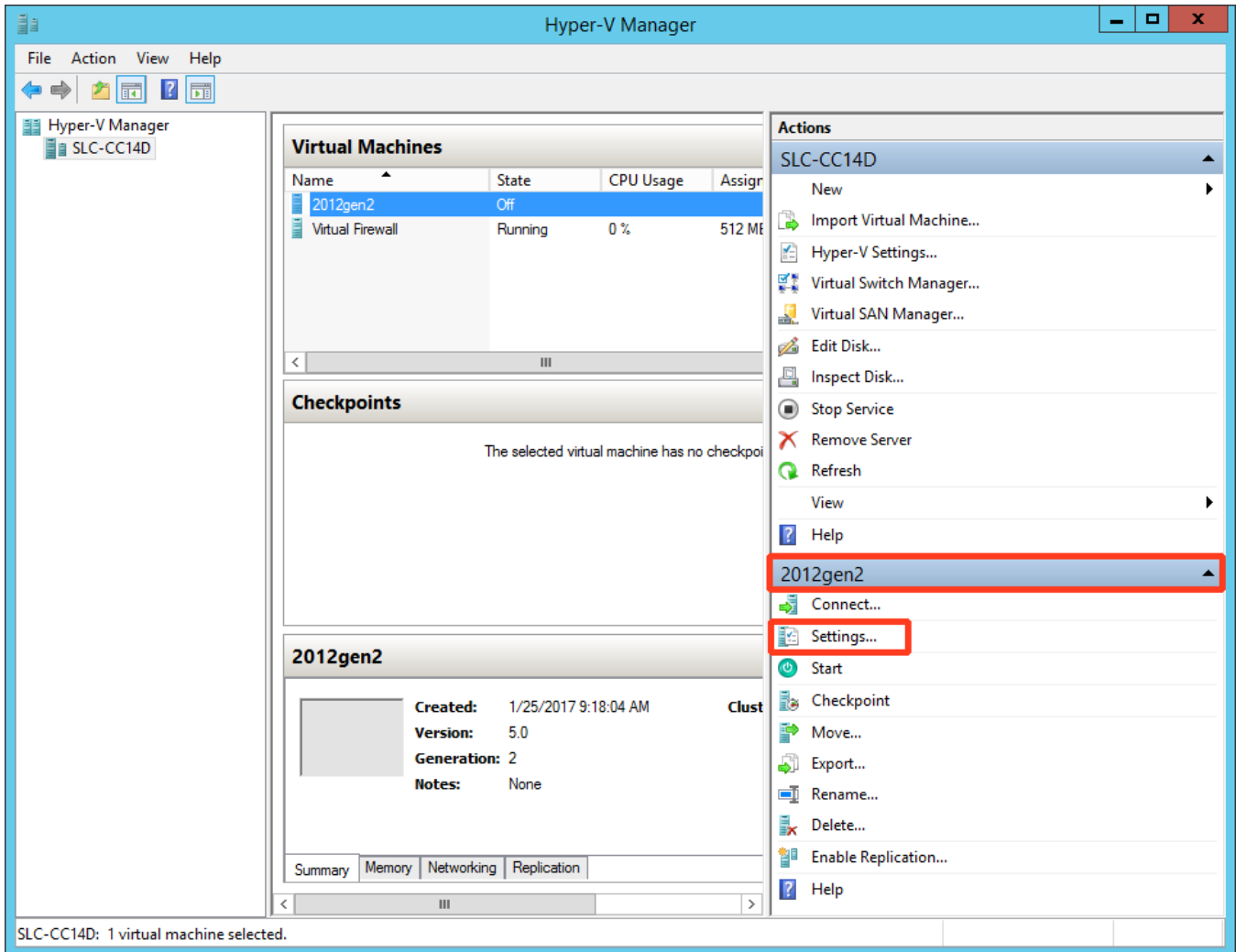
Click **Finish** to complete customization of the new VM.



CREATE ADDITIONAL DISKS TO BE RESTORED

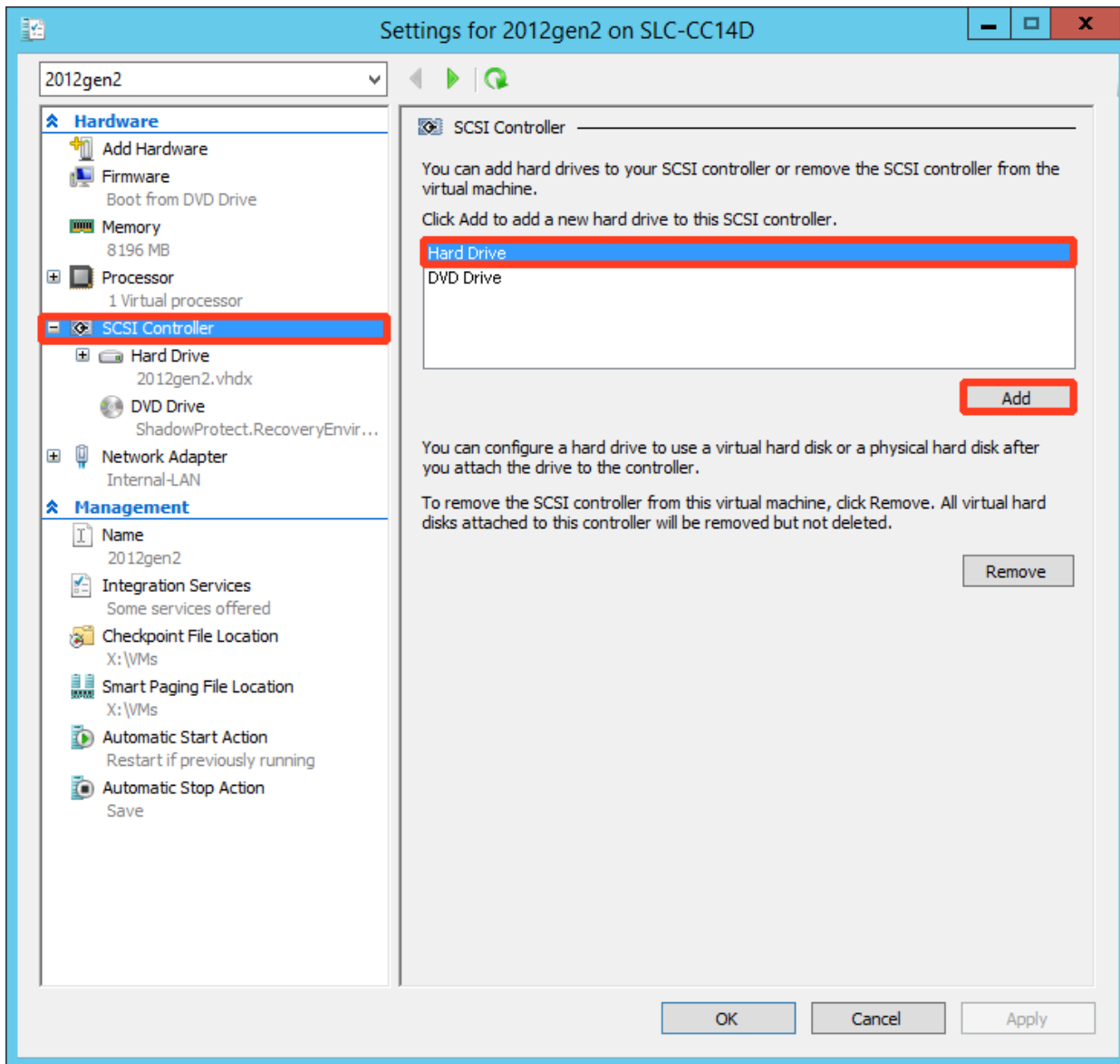
At this point, your new VM has been created, but if you have additional disks to restore, you will need to configure them now.

1. Return to the Hyper-V Manager.
 - a. Locate this new VM. (In this example: **2012gen2**)
 - b. Select Settings:



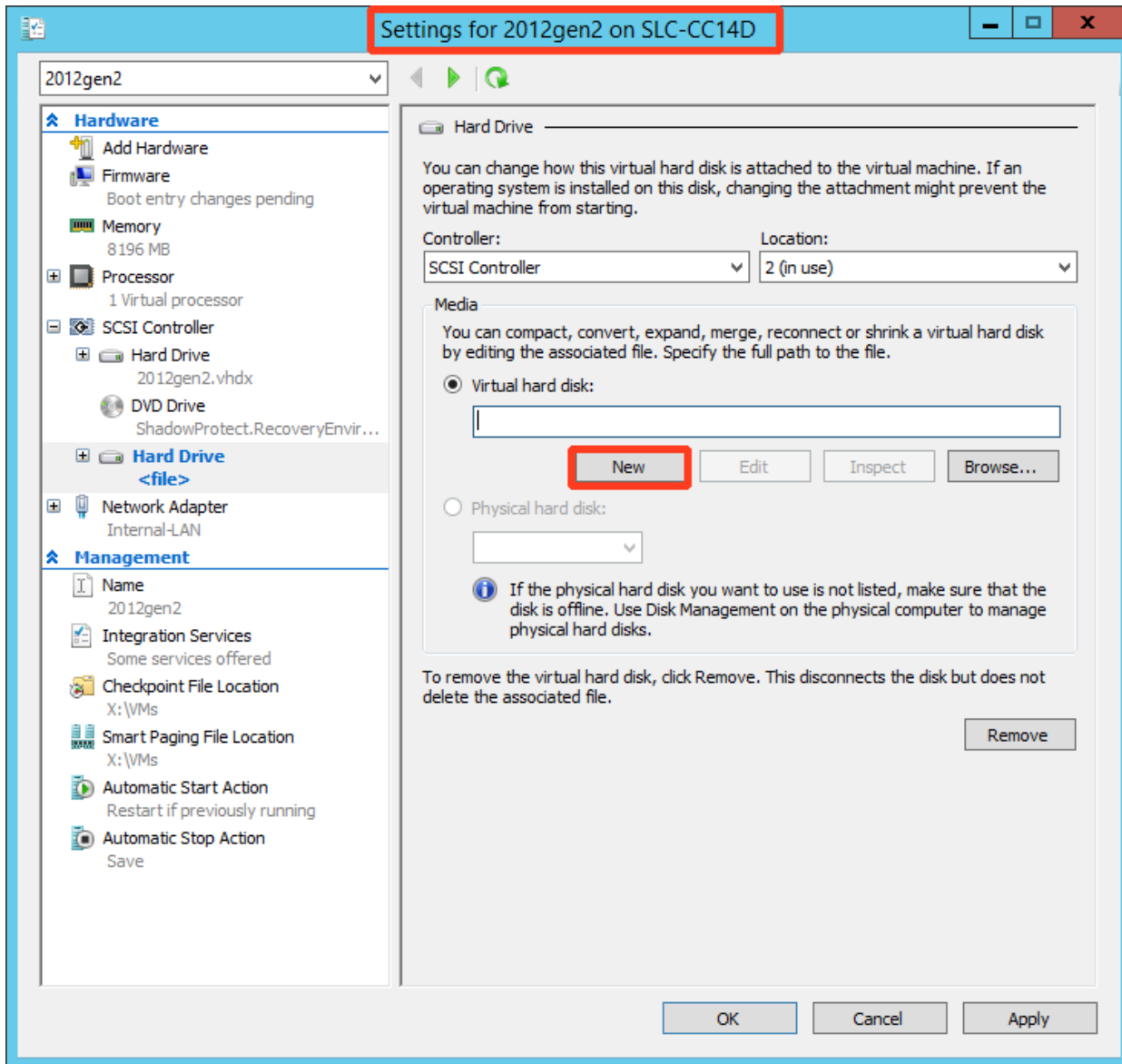
2. If you have additional disks to restore:
 - a. Click on **SCSI Controller** on the left navigation panel
 - b. Highlight **Hard Drive**
 - c. Click **Add**.

Repeat this step for each disk to be added.



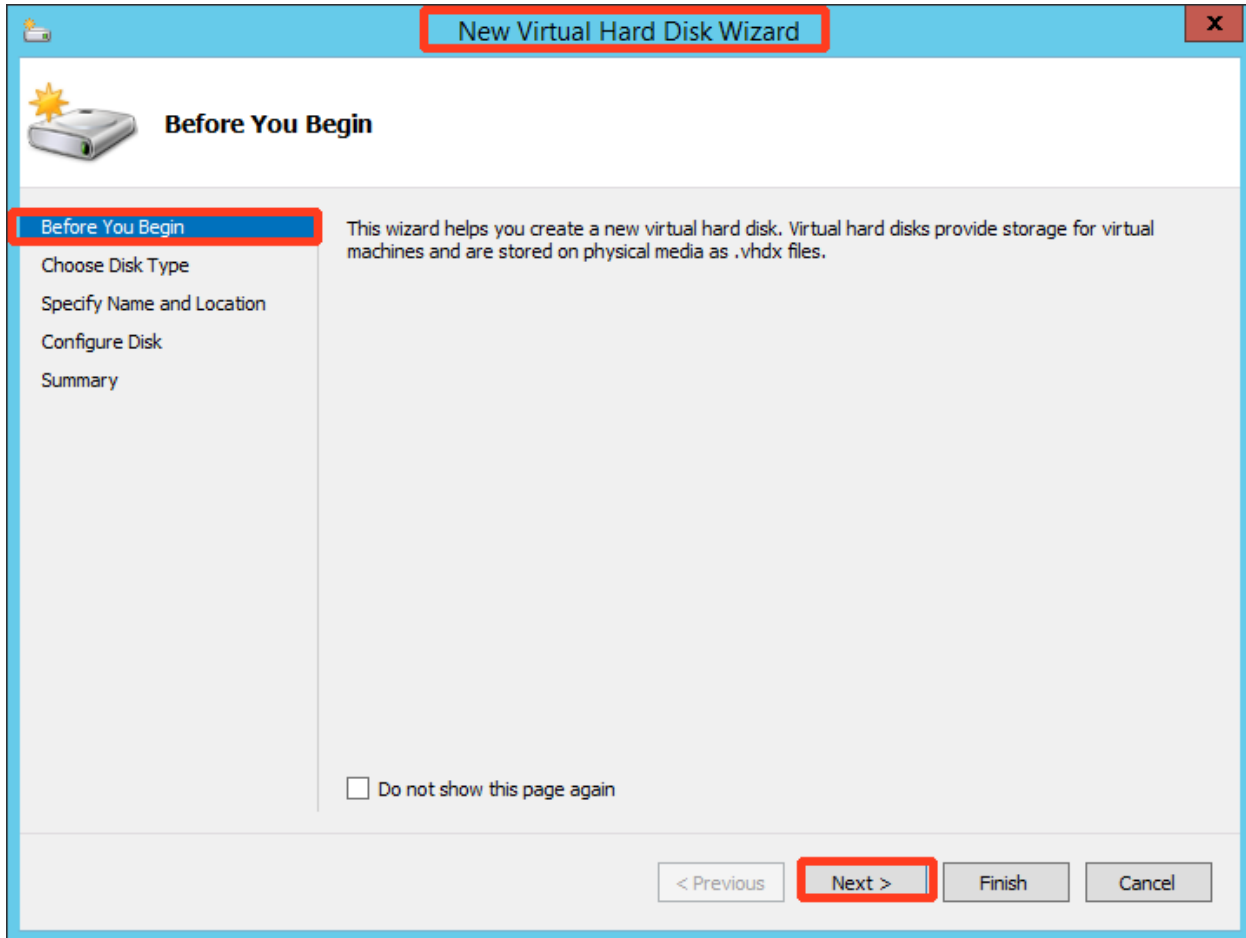
Configure additional disks using New Virtual Hard Disk Wizard

1. From within the Hyper-V *Settings* menu for the new VM, click **New**:

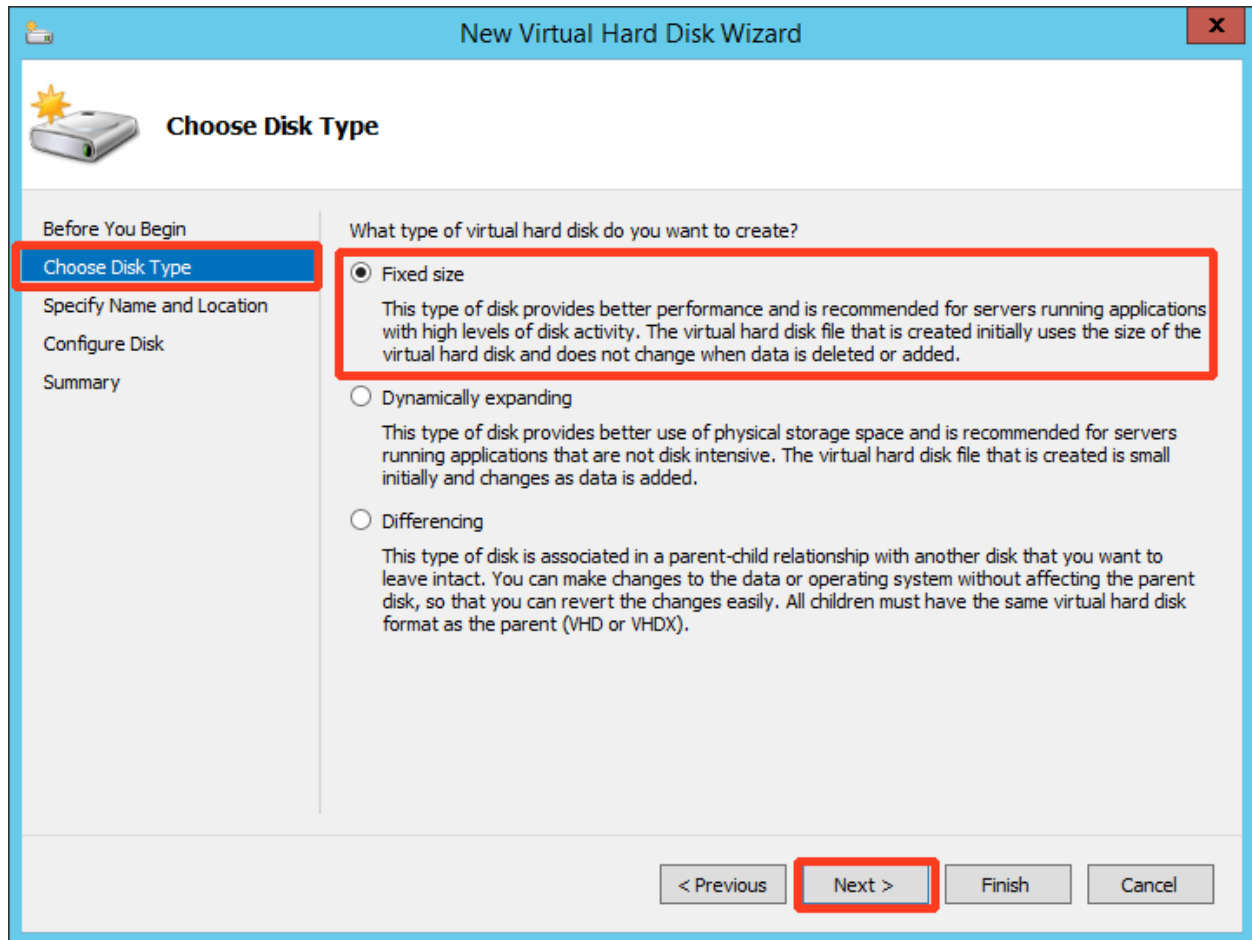


2. You have launched the **New Virtual Hard Disk Wizard**.

From the *Before You Begin* navigation menu, click **Next** to begin configuring the added disk.

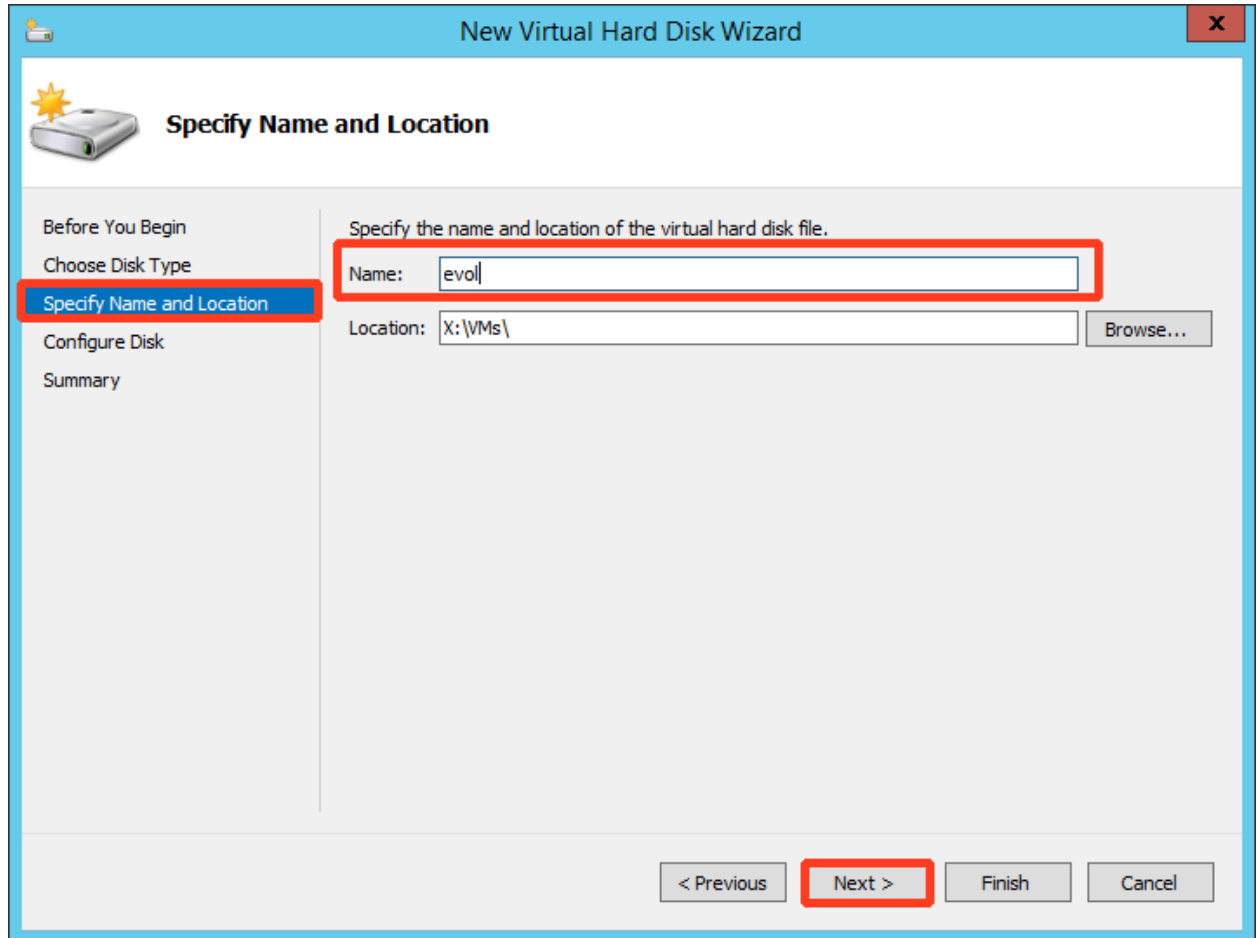


3. From the *Choose Disk Type* navigation menu, select **Fixed Size** and click **Next** to continue.

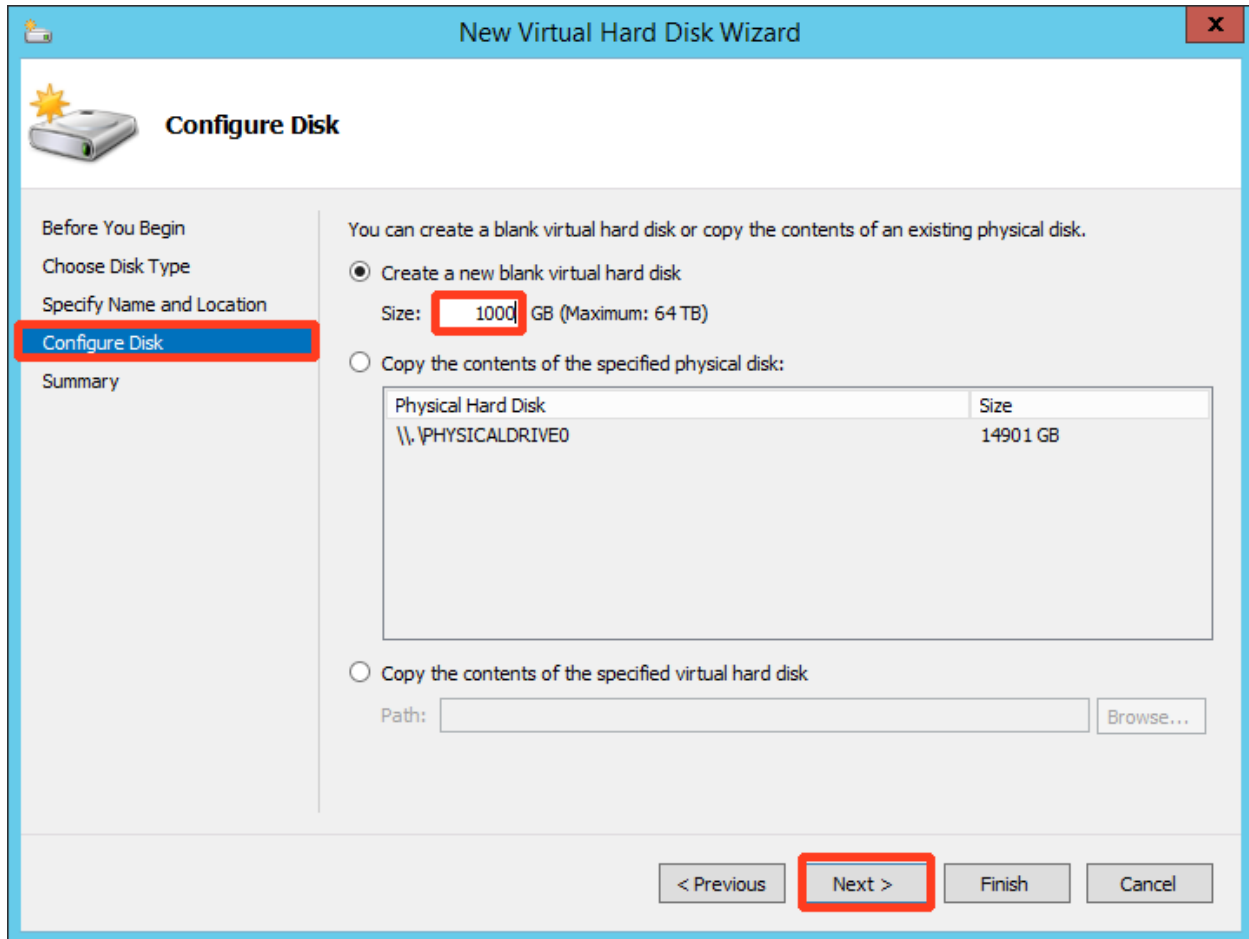


4. From the *Specify Name and Location* navigation menu, enter a **Name** for the new volume and click **Next** to continue.

[This example disk is named **evol**]

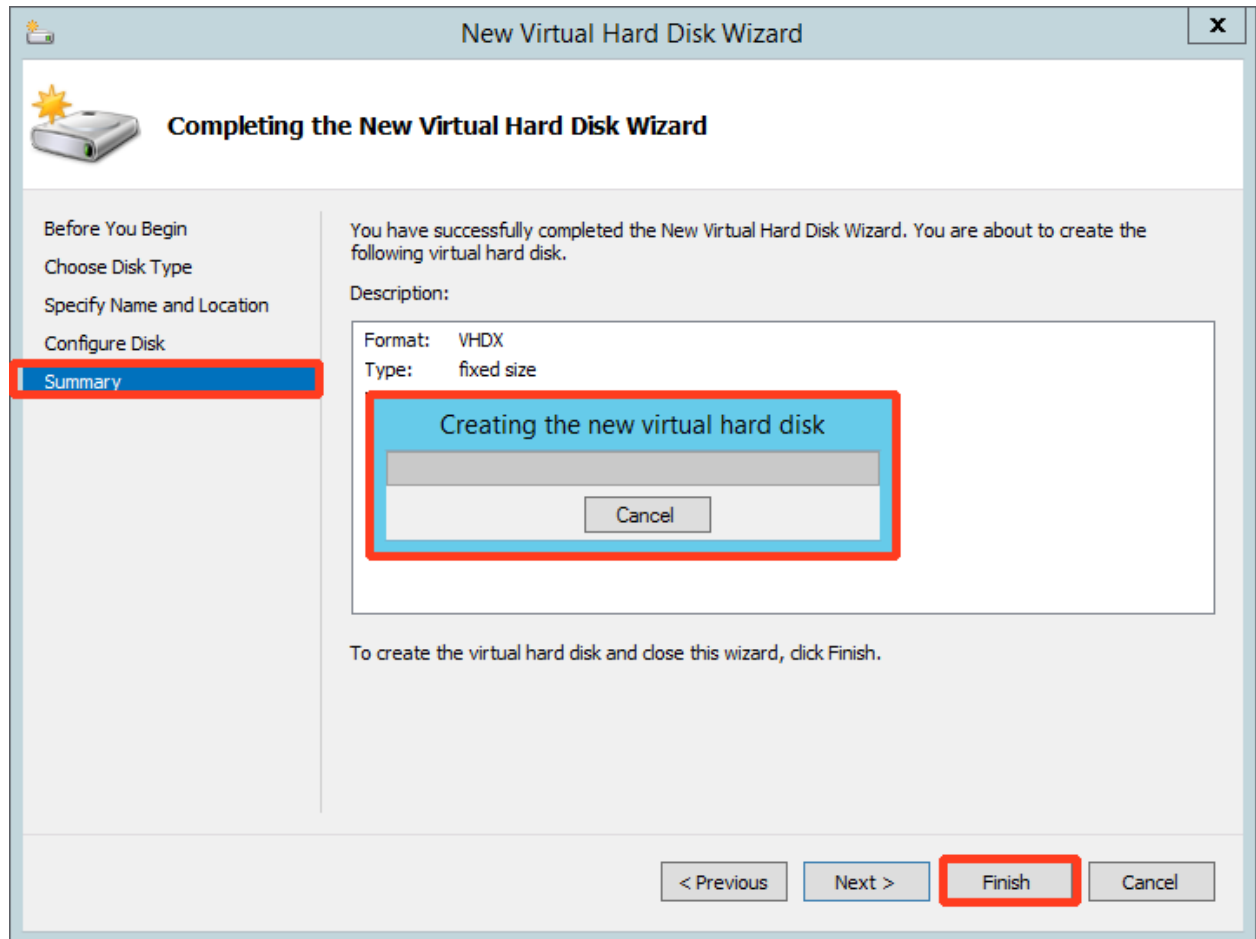


- From the *Configure Disk* navigation menu, enter a **Size** equal to (or greater) than the original volume to be restored. Click **Next** to continue.

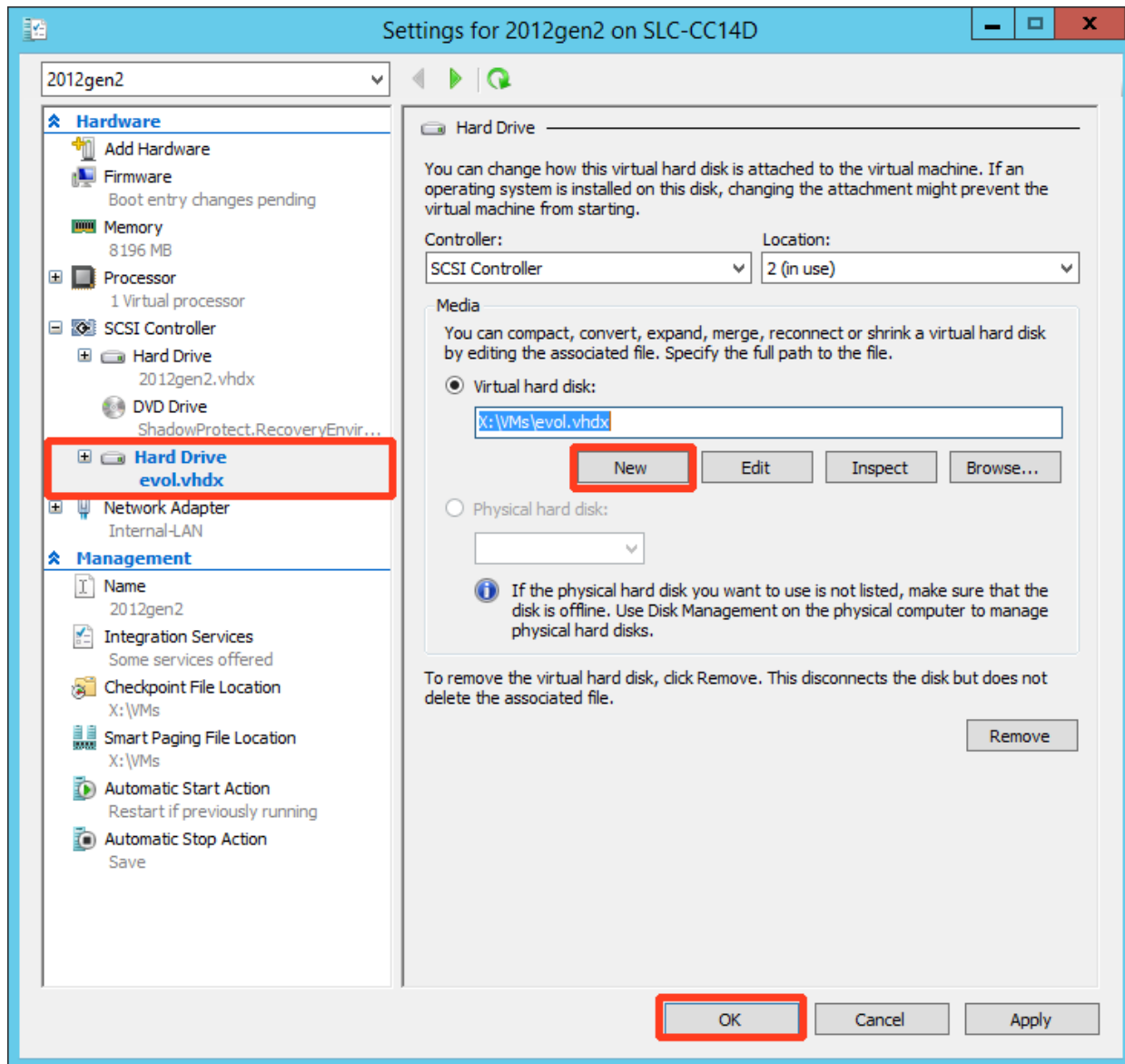


- From the *Summary* navigation menu, review the configuration settings and click **Finish**.

The new virtual hard disk will now create itself:

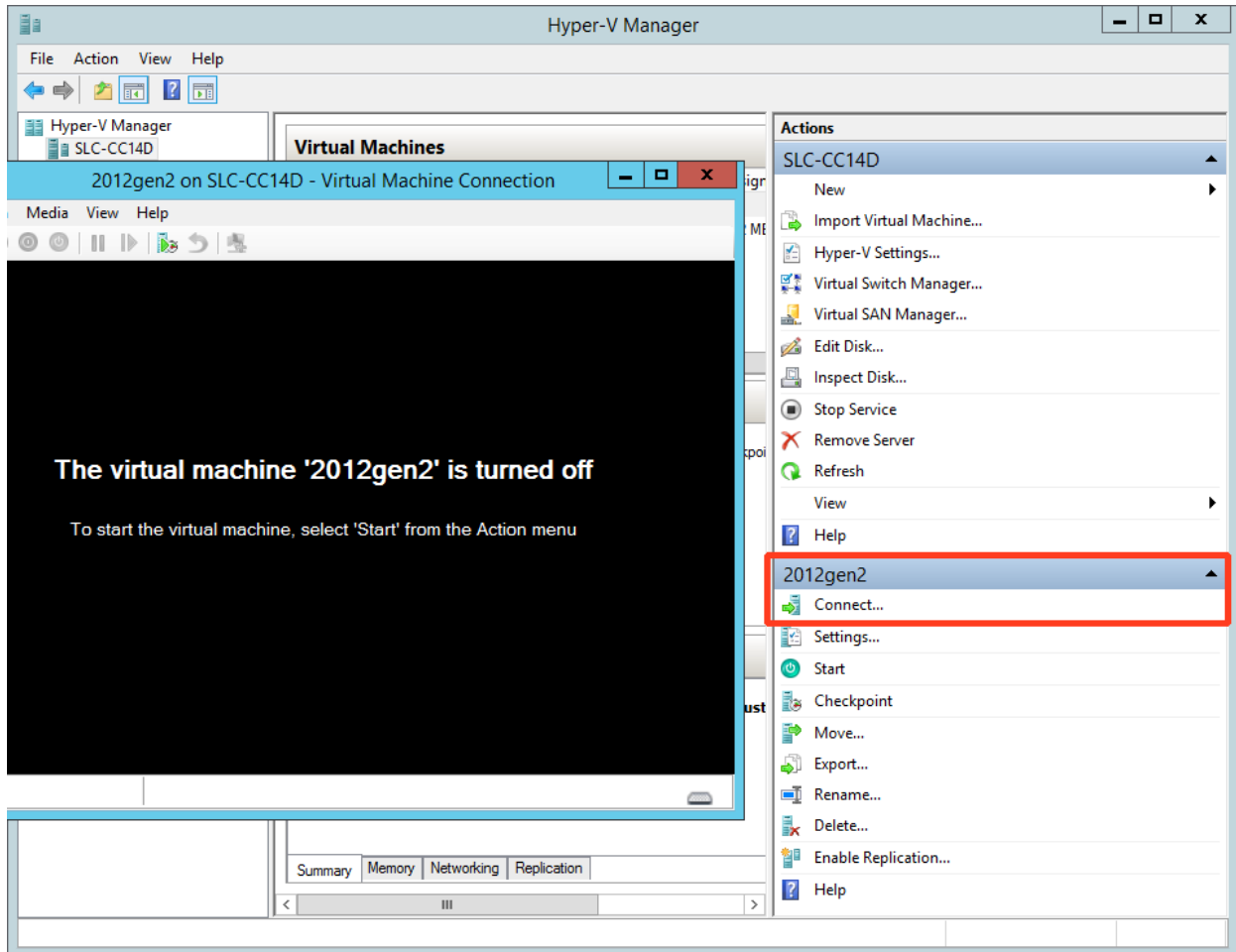


- When the new disk has been created, you will see it in the left-hand navigation panel for the new VM. [This example disk is named **evol**]
 - If you have additional disks to create, click **New** and repeat these instructions: [Configuring additional disks using New Virtual Hard Disk Wizard](#).
 - When you have finished creating all needed new disks, click **OK** to exit.

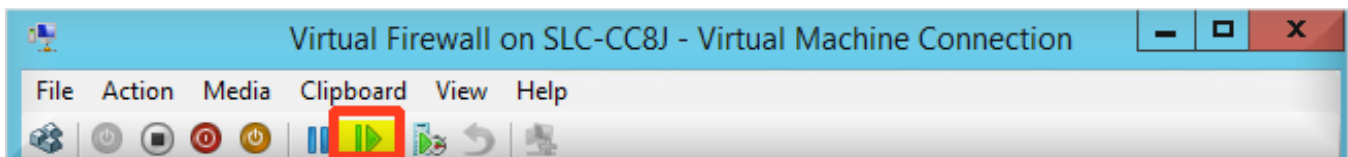


CONNECT THE NEW VM

1. Return to the Hyper-V Manager.
 - a. Highlight the new virtual machine. [This example is 2012gen2]
 - b. Click Connect.



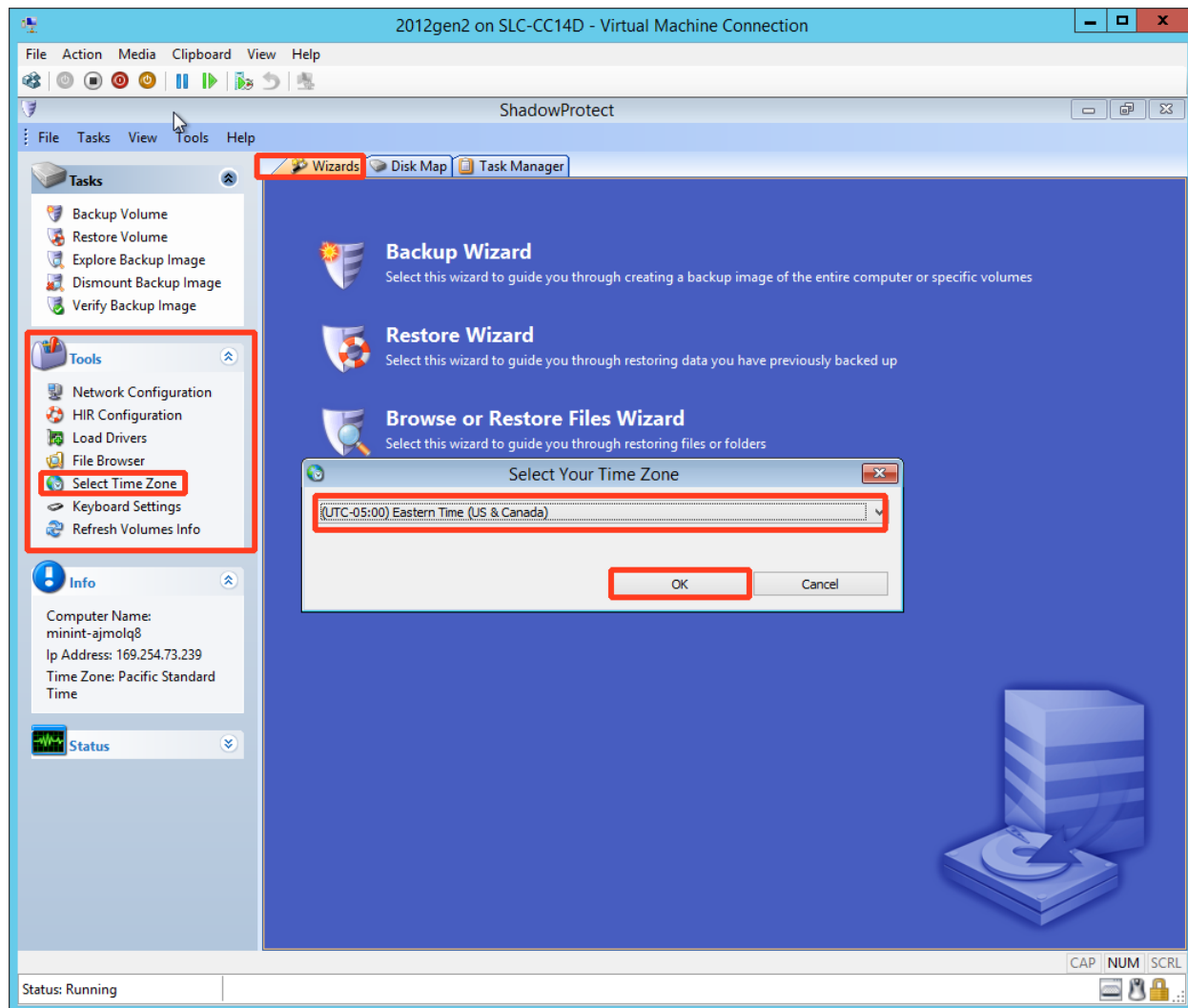
2. Click the green power button at the top of the connection window. As soon as booting begins, press any key to boot to the Recovery Environment (RE) CD.



3. When the *Virtual Machine Connection* screen opens:
 - a. Select the **Wizards** tab in the ShadowProtect Recovery Environment (RE).
 - b. Go to **Tools** on the left hand navigation.
 - c. Click **Select Time Zone**.
 - d. If the displayed time zone in the drop-down is correct, click OK.
Otherwise, re-select the desired time zone from the drop-down list.



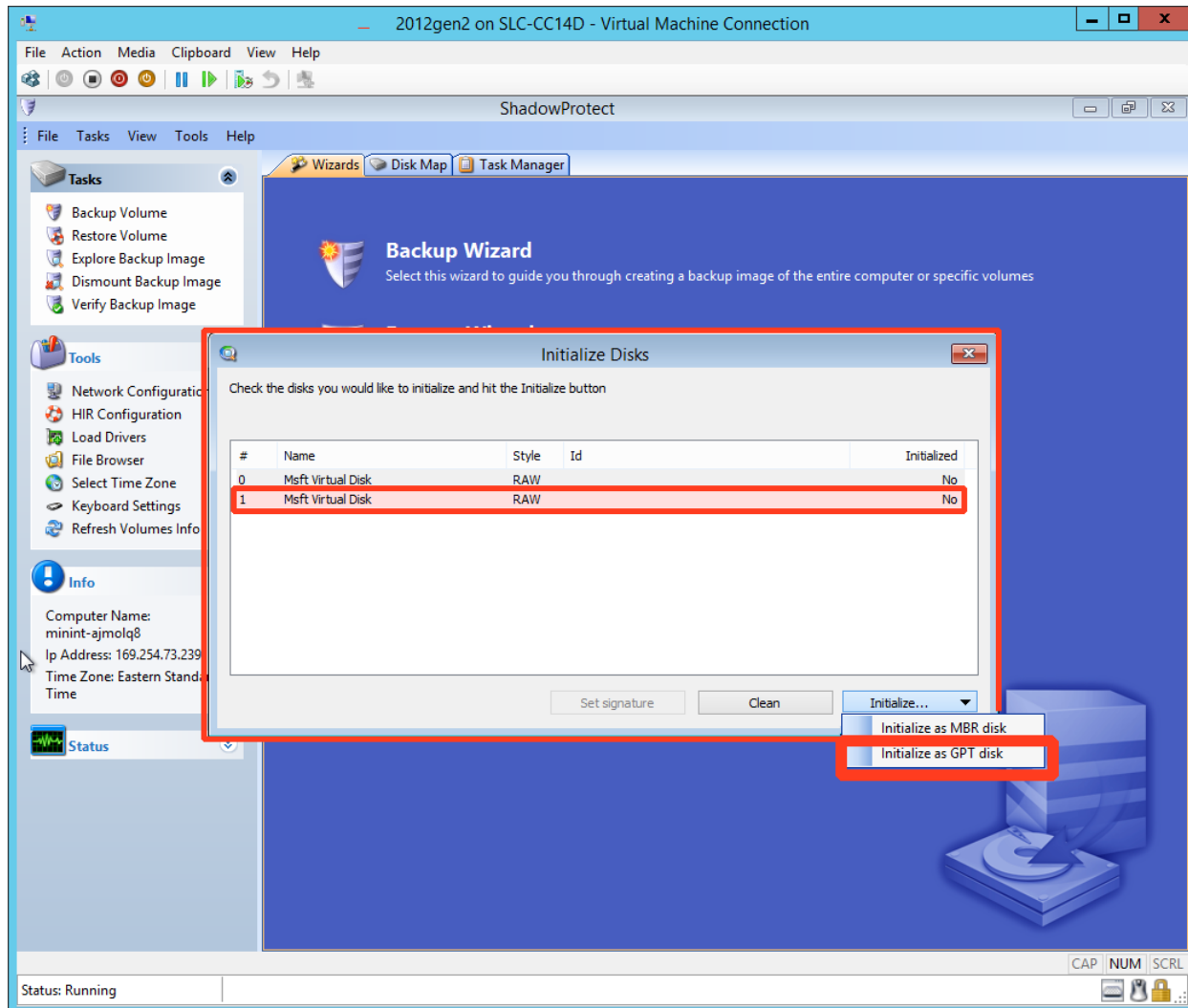
Setting the correct time zone is especially important for Domain Controllers.



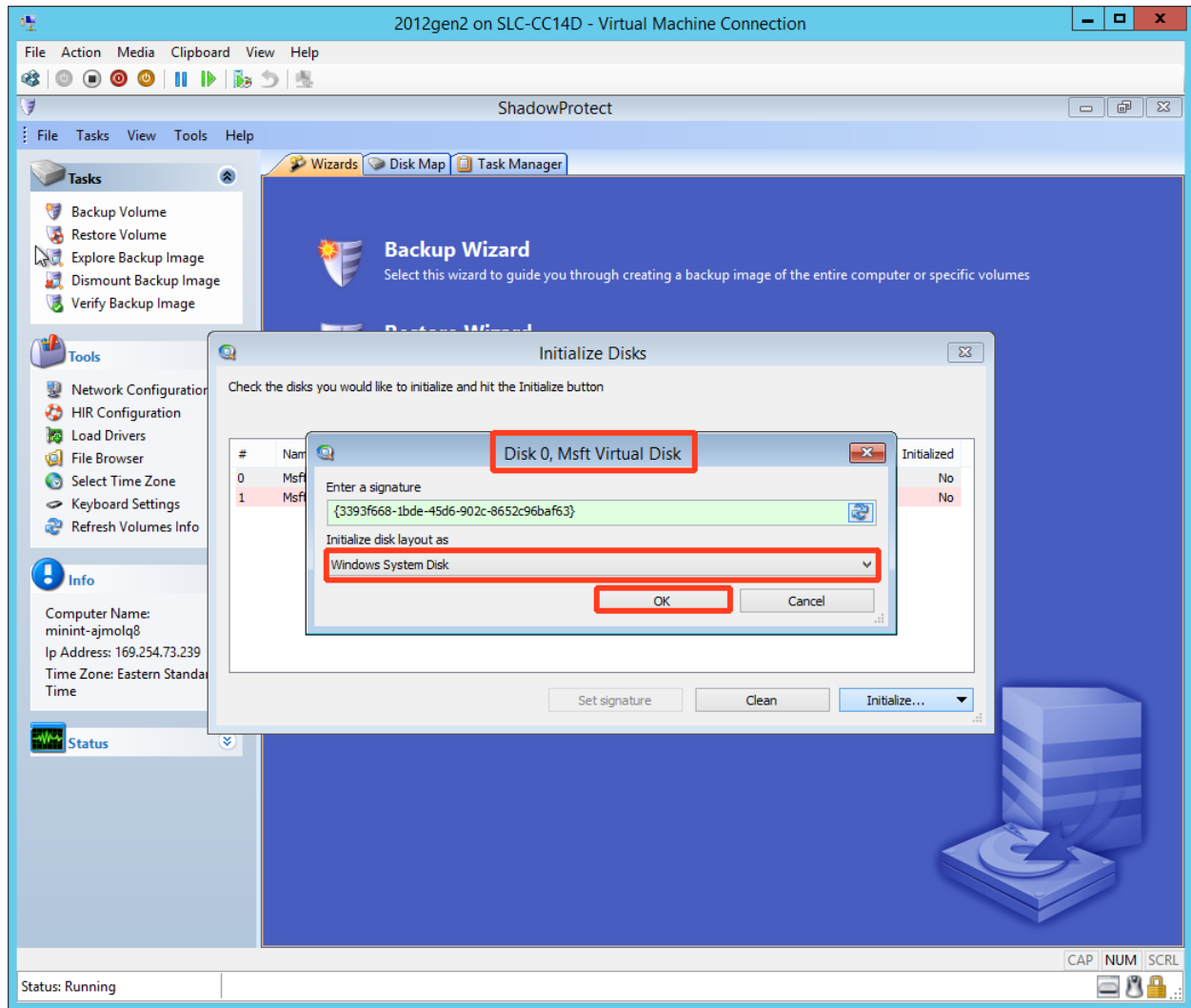
INITIALIZE NEWLY CREATED DISKS

The ShadowProtect Recovery Environment (RE) requires that all newly created disks be initialized.

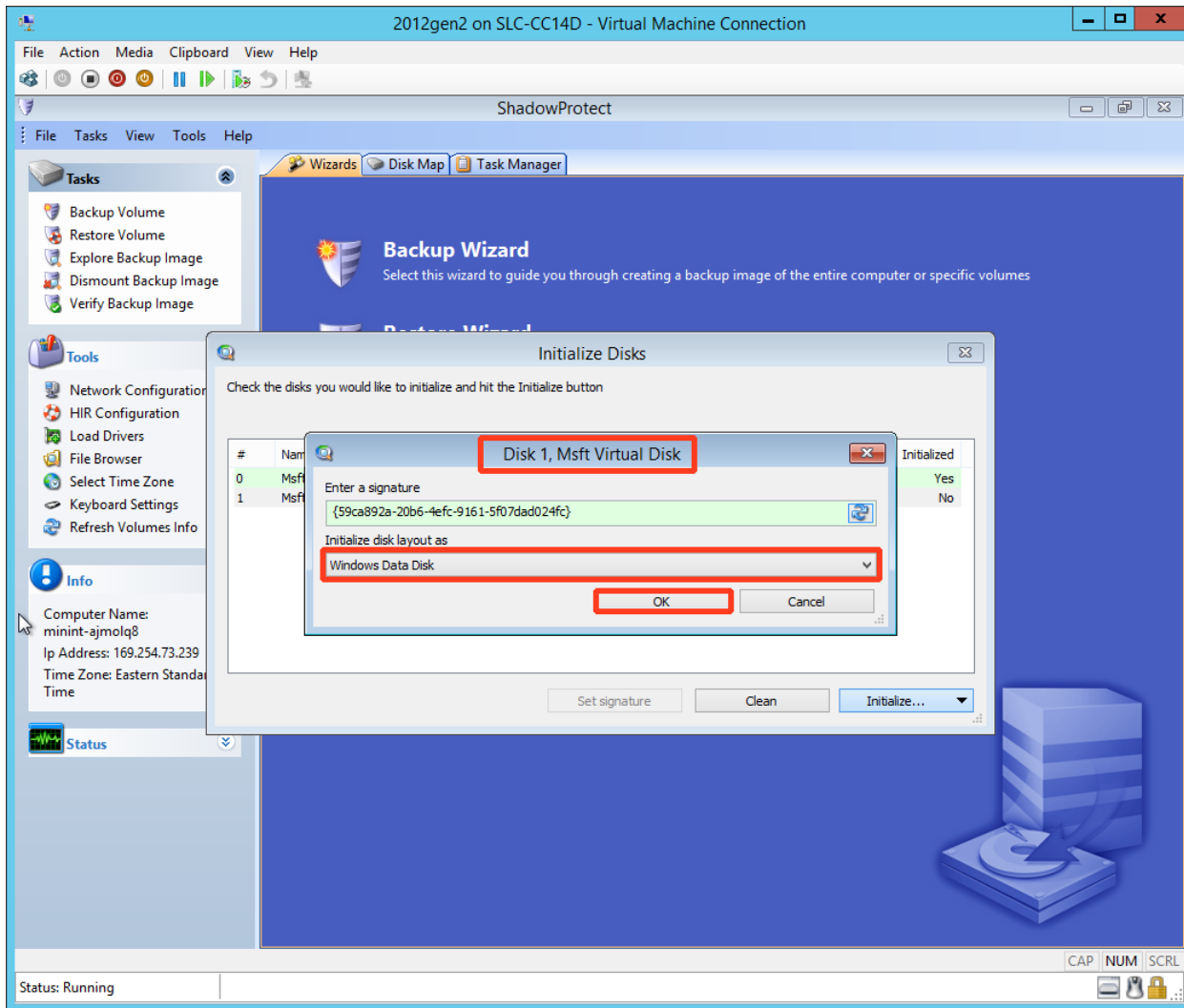
1. The *Initialize Disks* window opens automatically.
 - a. Select the disk to be initialized.
 - b. Choose **Initialize as GPT disk** from the drop-down list.



2. Next, right-click the desired **boot volume**. (The boot volume in this example is **Disk 0**)
 - a. From the *Initialize disk layout as* drop-down, select **Windows System Disk**.
 - b. Click **OK** to continue.



3. Next, right-click the desired **data volume**. (The data volume in this example is **Disk 1**.)
 - c. From the *Initialize disk layout as* drop-down, select **Windows System Disk**.
 - d. Click **OK** to continue.

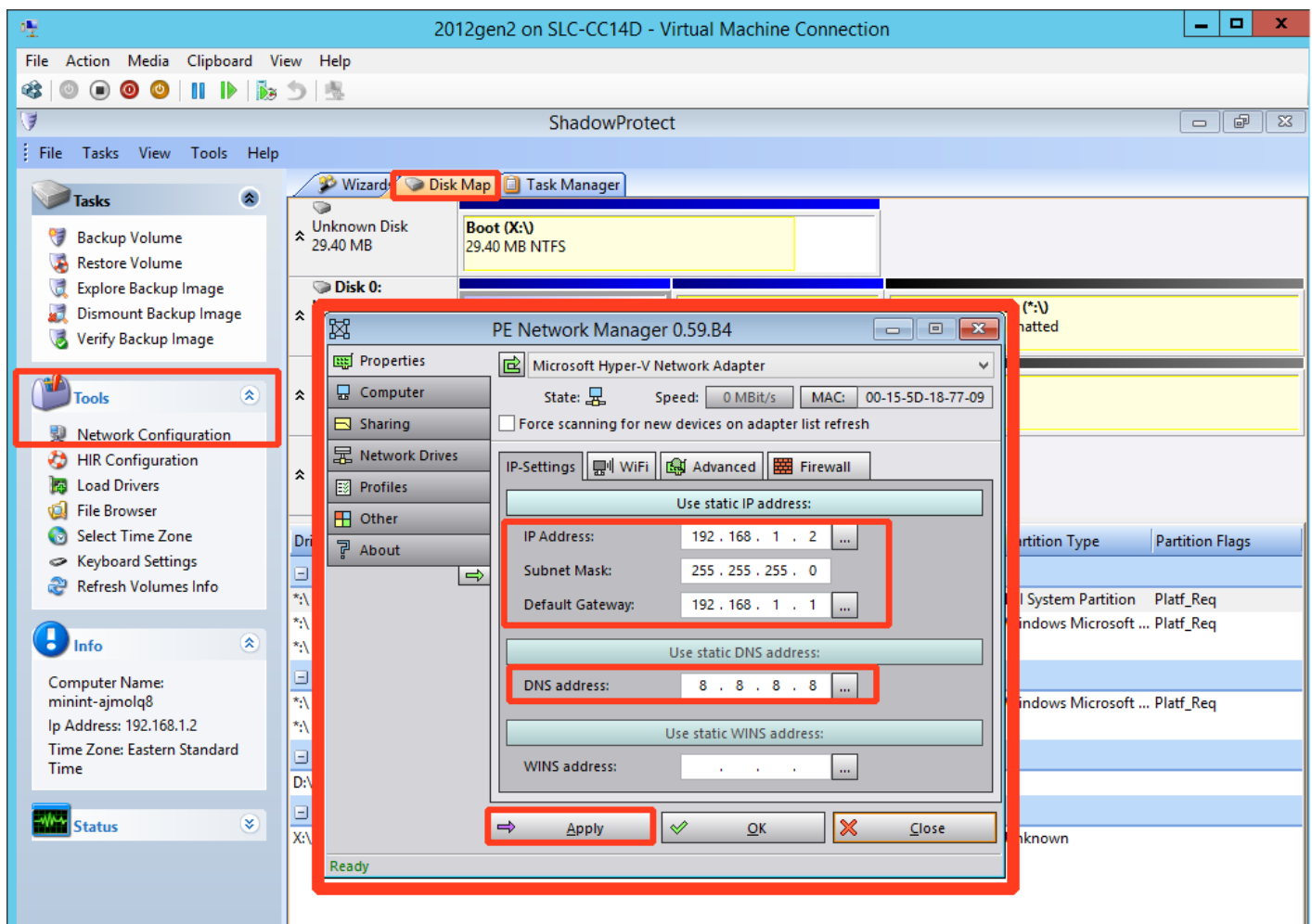


4. Close the **Initialize Disks** window.

CONFIGURE THE NETWORK

1. Select the **Disk Map** tab in the ShadowProtect Recovery Environment and locate **Tools** on the left hand navigation panel.

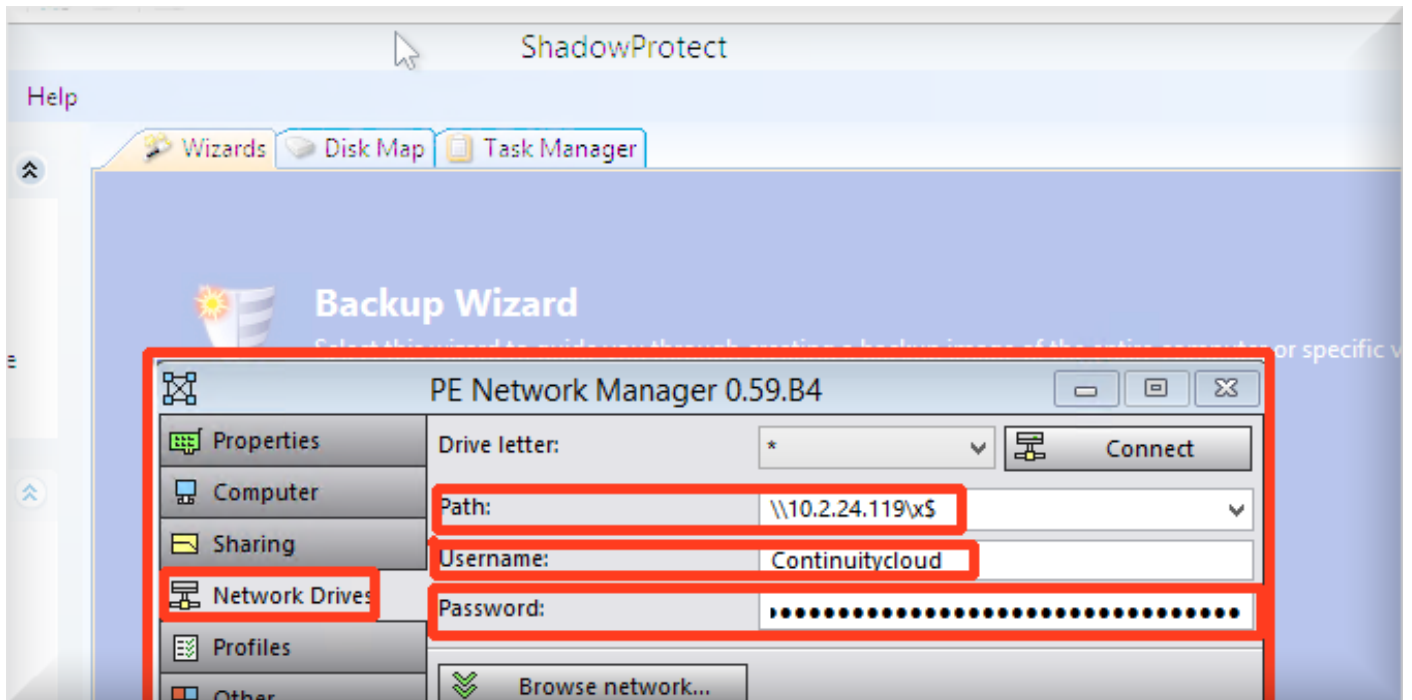
- Under **Tools**, click **Network Configuration**, to open the Network Manager window.
- Click on **Obtain an IP address automatically** to change to manual address selection
- Input an **IP address** in the same range used when you configured **your Virtual Firewall LAN***
- (In this example, 192.168.1.2).
- Use the same **Subnet Mask** used in your Firewall. (In this example, 255.255.255.0).
- The **Default Gateway** will be the Firewall Address (In this example, 192.168.1.1).
- Use 8.8.8.8 for the static DNS address.
- Click **Apply**



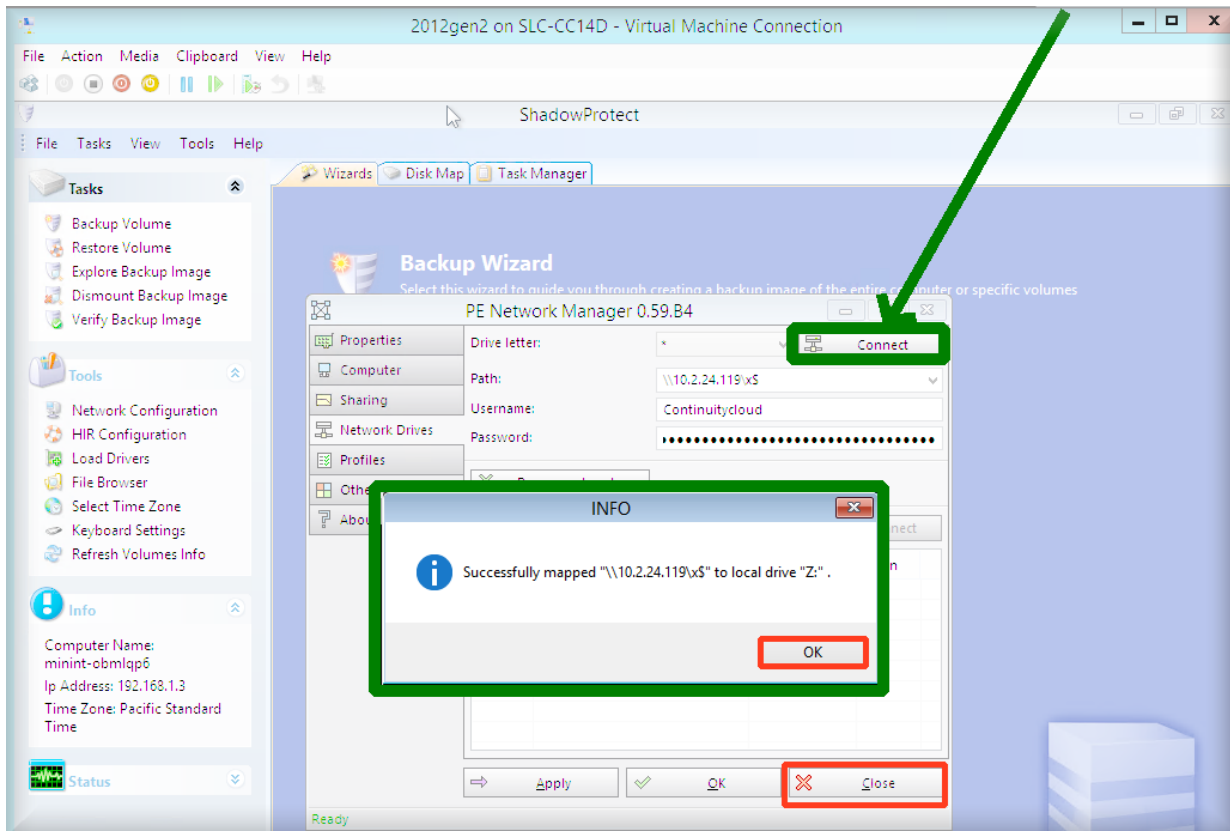
*The [Virtual Firewall Configuration Guide](#) is available for review [here](#):

Connect and map the drive

2. Select the **Network Drives** tab on the left navigation panel of the *Network Manager* window and complete the following fields:
 - a. For **Path**, enter the UNC path of the CC Node X: volume, [\\10.2.24.119\X\\$](#).
 - b. Enter the **Username** as continuitycloud
 - c. Use the same **Password** you use to connect to the CC Node. (Copy and paste the password using the clipboard, to avoid errors when manually retyping.)

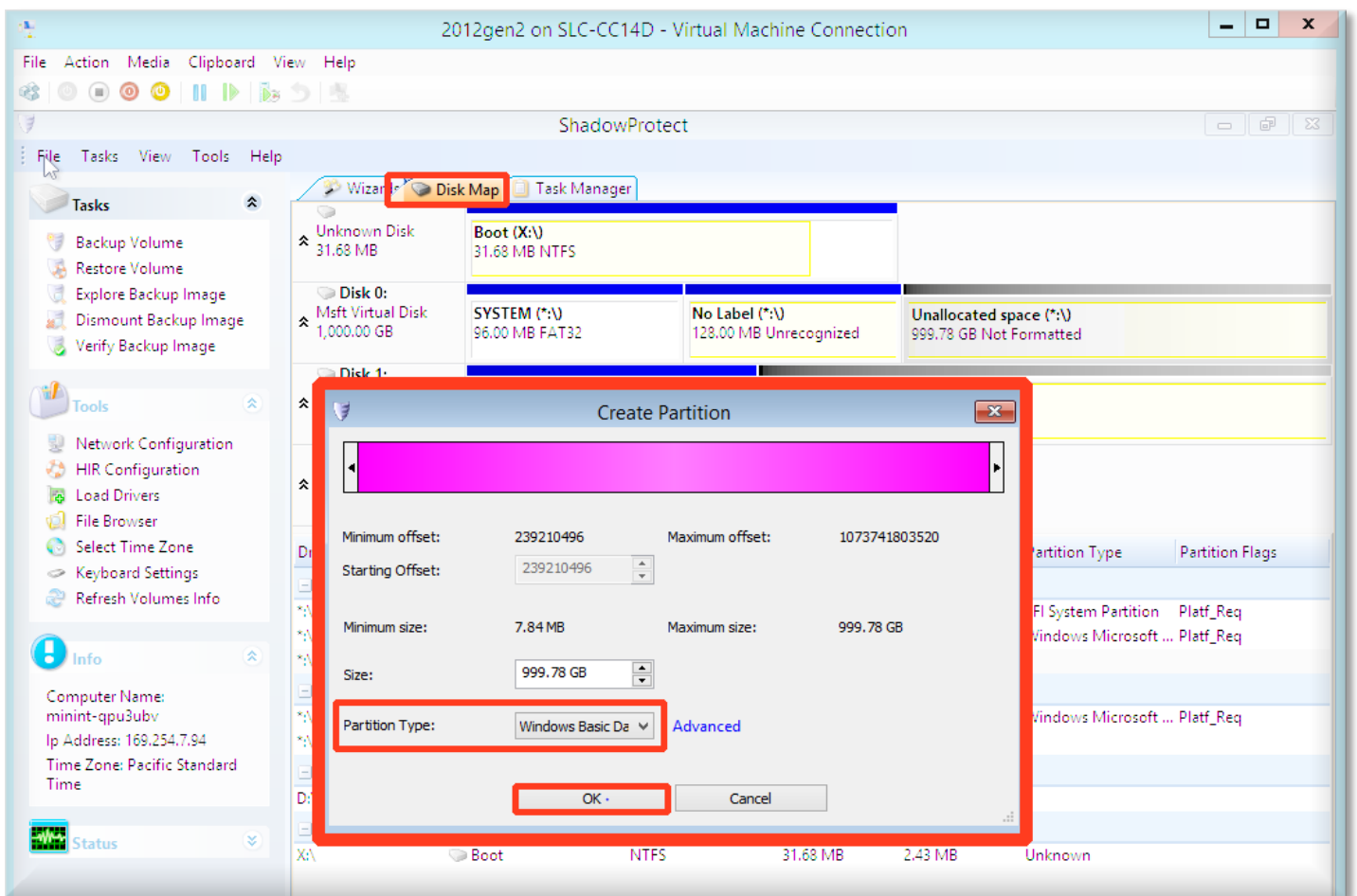


3. After all of the above fields are completed as shown, click the **Connect** button in at the top right corner of the *Network Manager* window.
 - a. A confirmation message will appear stating "Successfully Mapped....."
 - b. Click **OK**.
 - c. Close the Network Manager.



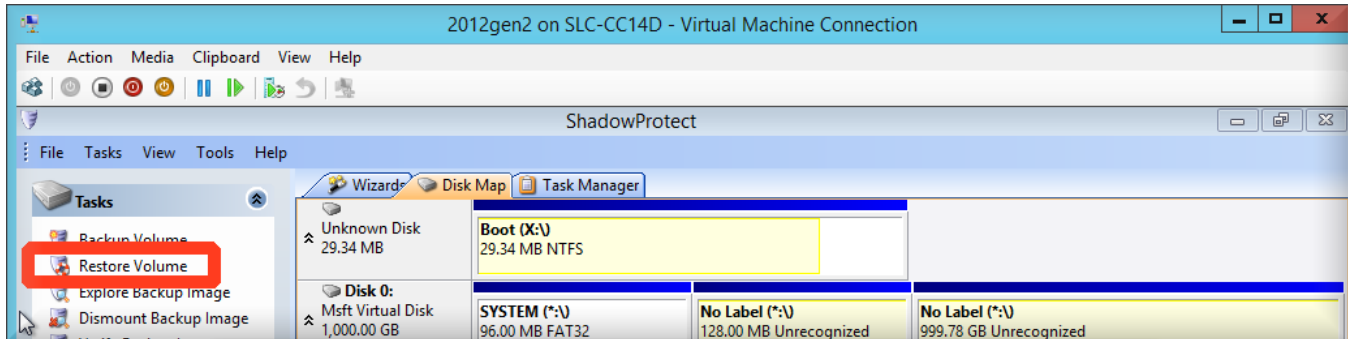
Create partitions

4. Select the **Disk Map** tab on the top row of the ShadowProtect Recovery Environment.
 - a. Right click on the largest volume from Disk 0. This assigns the boot volume and opens the **Create Partition** window.
 - b. Create a partition, using the full amount allocated. (You can use the full amount allocated because you have already created the virtual disk to the right size.)
 - c. Under **Partition Type**, select **Windows Basic Data Disk**.
 - d. Click **OK** to continue.

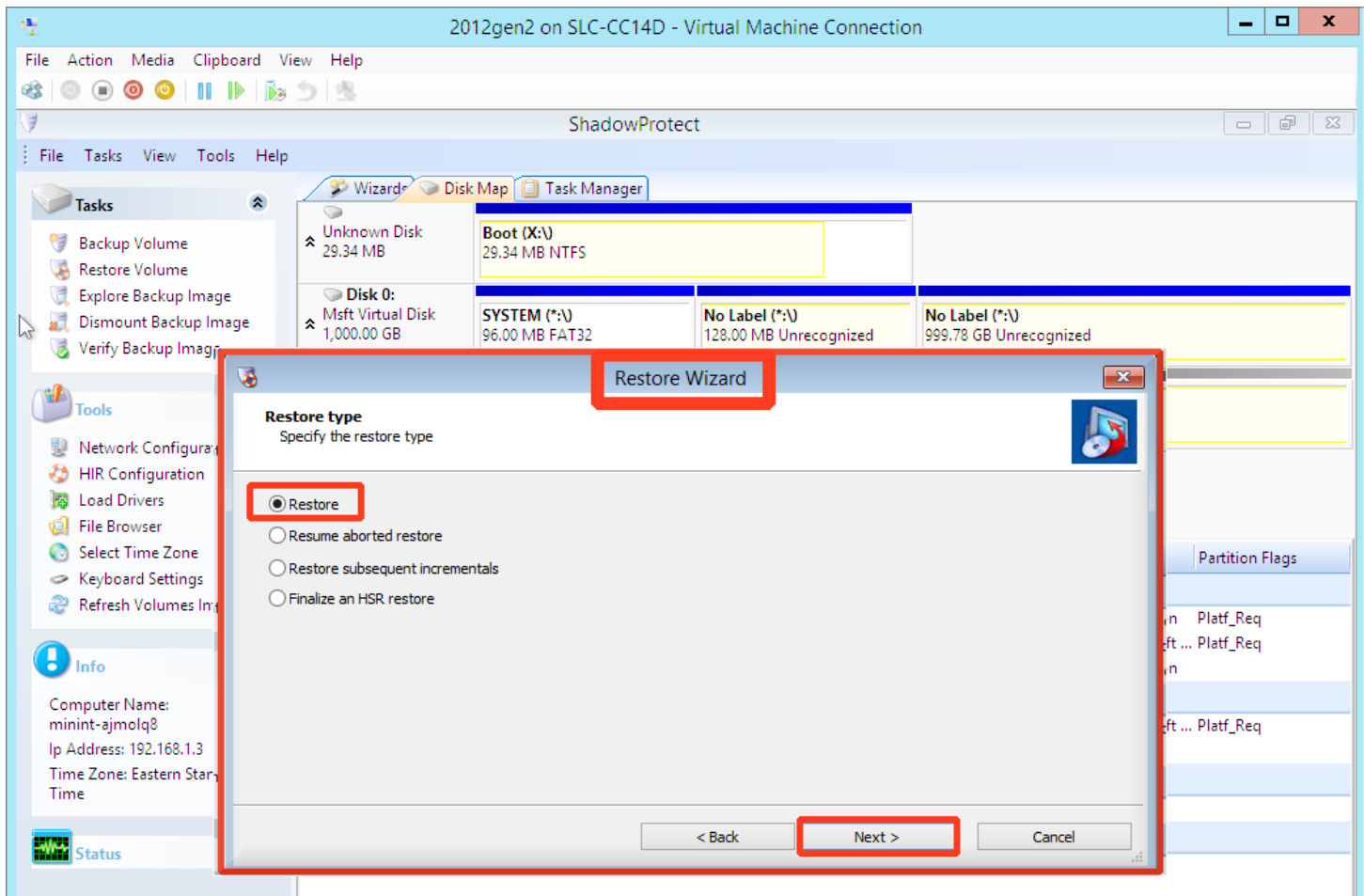


RUN THE RESTORE WIZARD

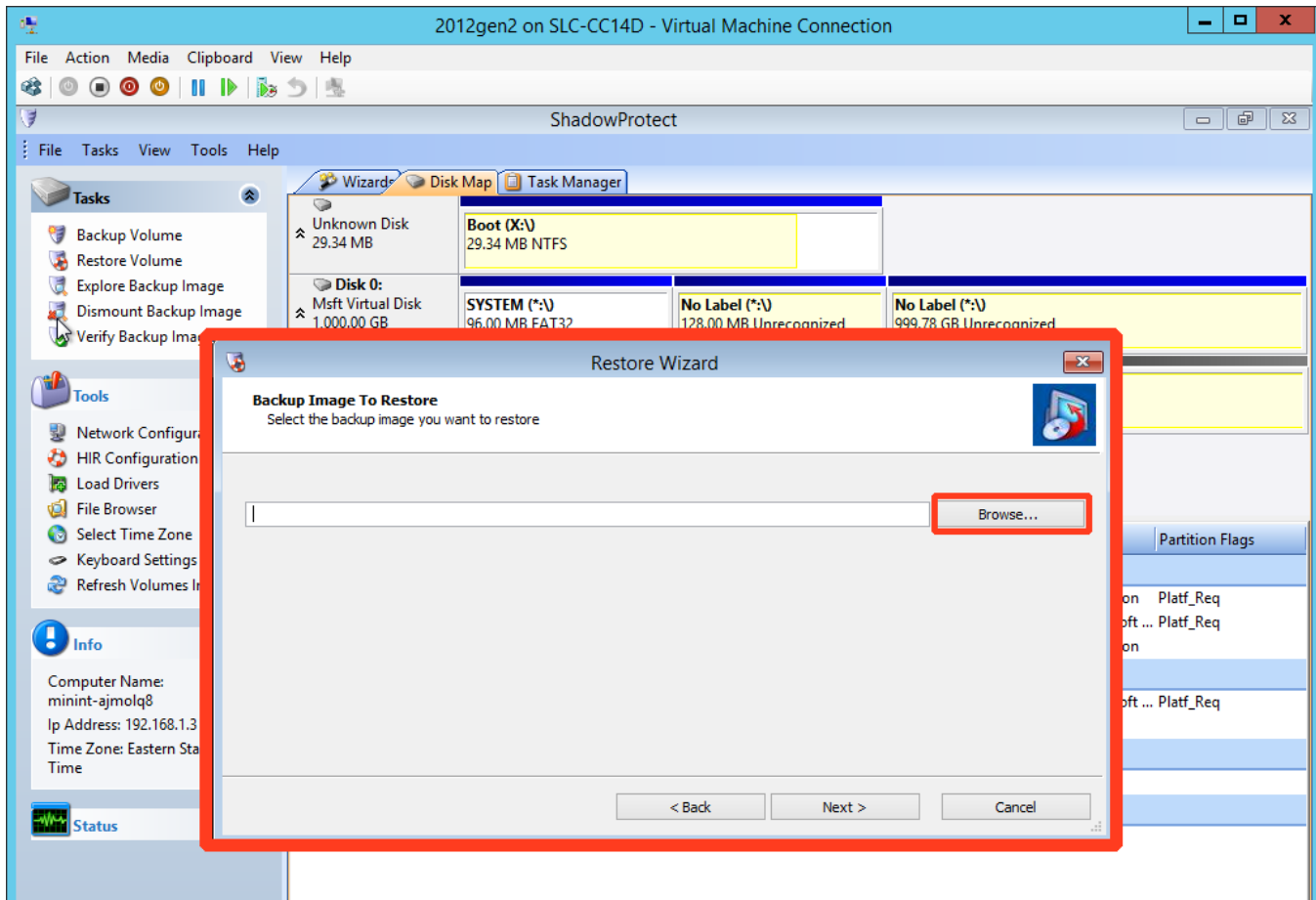
1. Click the **Restore Volume** tab in the left panel of the ShadowProtect Recovery Environment.



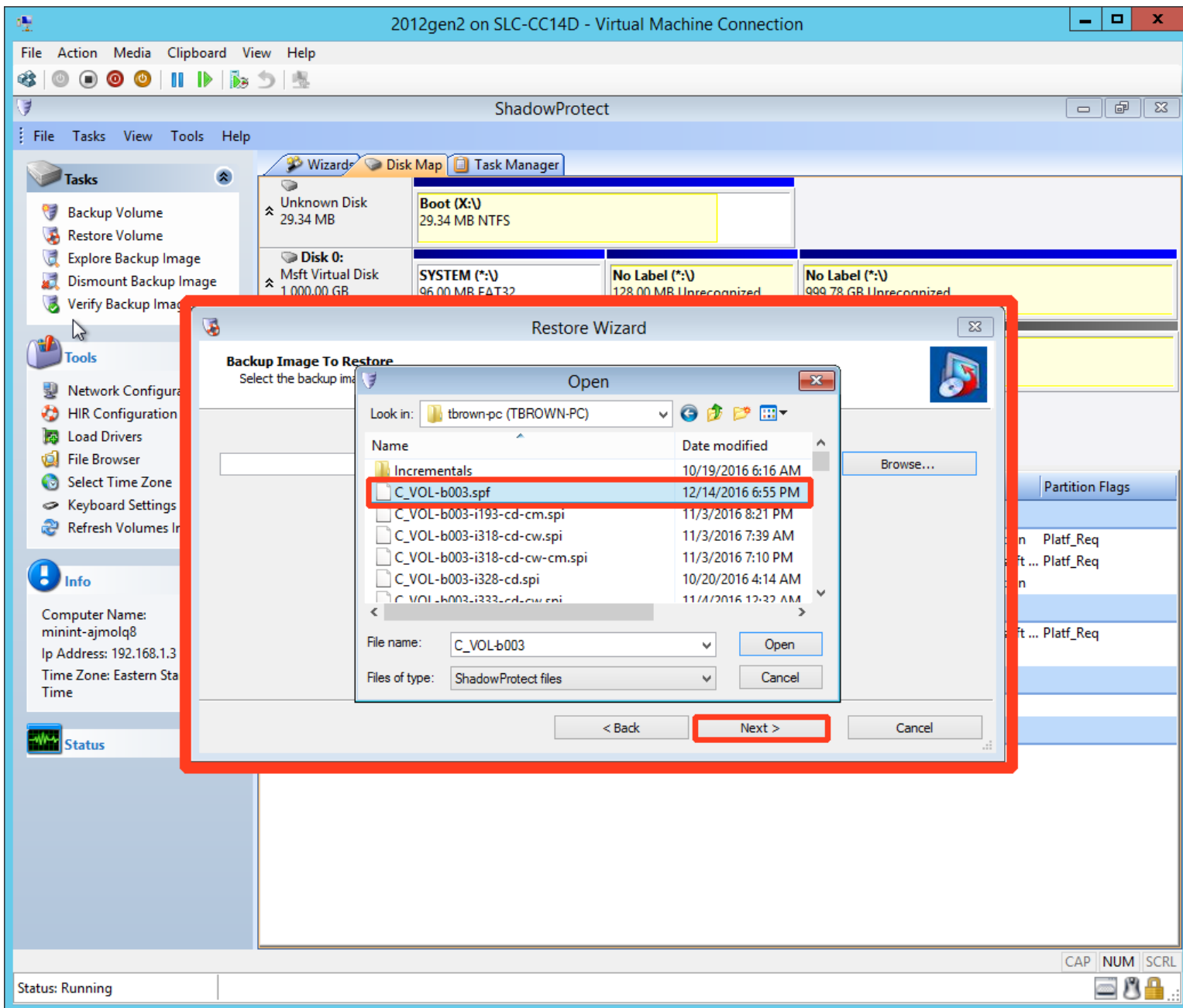
2. The **Restore Wizard** will open. Click **Next**.
Choose the **Restore** radio button and then click **Next** to continue.



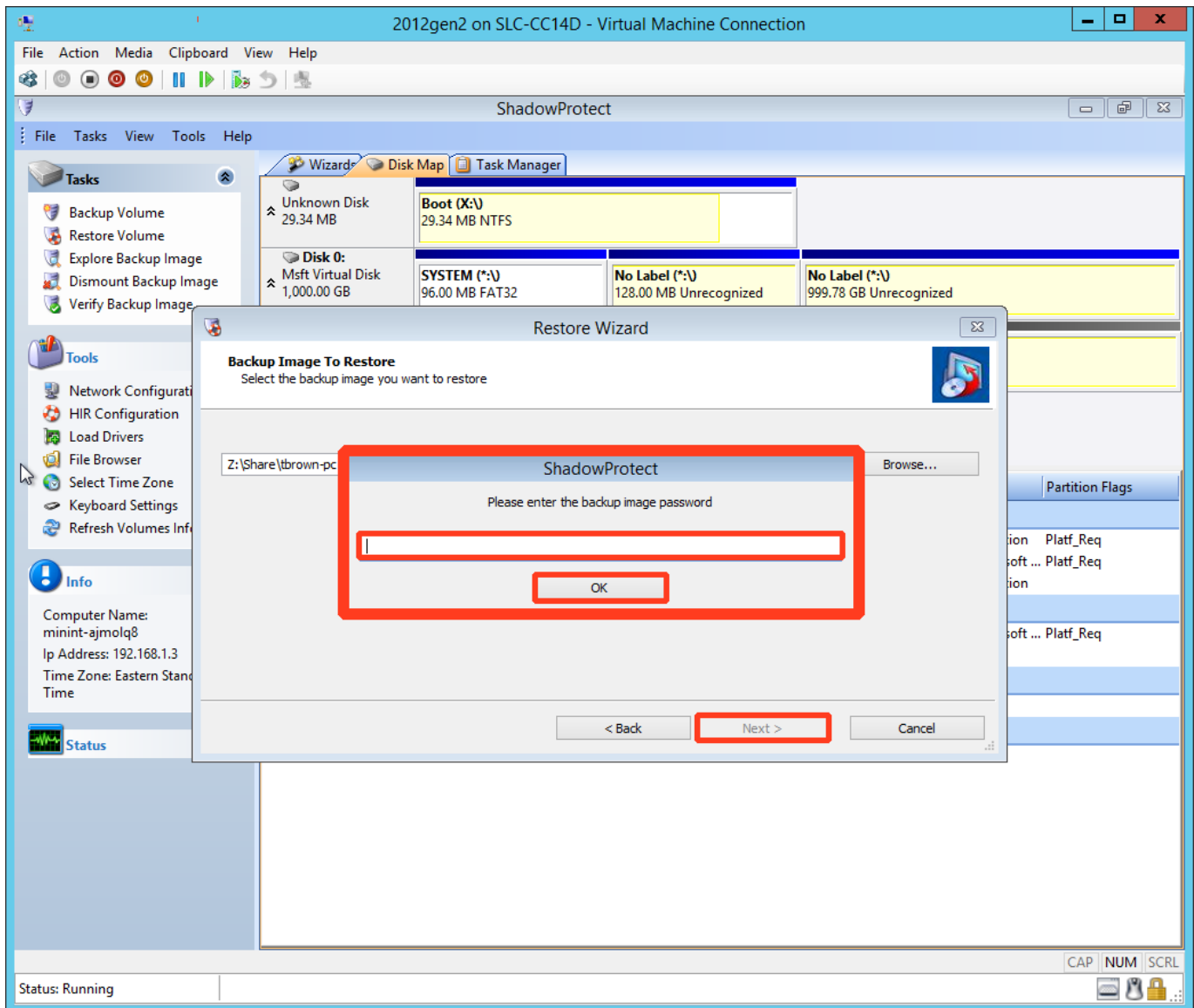
3. Click **Browse** to search for the image you wish to restore.



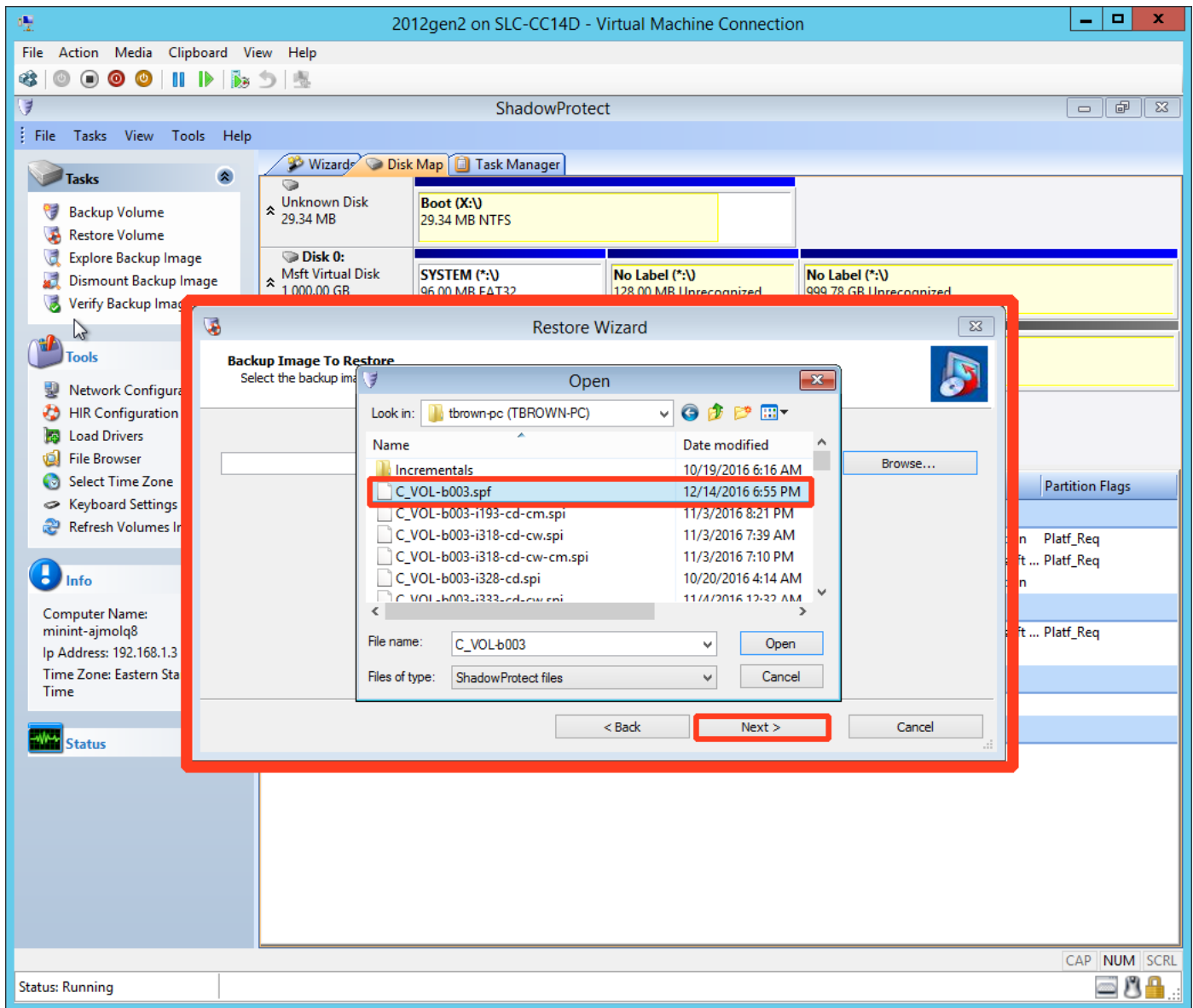
4. By default, the image will be on the drive which you connected earlier, Z:
 - a. Navigate to the folder of the chain you wish to restore.
 - b. Select the appropriate backup date and time.
 - c. Click **Next** to continue.



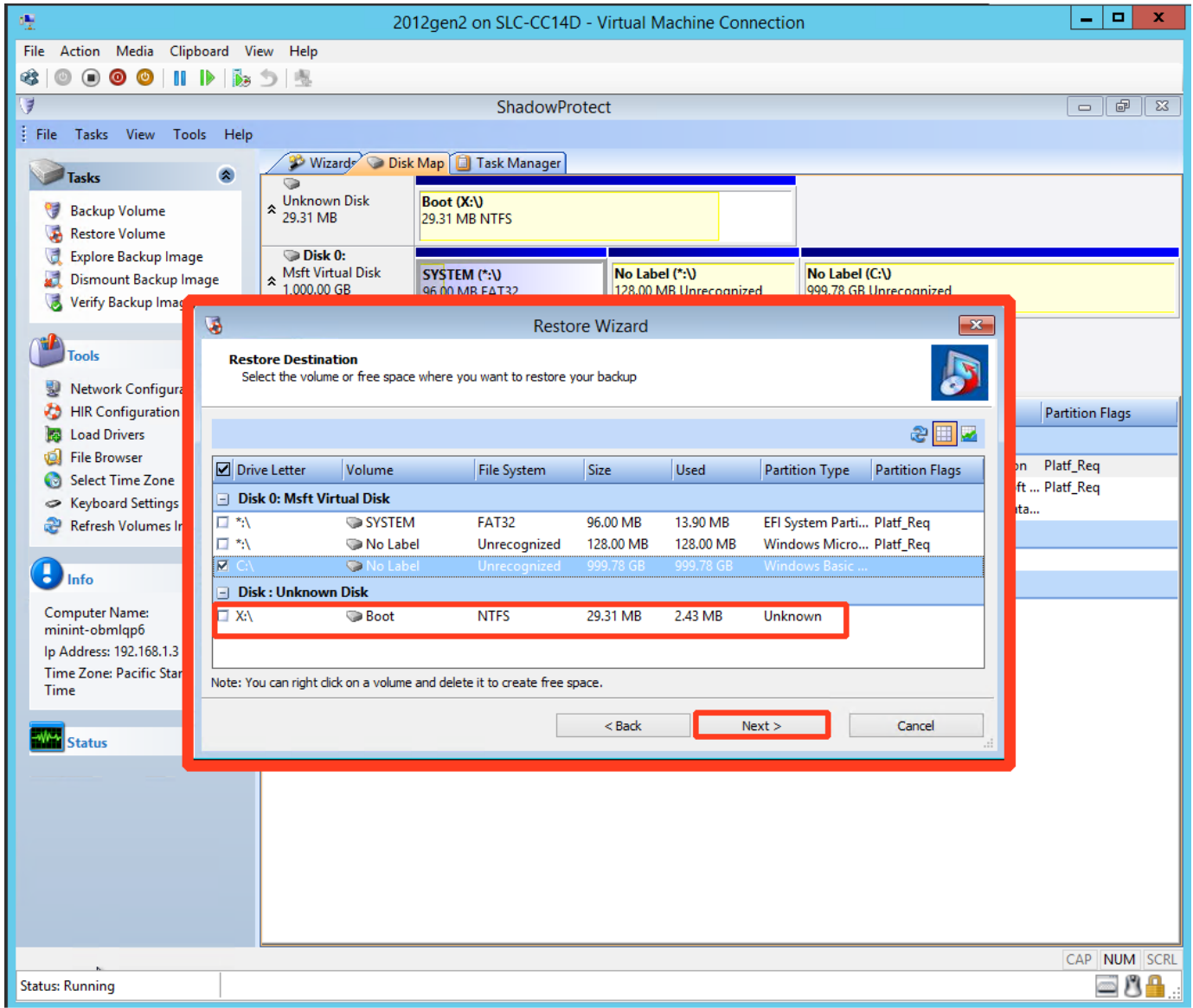
5. ShadowProtect will require the backup image password.
 - a. Enter the backup image password to access the chain.
 - b. Click OK.
 - c. Click **Next** to continue.



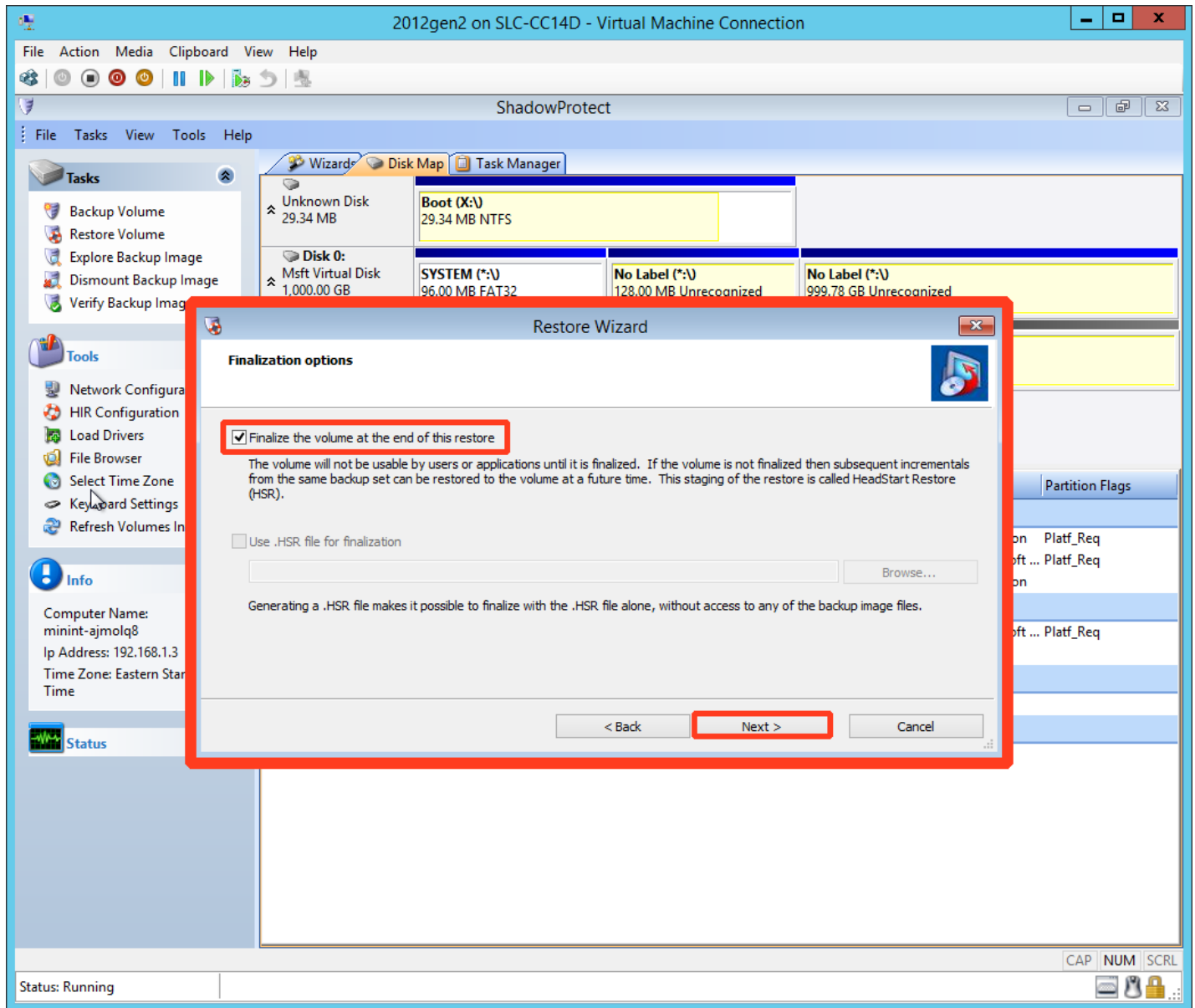
6. Verify that the date and time match what you selected and click **Next**.



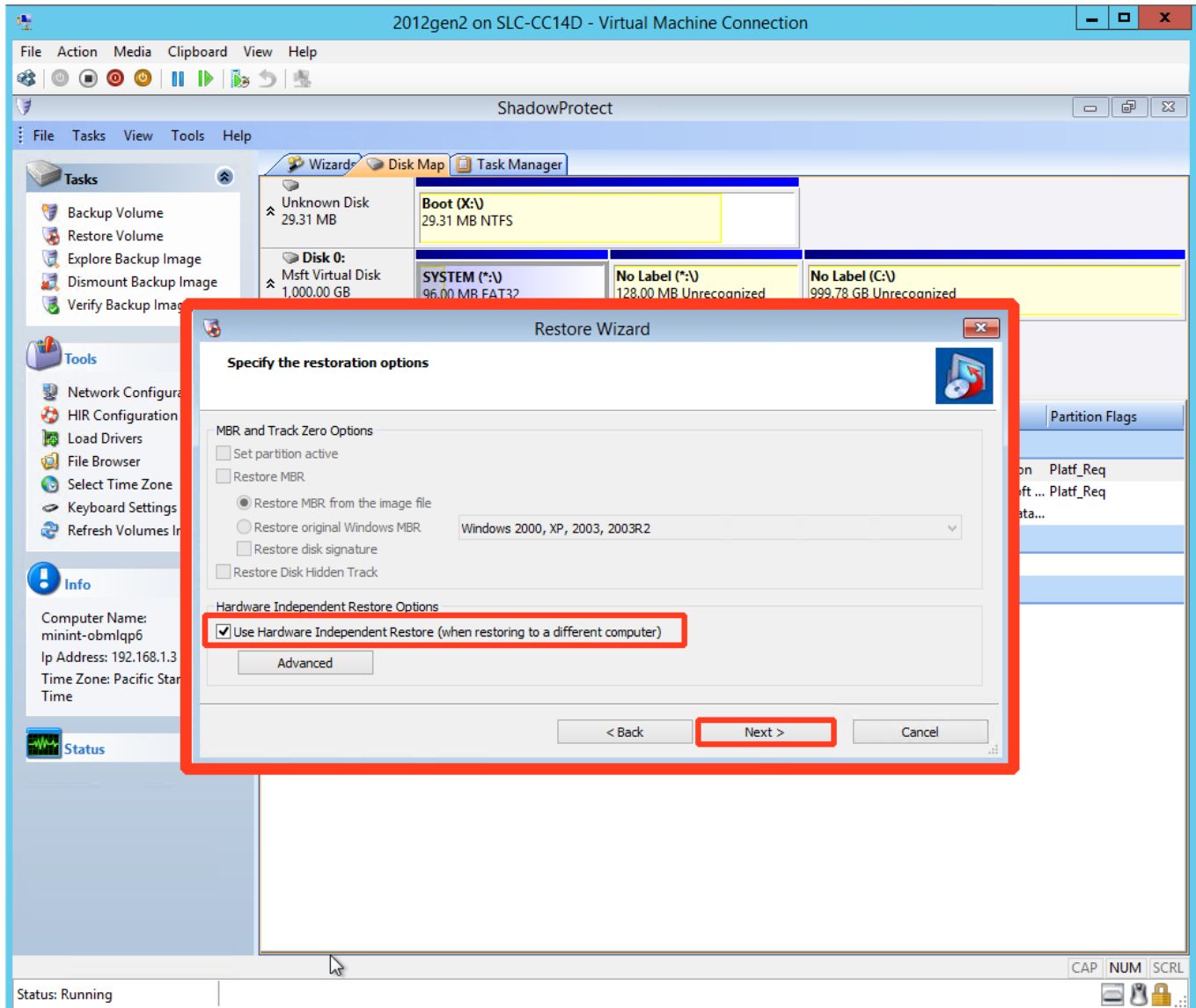
7. Select the volume you created earlier [C:\ for boot volume] and click **Next** to continue.



8. A Finalize options window will appear.
 - a. Make sure the box for **Finalize the volume at the end of this restore** is checked.
 - b. Click **Next** to continue.

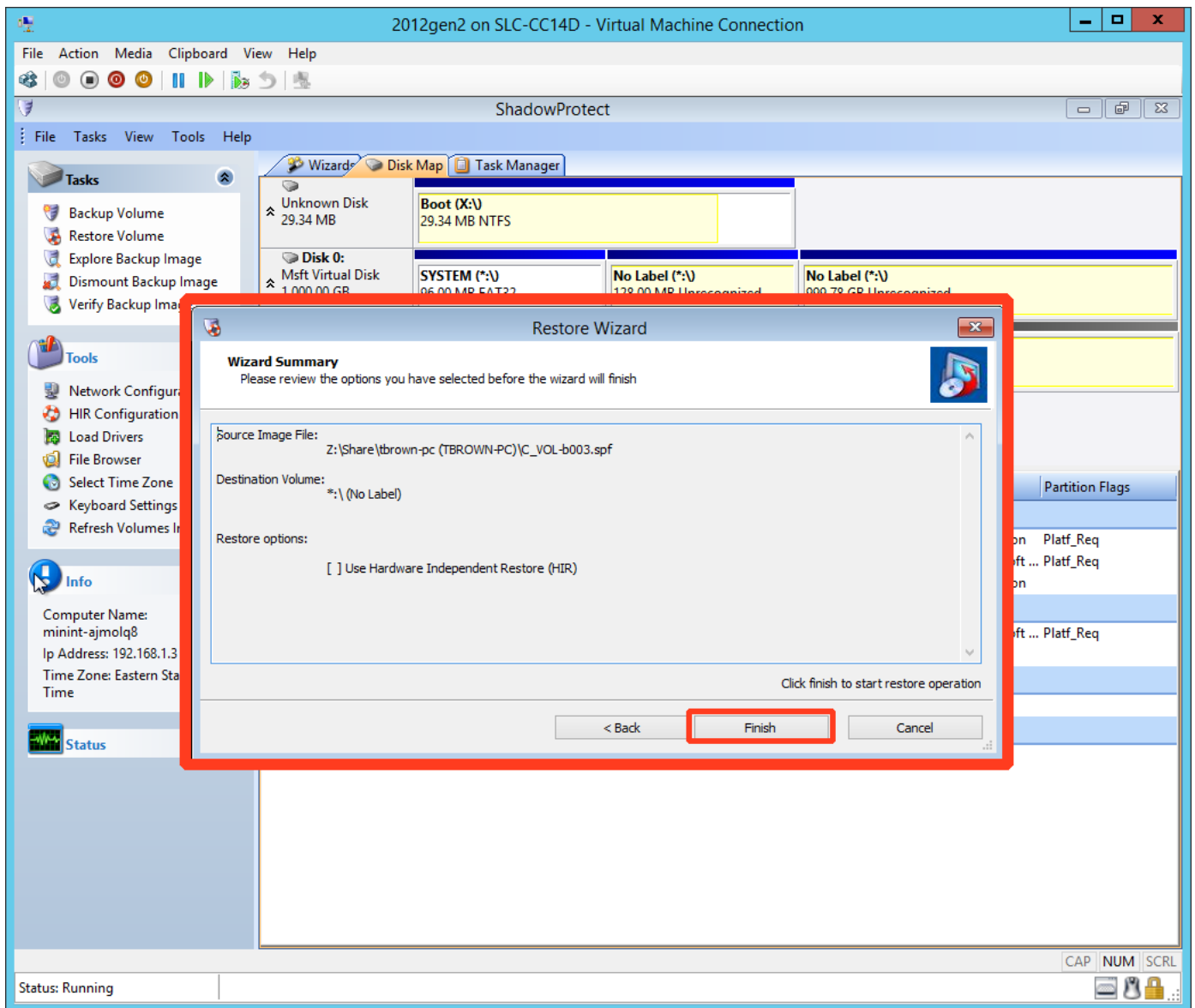


9. A Specify the restoration options window will appear.
 - a. Ensure you have checked the **Use Hardware Independent Restore** box.
 - b. Click **Next** to continue.



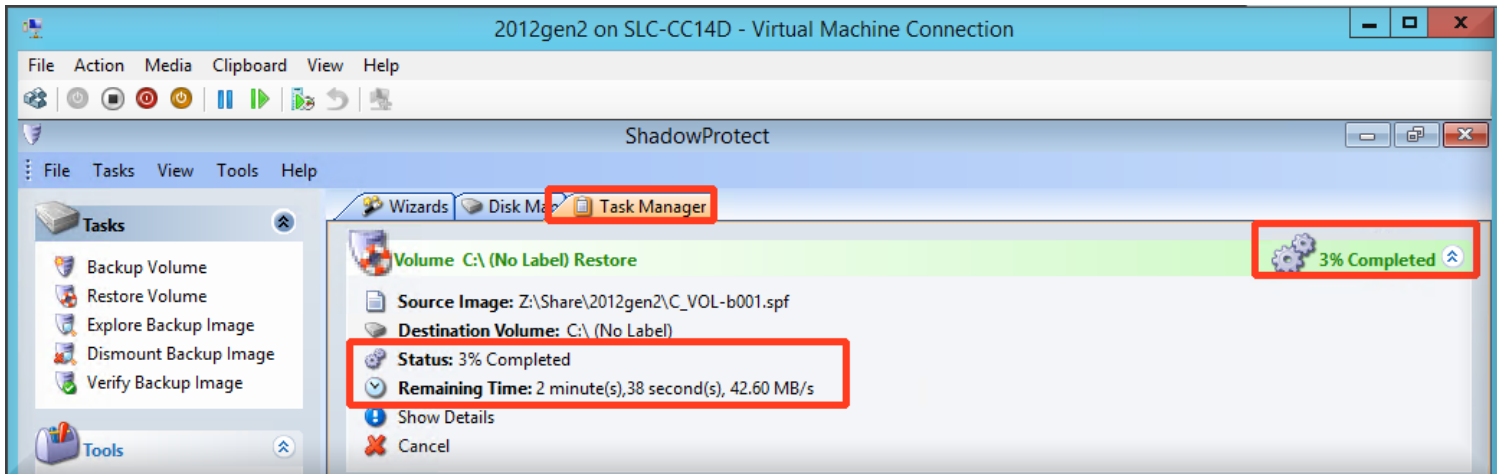
10. The Restore Wizard will now display a Summary of the options we have selected.

Review the settings and click Finish to begin the restoration operation.

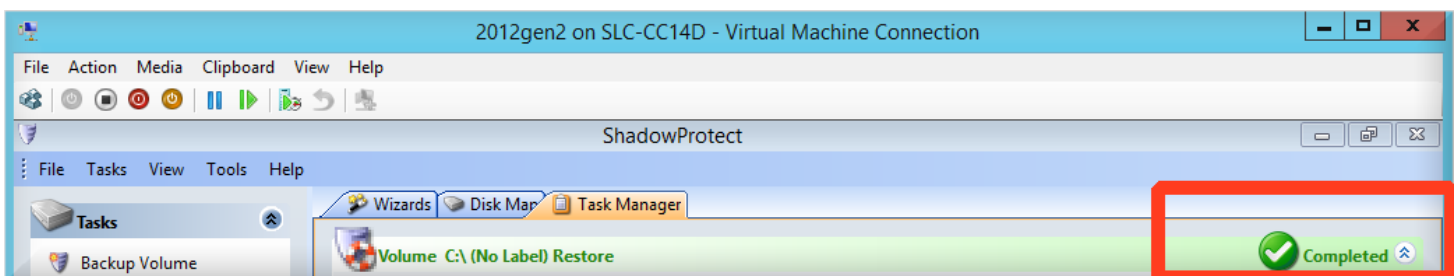


COMPLETE THE RESTORATION

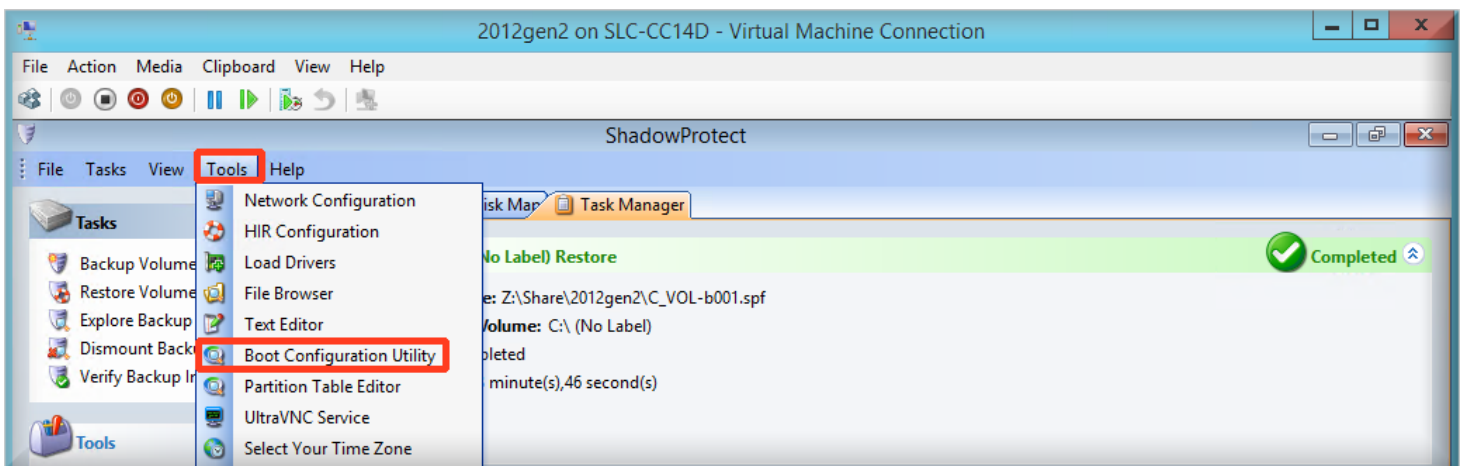
1. On the **Task Manager** tab of the ShadowProtect Restoration Environment, a status screen will display with (a) the approximate remaining time until restoration is completed and (b) the percentage of restoration currently completed.



2. Once restoration is finished, a message will indicate that restoration is 100% completed. A message will also appear if any errors occurred during the restoration.

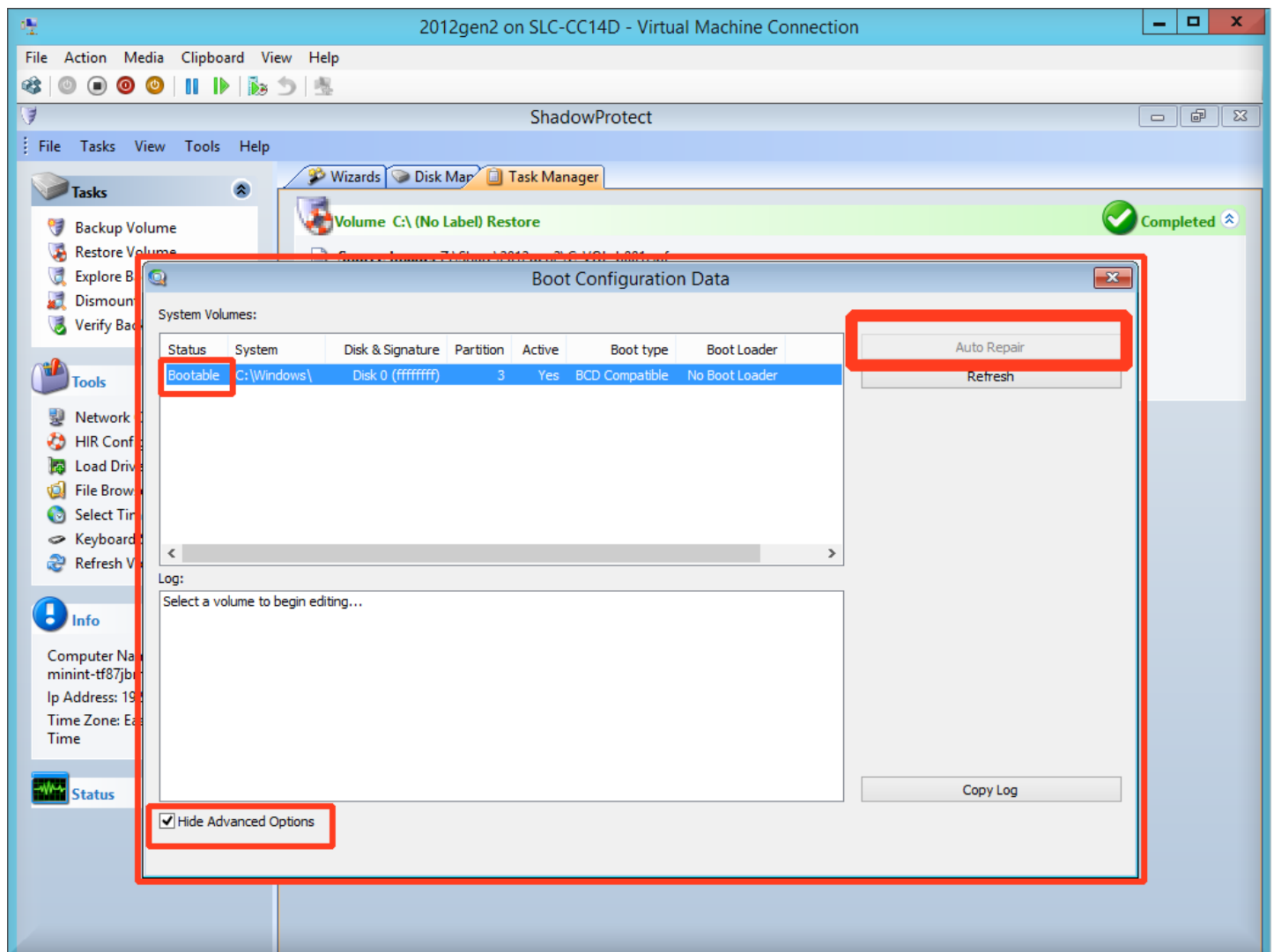


3. If there are no errors, click on **Tools** at the top menu and select **Boot Configuration Utility**.



Verify the bootable status.

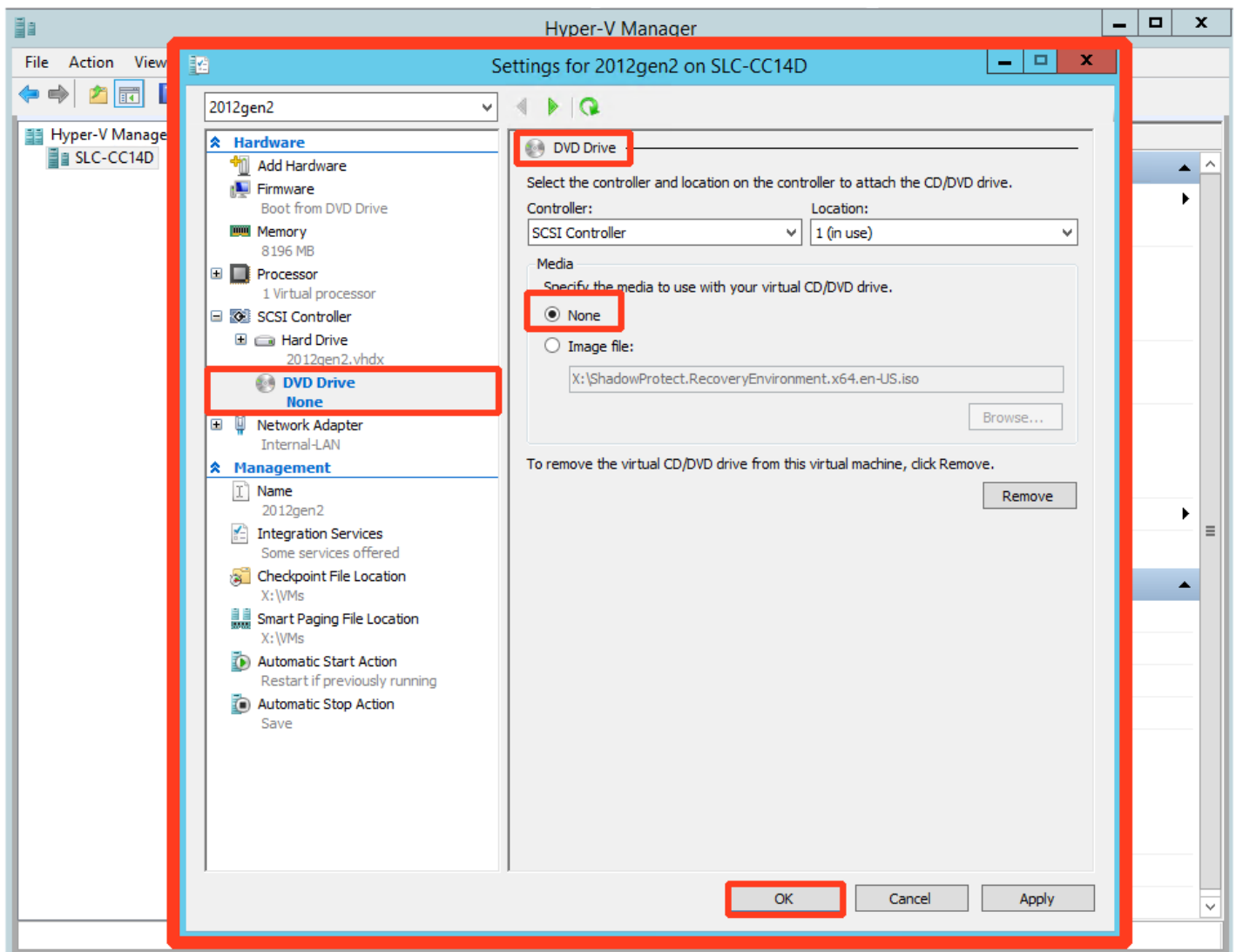
4. When the **Boot Configuration Data** window appears, verify that the **Status** is **Bootable**.
 - a. If the **Status** does NOT display as **Bootable**, go to the bottom of the Boot Configuration Data window and uncheck the **Hide Advanced Options** box.
 - b. Unchecking the **Hide Advanced Options** box will allow you to then select the **Auto Repair** function in the upper right hand corner of the **Boot Configuration Data** window.
 - c. If the **Auto Repair** function is not available or fails after you select it, please call us at 800-352-0248.



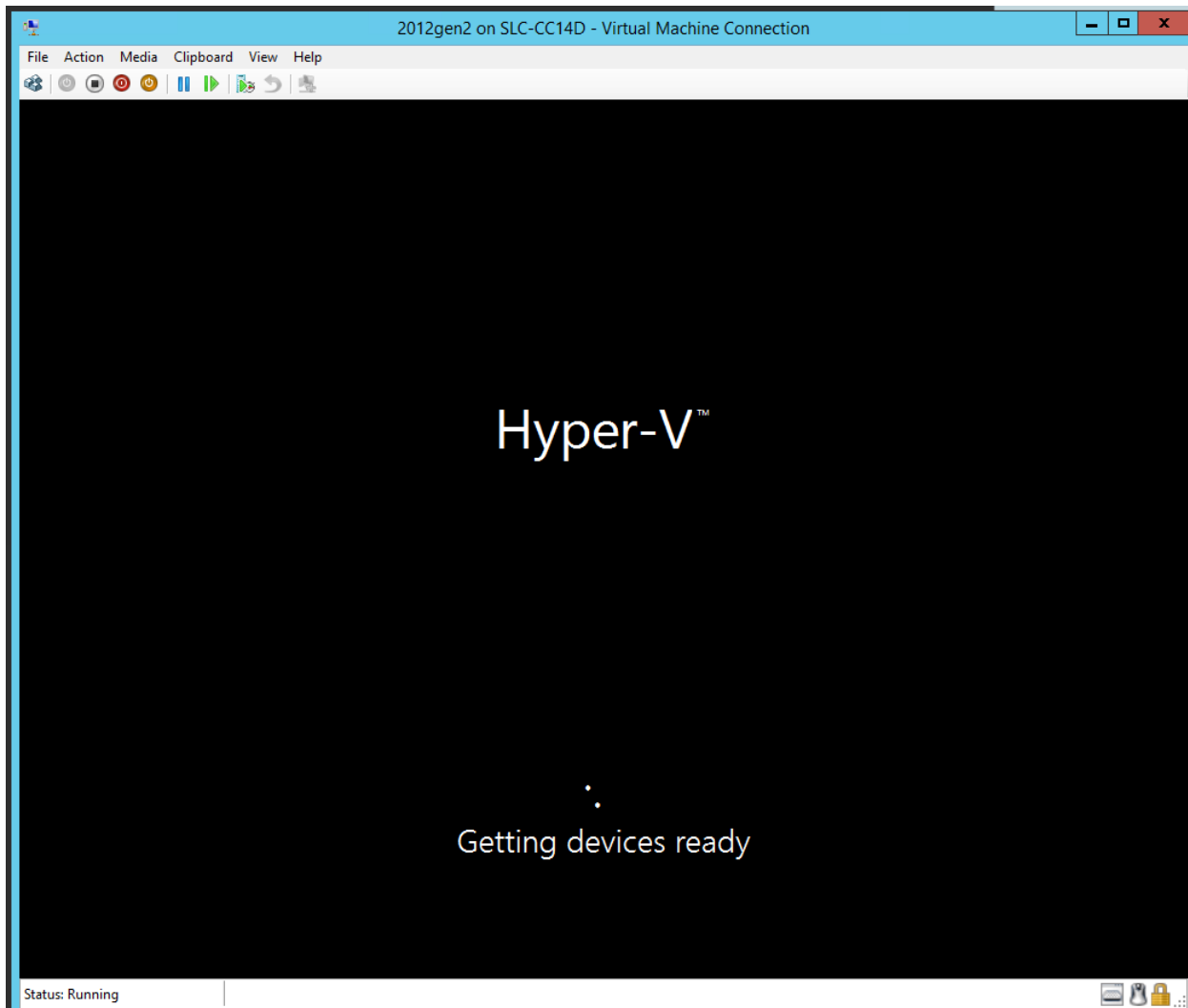
5. Click the power-off button at the top of the connection window to turn off the virtual machine. Then return to the Virtual Machines Manager window.



6. Return to the Hyper-V Manager and open the settings for this new VM.
 - a. Select the DVD Drive.
 - b. Remove the DVD ISO by selecting None.
 - c. Click OK to exit.



Boot the newly created VM



QUESTIONS

For specific questions about this eFolder product, please contact us directly:

- Submit all eFolder questions to support@efolder.net.
- Call us at 800-352-0248.
- Browse our [Knowledgebase](#).



The People Behind Your Cloud

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