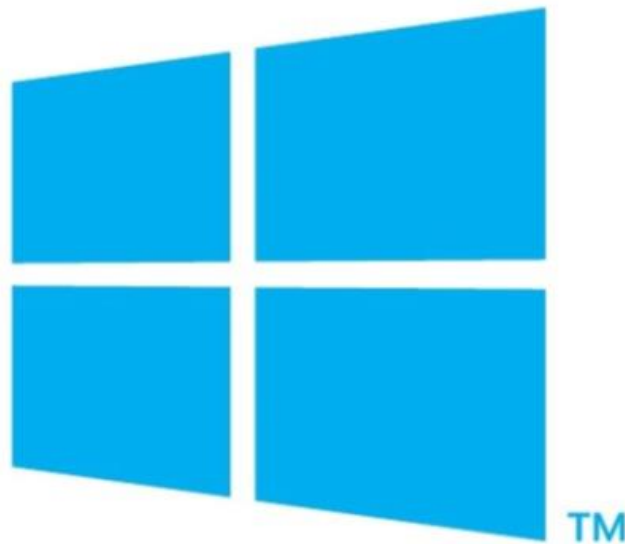




Department of Information Systems  
Arkansas. A State of Technology.



## WINDOWS SERVER HYPER-V INSTALL MANAGE MAINTAIN AND TROUBLESHOOT

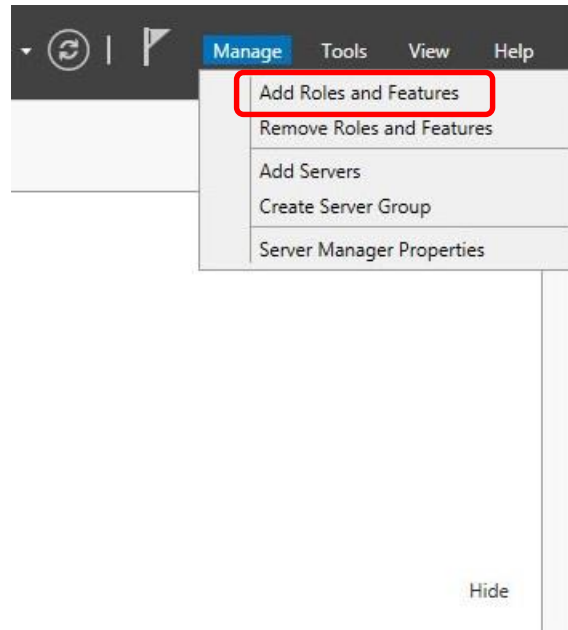
Prepared By  
DIS APSCN LAN Support  
<http://apscnlan.k12.ar.us/downloads>

# Installing Hyper-V

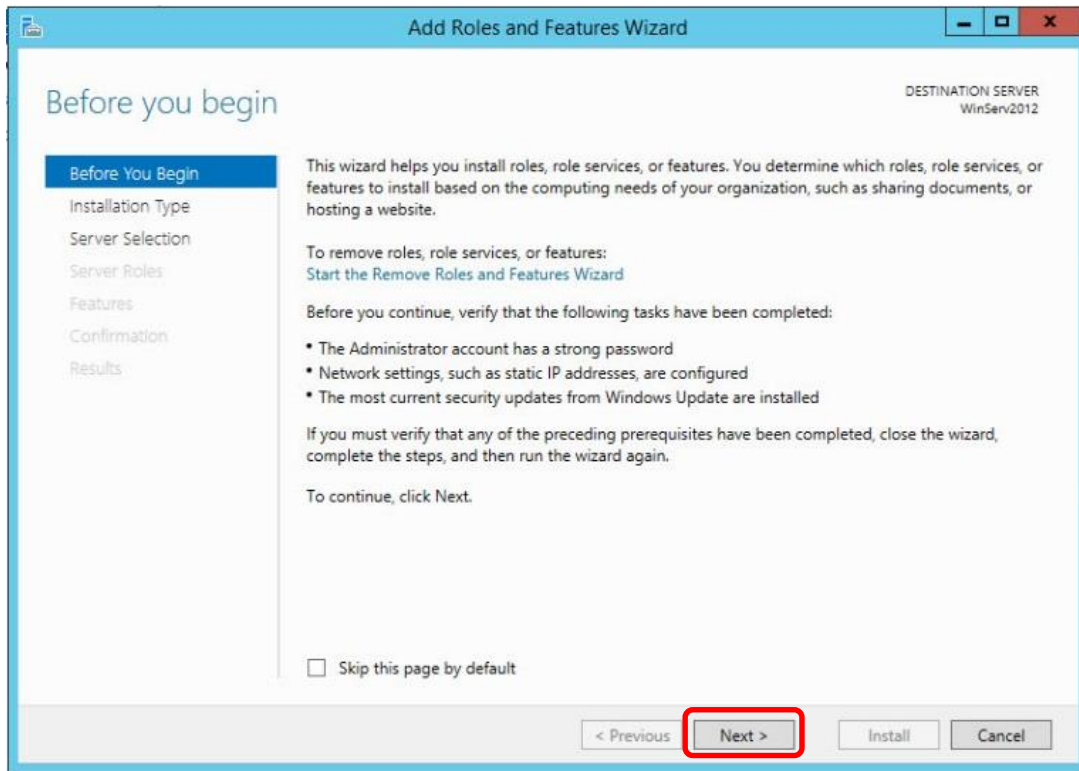
## *Installing Hyper-V as a Role in Windows Server*

### Pre-Installation Requirements

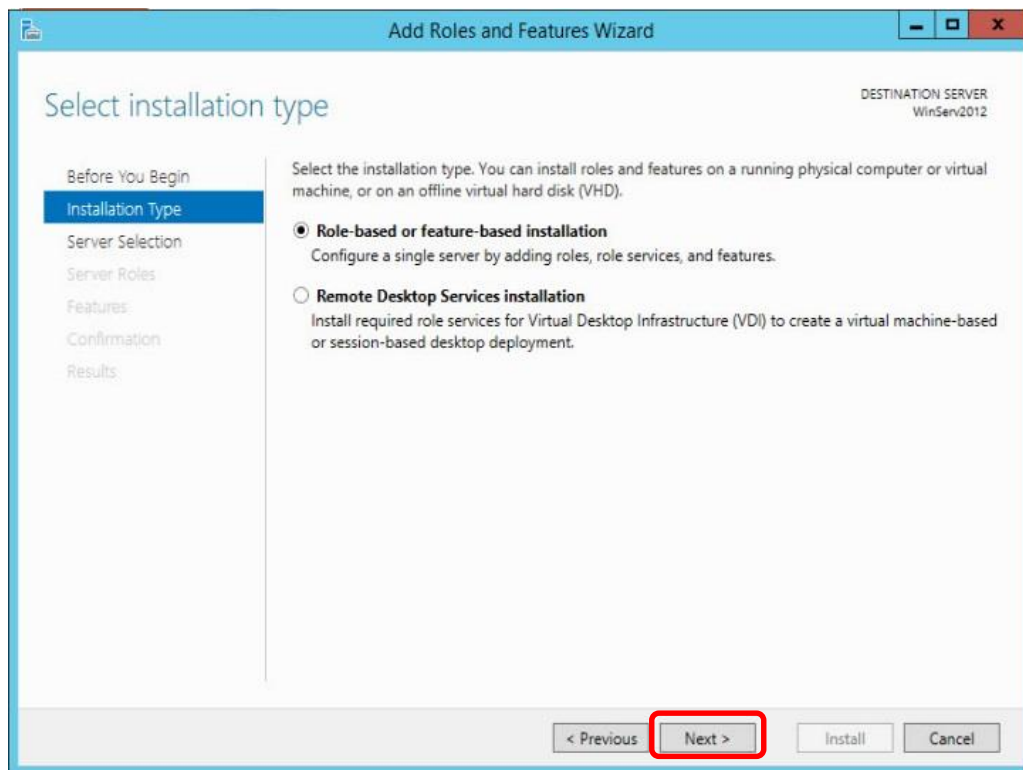
1. From the **Server Manager Dashboard** go to **Manage**, and then click **Add Roles and Features**



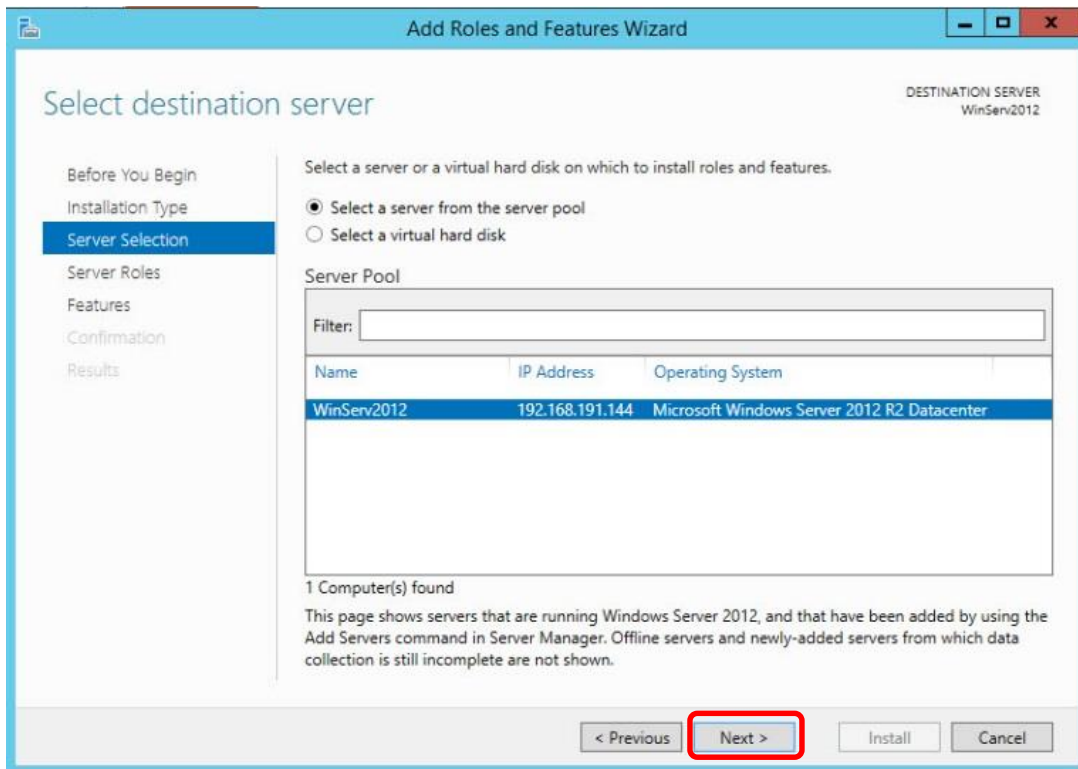
2. At **Before You Begin** page, Click **Next**



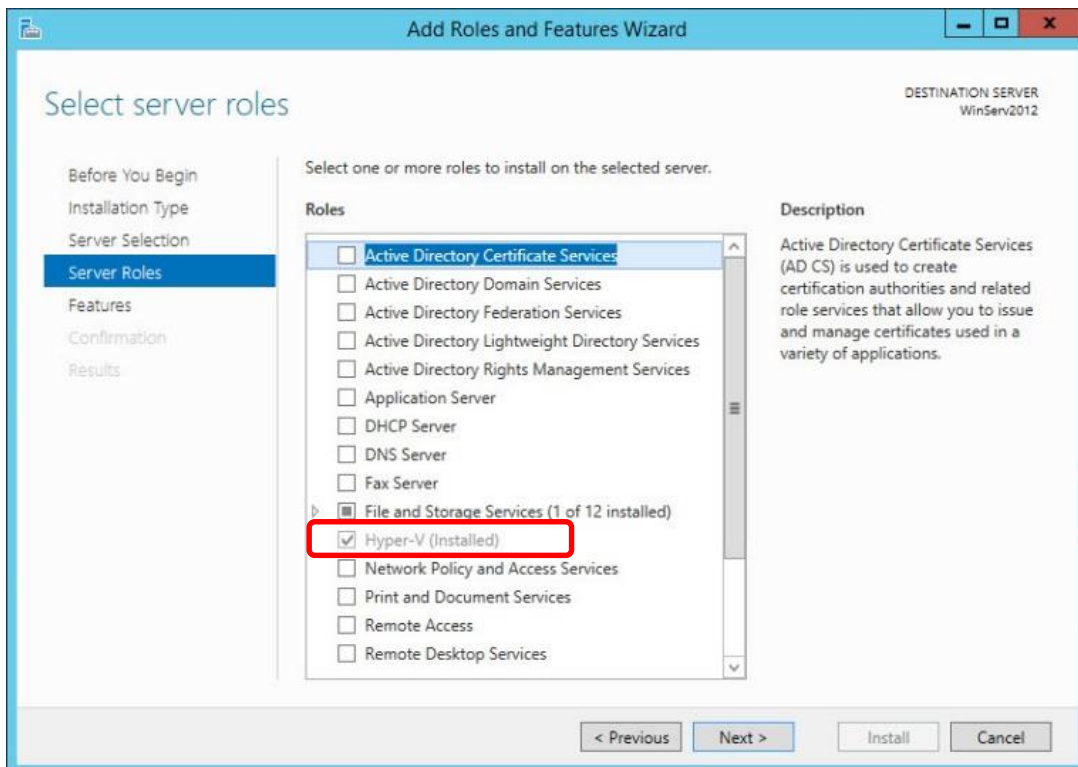
3. At **Installation Type** page, Click **Next**



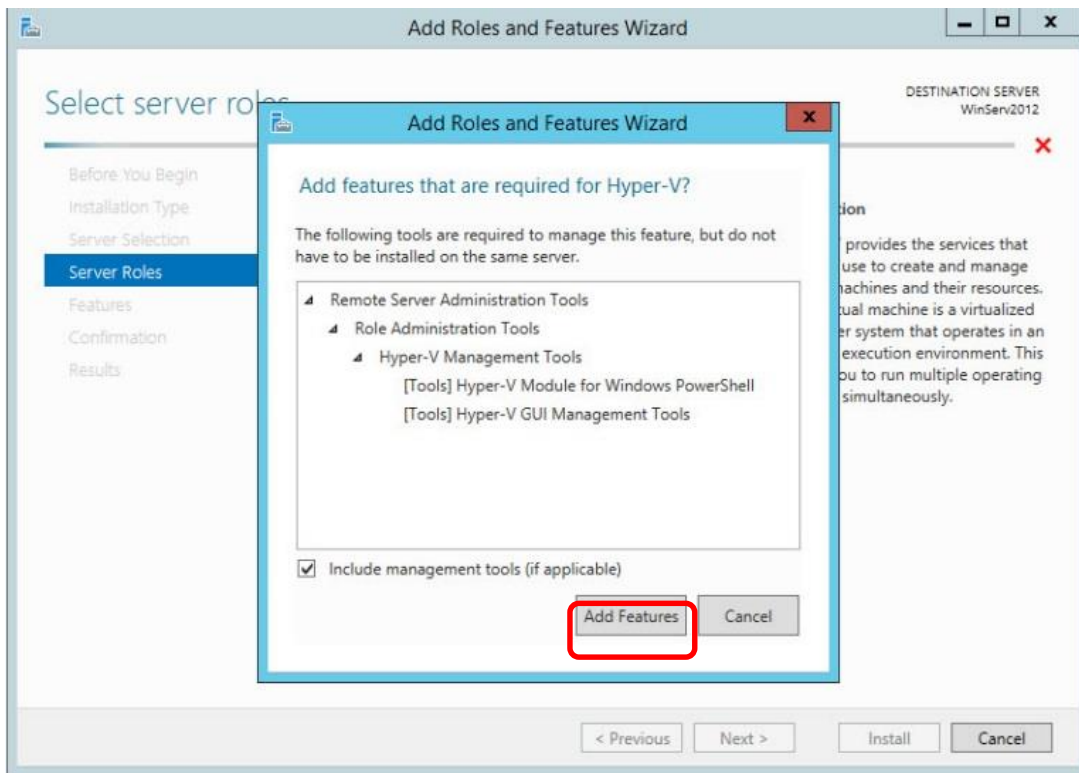
4. On the **Server Selection** page, Click **Next** or select the server you will install Hyper-V on



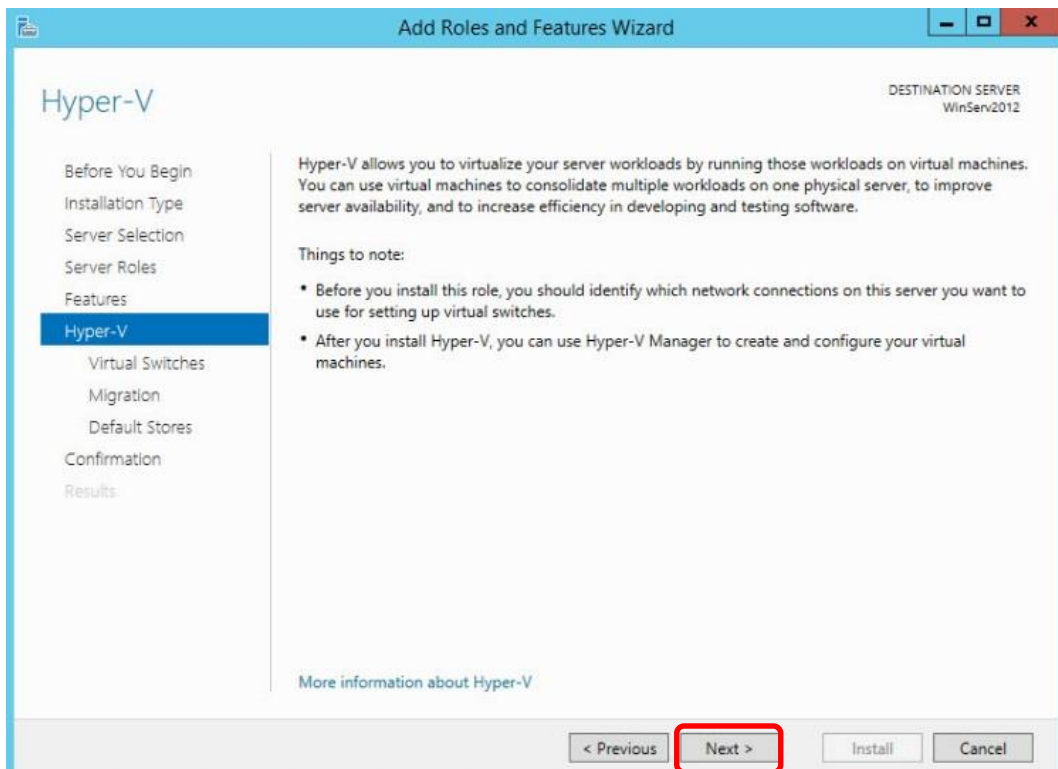
5. On the **Server Roles** page, Select **Hyper-V**



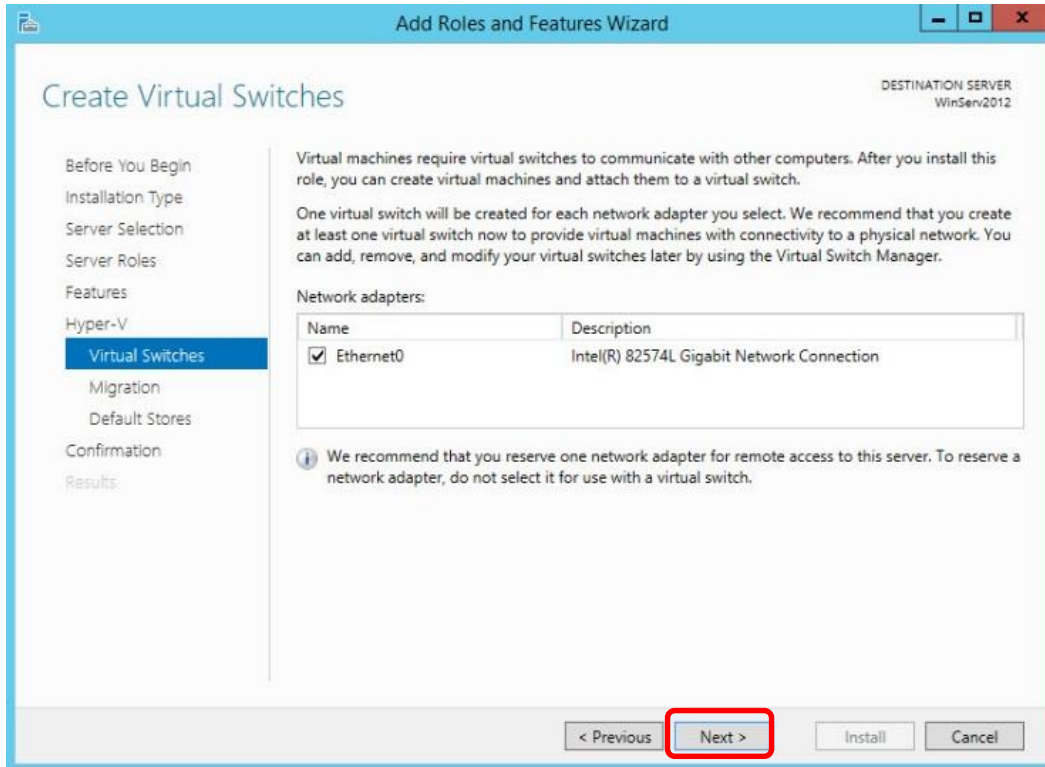
6. Click **Add Features** when the wizard comes up



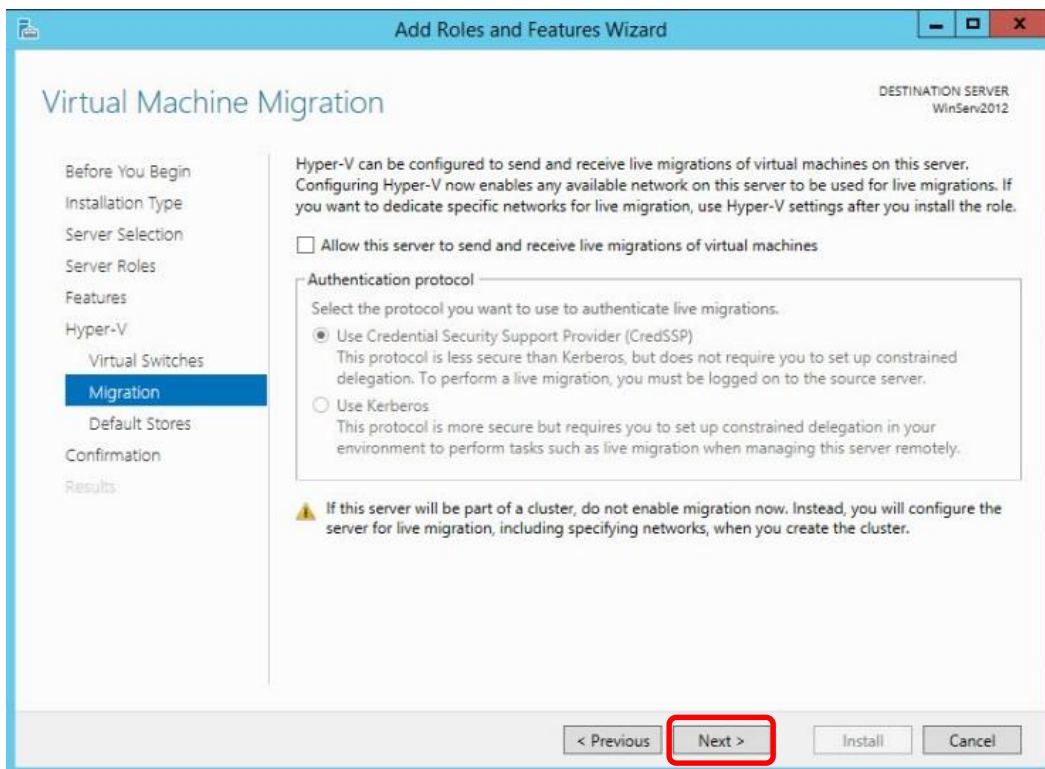
7. On the **Features** page, Click **Next**
8. On the **Hyper-V** page, Click **Next**



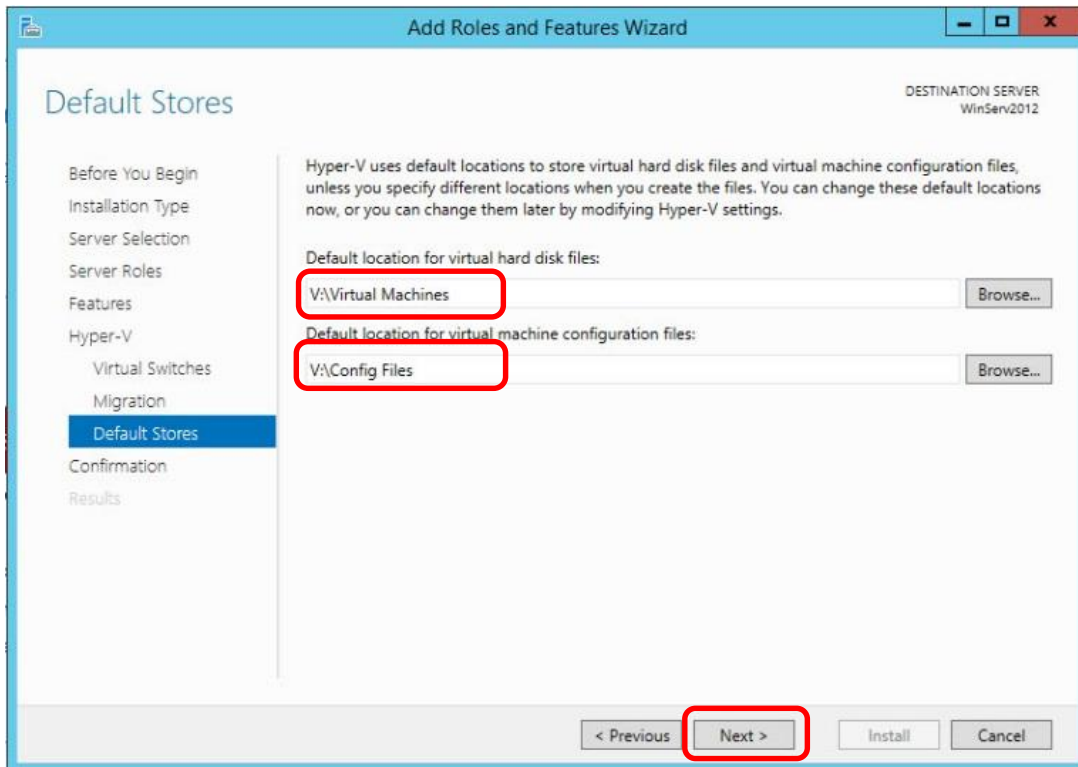
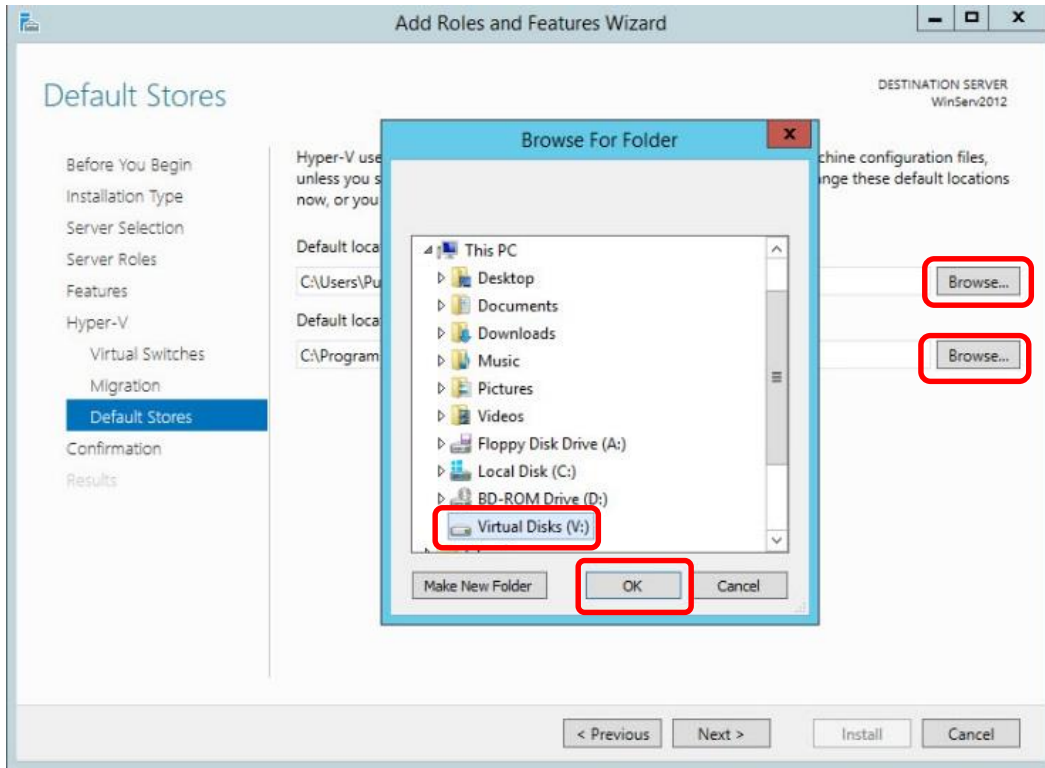
9. On the **Virtual Switches** page, Click on the NIC you will use to manage your Virtual Machines if you have multiple NICs



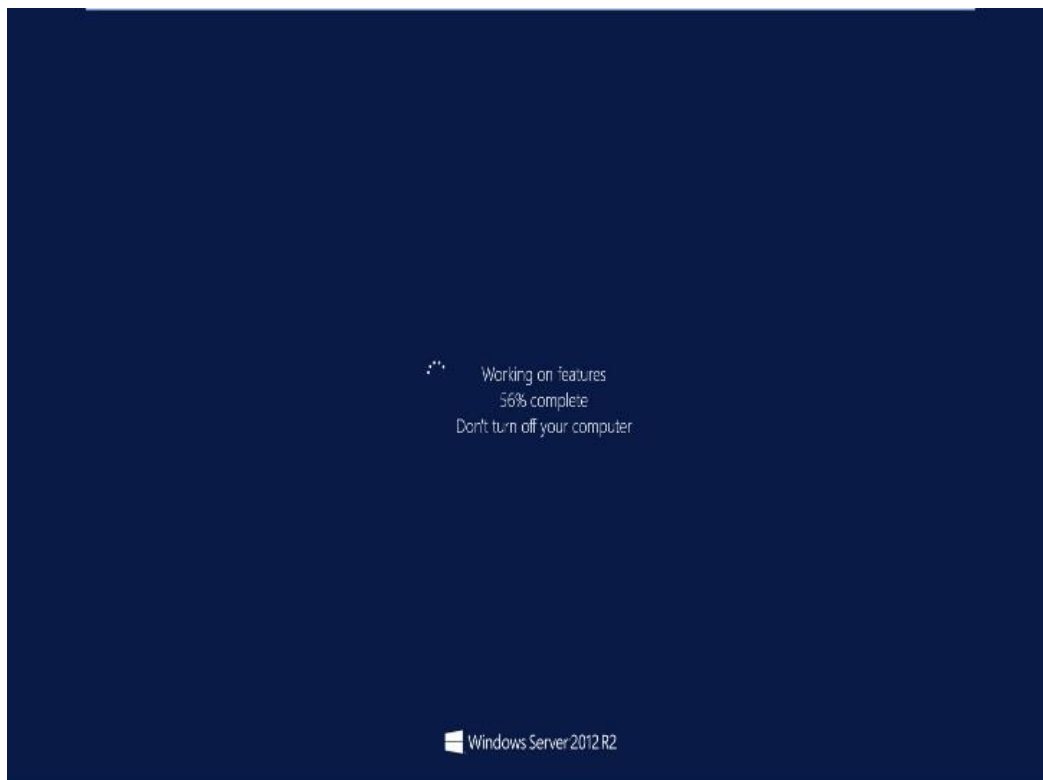
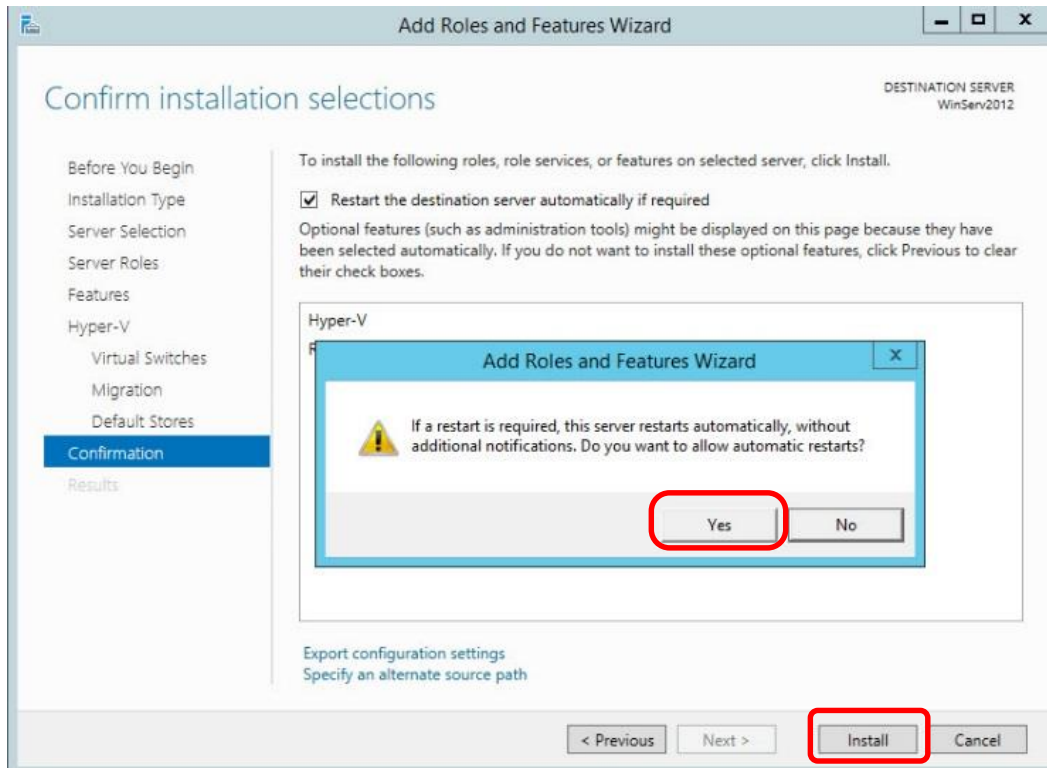
10. On **Virtual Machine Migration** page, Click **Next**



11. On **Default Stores** page, Click **Browse** and select the folder under the Drive you created for the Virtual Hard Disk and Virtual Machine Configuration Files then click **Next**

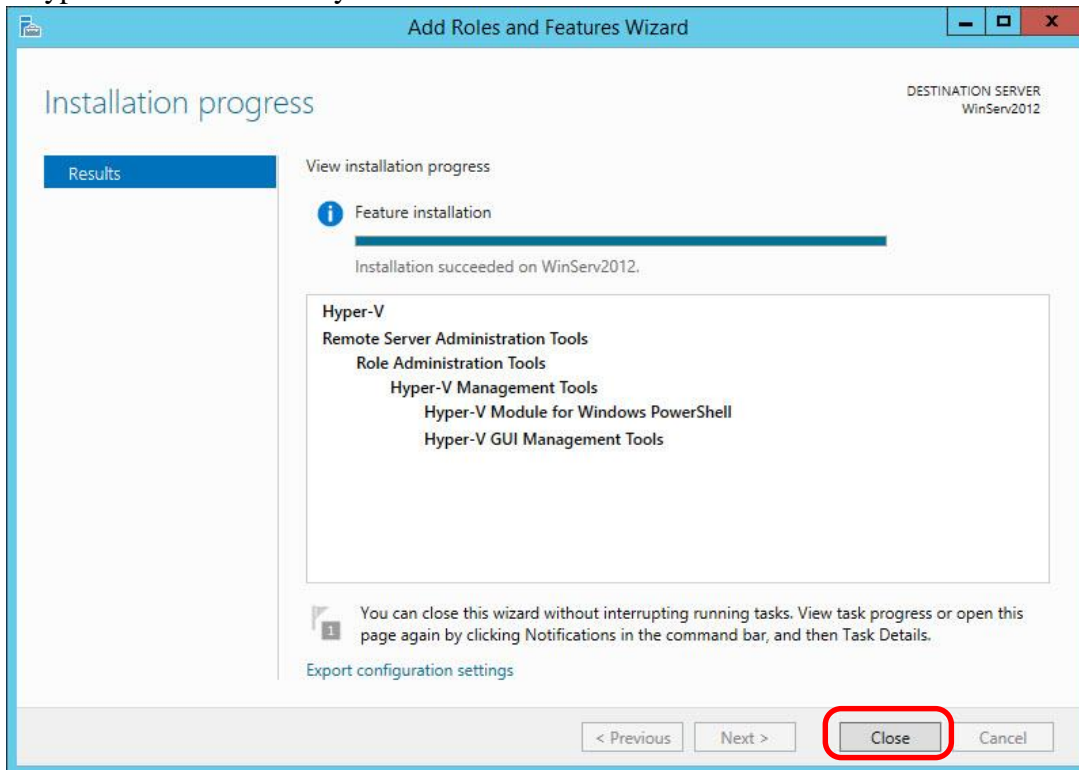


12. Check the Restart destination server.... And choose **Yes**. Verify settings then click, **Install**. The Role will install and the server will automatically restart.

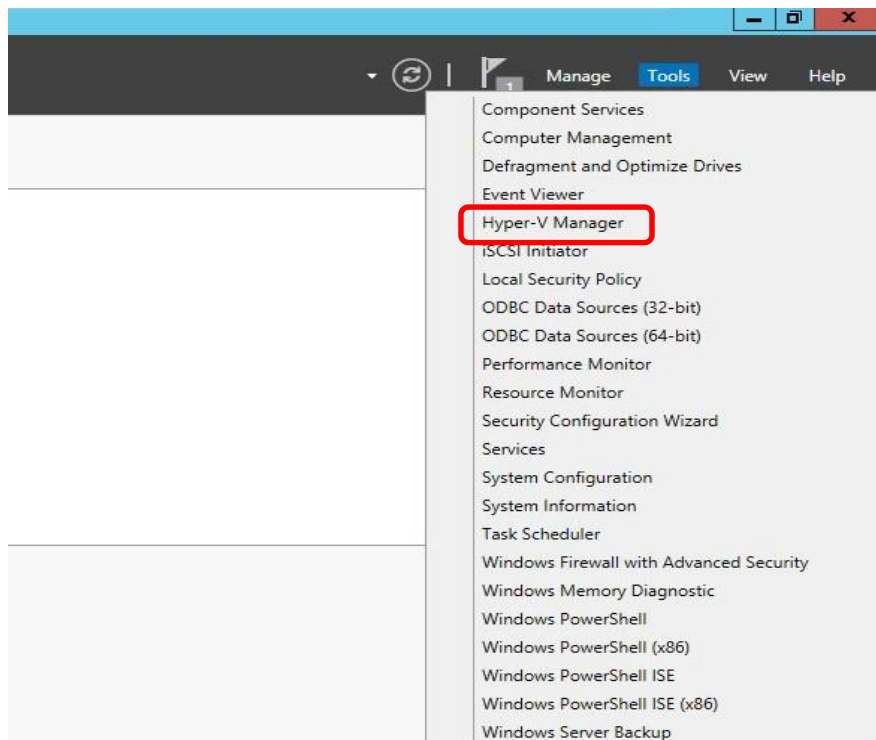




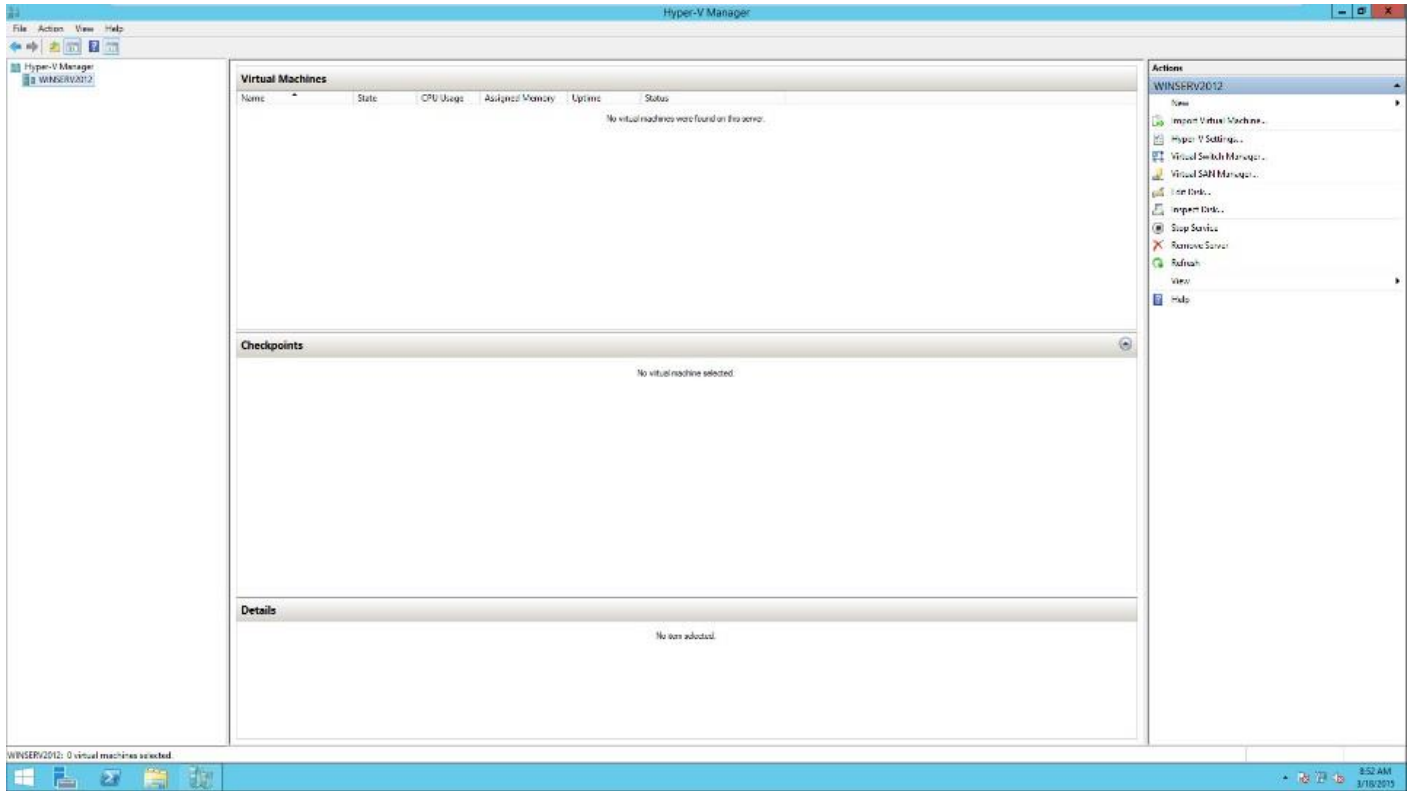
13. Once the server restarts and you login, the Installation progress will come up verifying Hyper-V has successfully installed. Click **Close**



14. Go to **Tools** and you will **Hyper-V Manager**. Click on **Hyper-V Manager** to bring up the Hyper-V Management Console



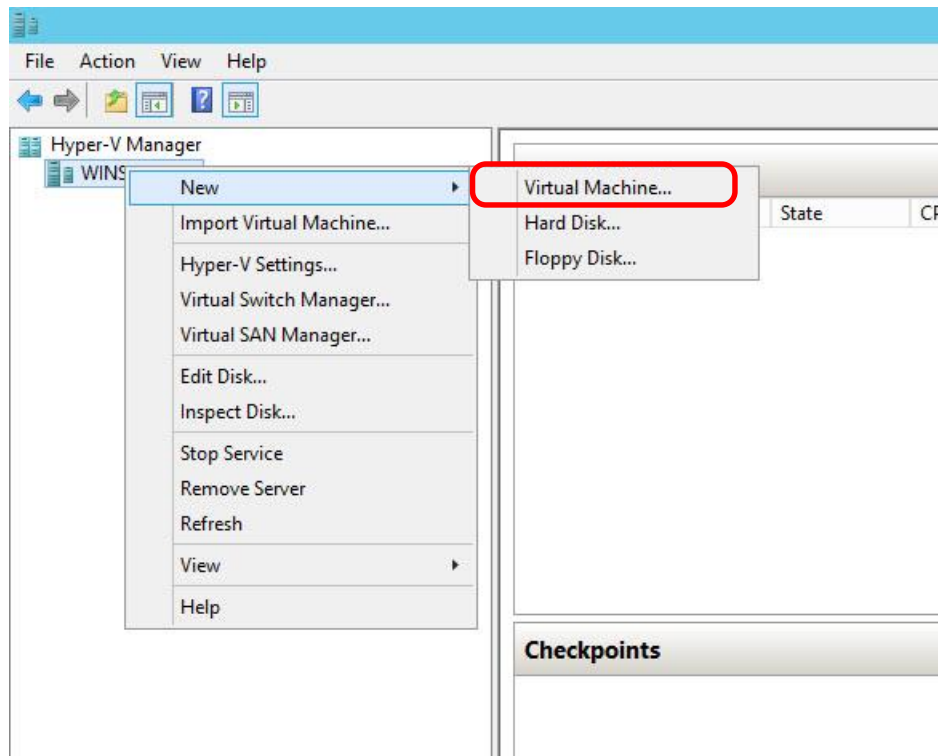
You will see the Hyper-V Manager. Now we will add our Virtual Machines to our Hyper-V Management Console



# Manage Hyper-V

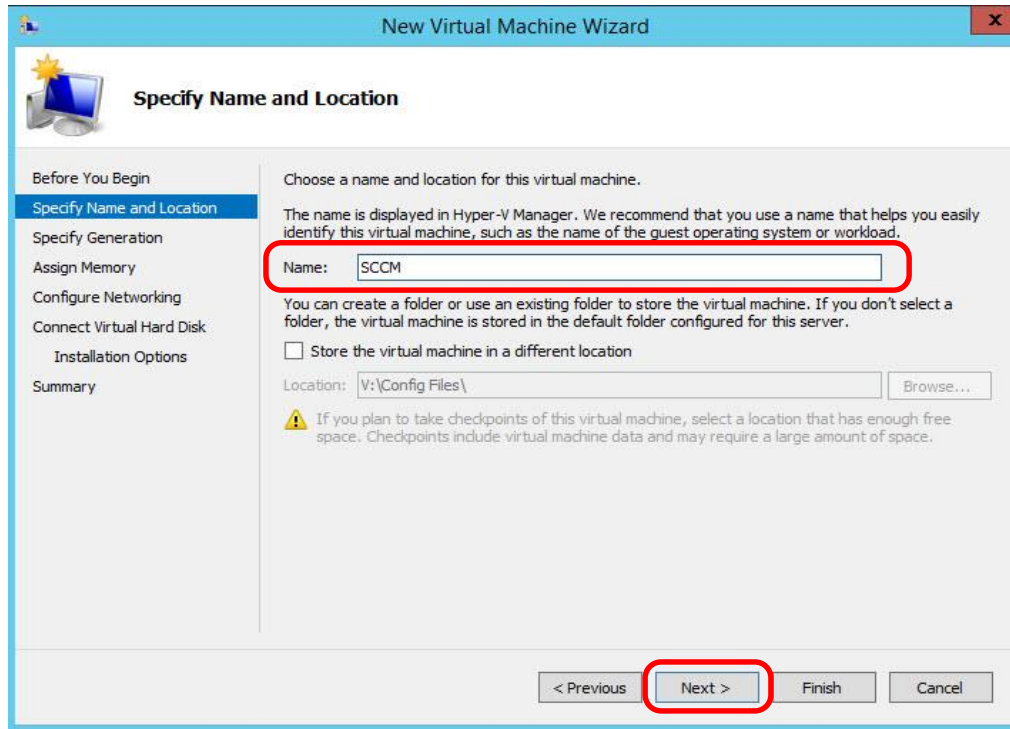
## *Installing Virtual Machines in Hyper-V*

1. Bring up **Hyper-V Manager**. Under Actions Click **New** and select **Virtual Machine** or Right Click on your Hyper-V Host and Select **New > Virtual Machine**

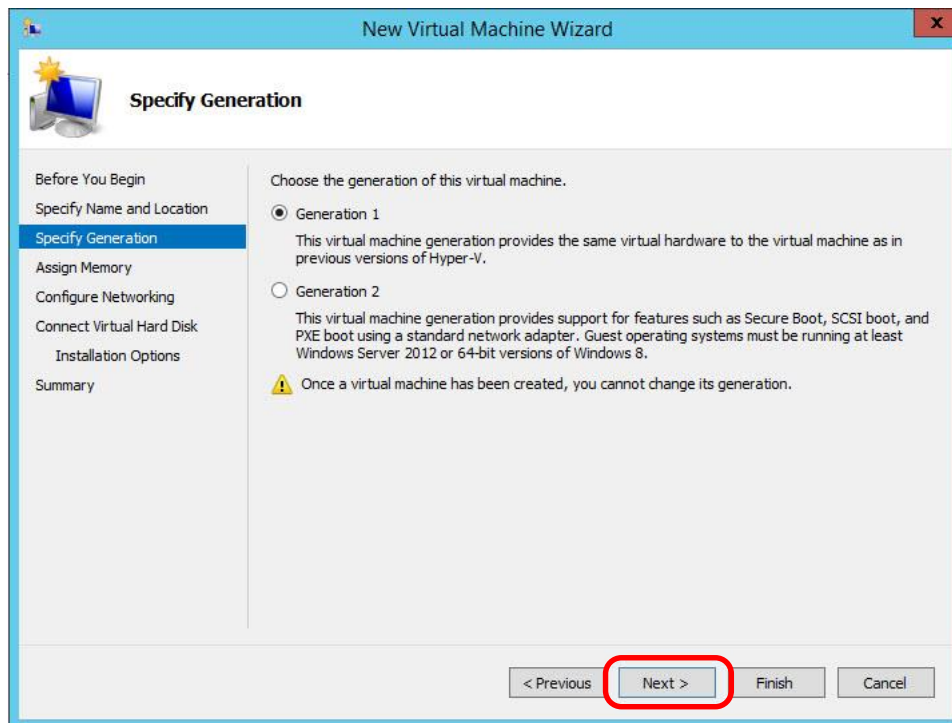


2. Click **Next** on **Before You Begin**.

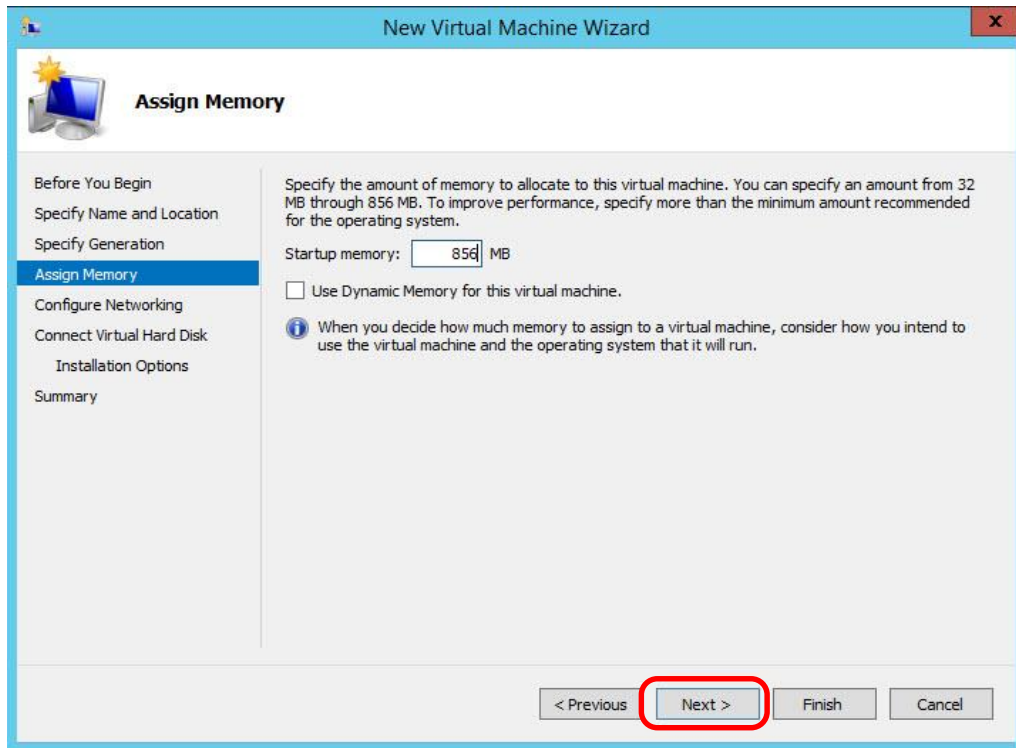
3. On **Specify Name and Location** page, Name your new Virtual Machine. Click **Next**  
**Do not change the Location as this was configured during the setup**



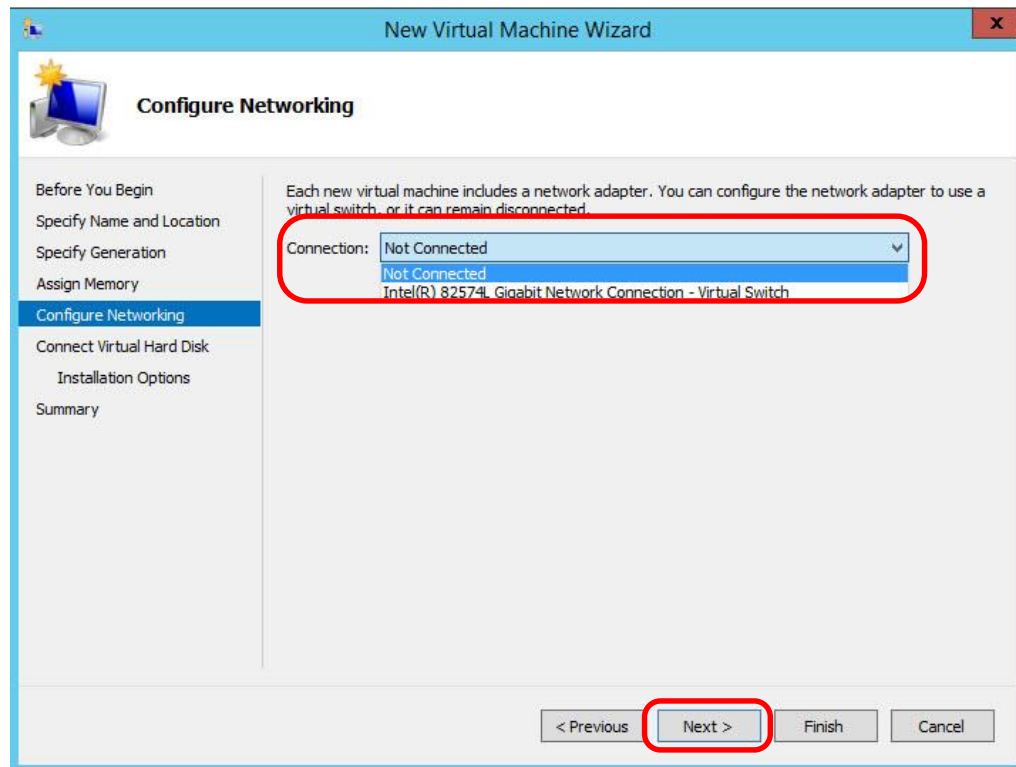
4. On **Specify Generation** Page, Click **Next**.



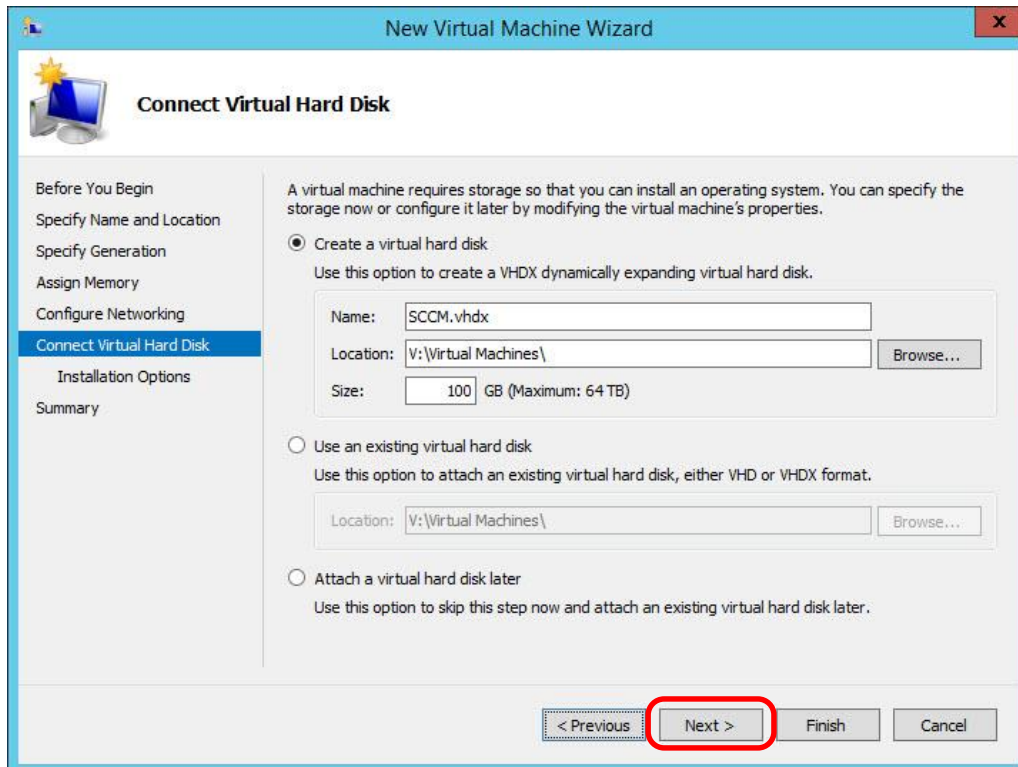
5. On **Assign Memory** page, assign the amount of memory to allocate to this virtual machine.



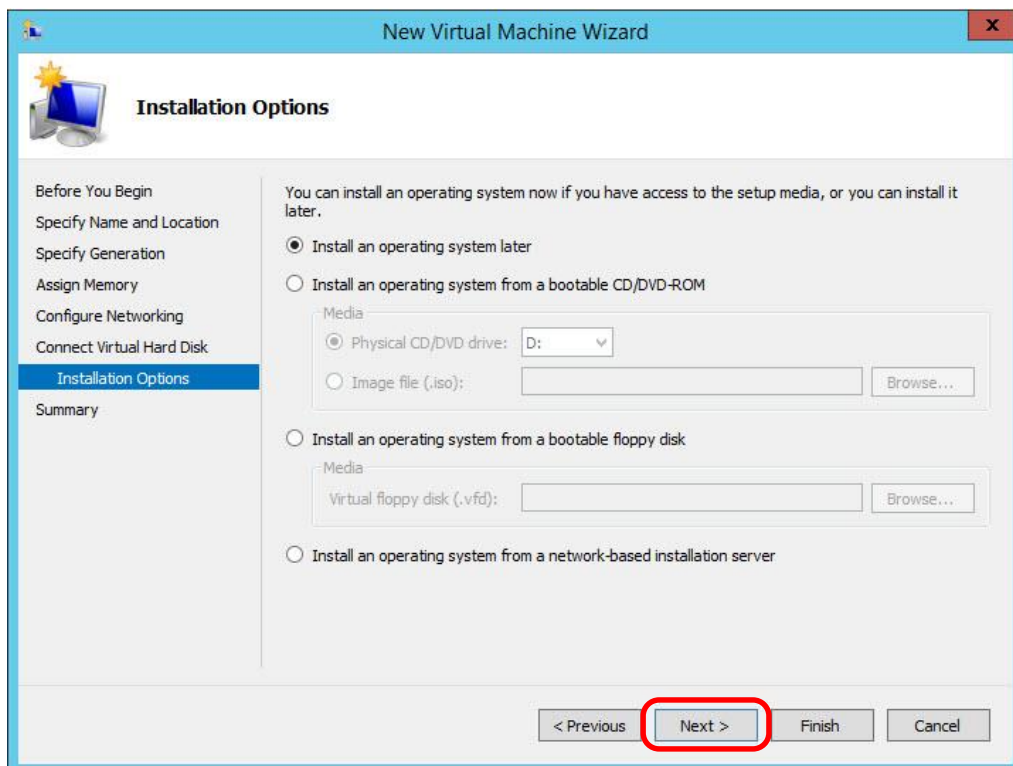
6. On **Configure Networking** page, select the NIC card from the list. Click **Next**



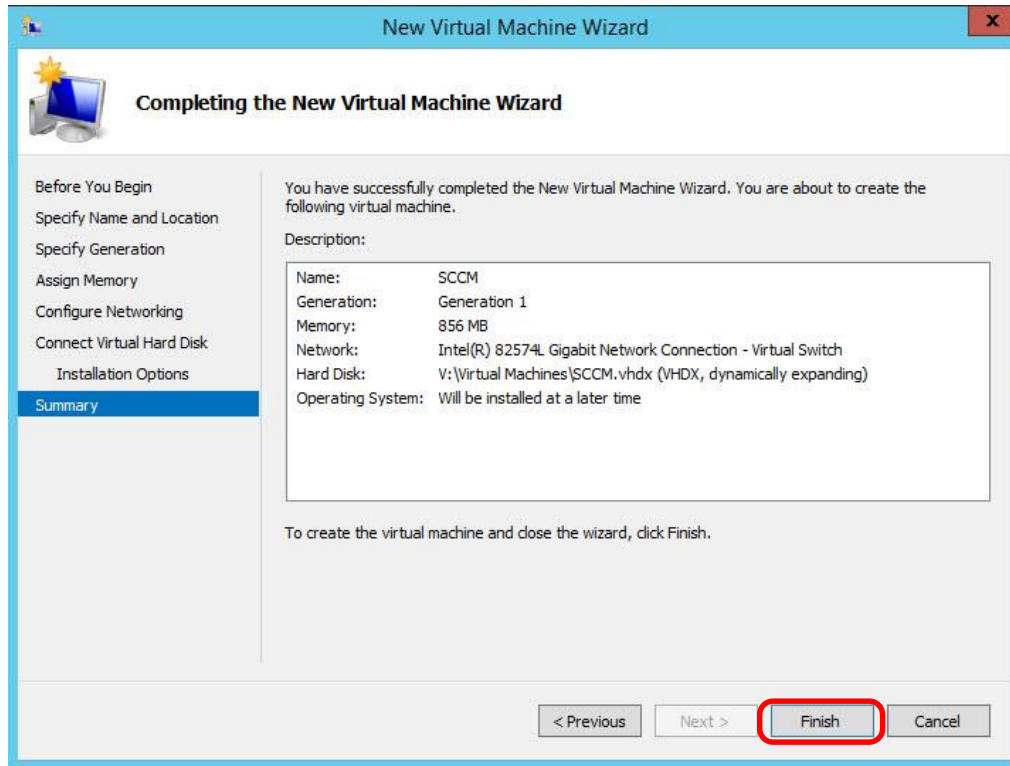
7. On **Create Virtual Hard Disk** page, click **Next**



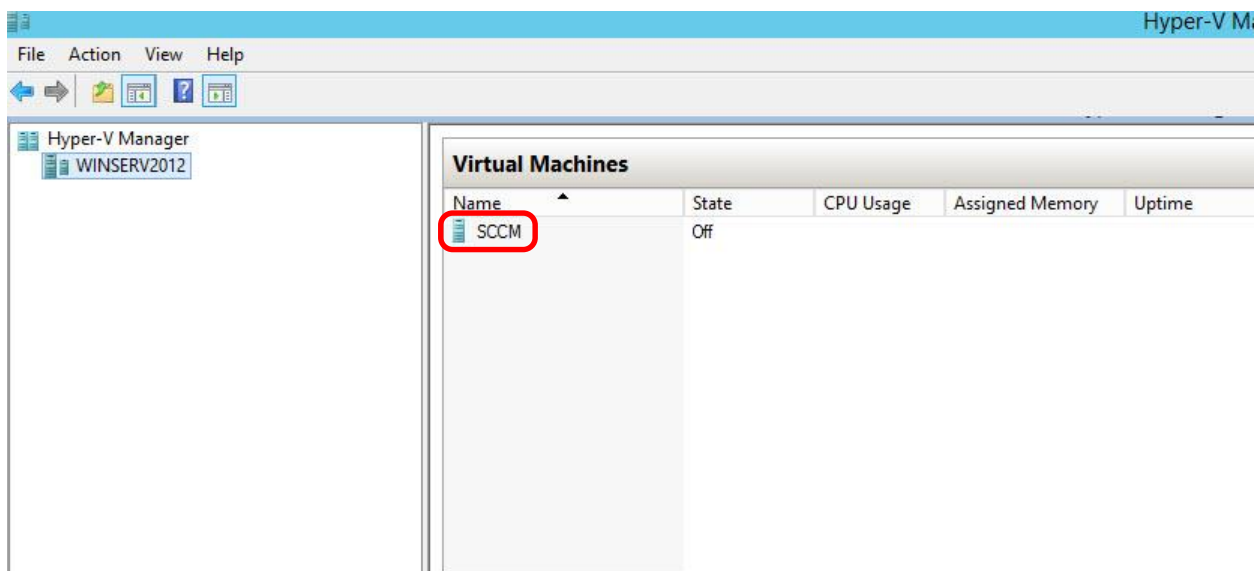
8. On **Installation Operating System Options** page, click **Next**



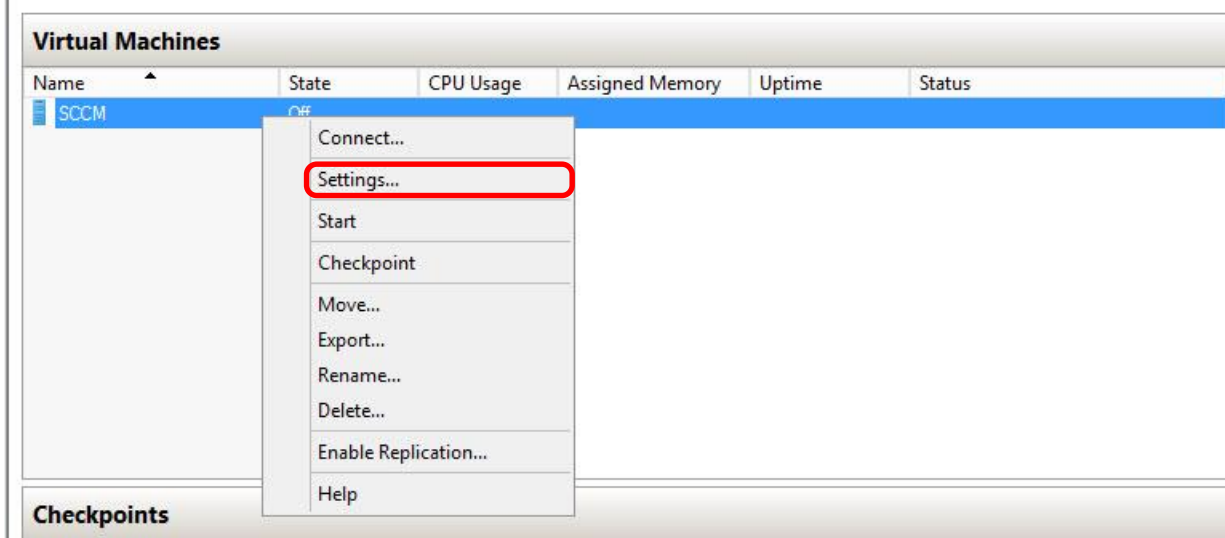
9. **Confirm configuration** and click **Finish**. The wizard will run through the installation and create the virtual disk.



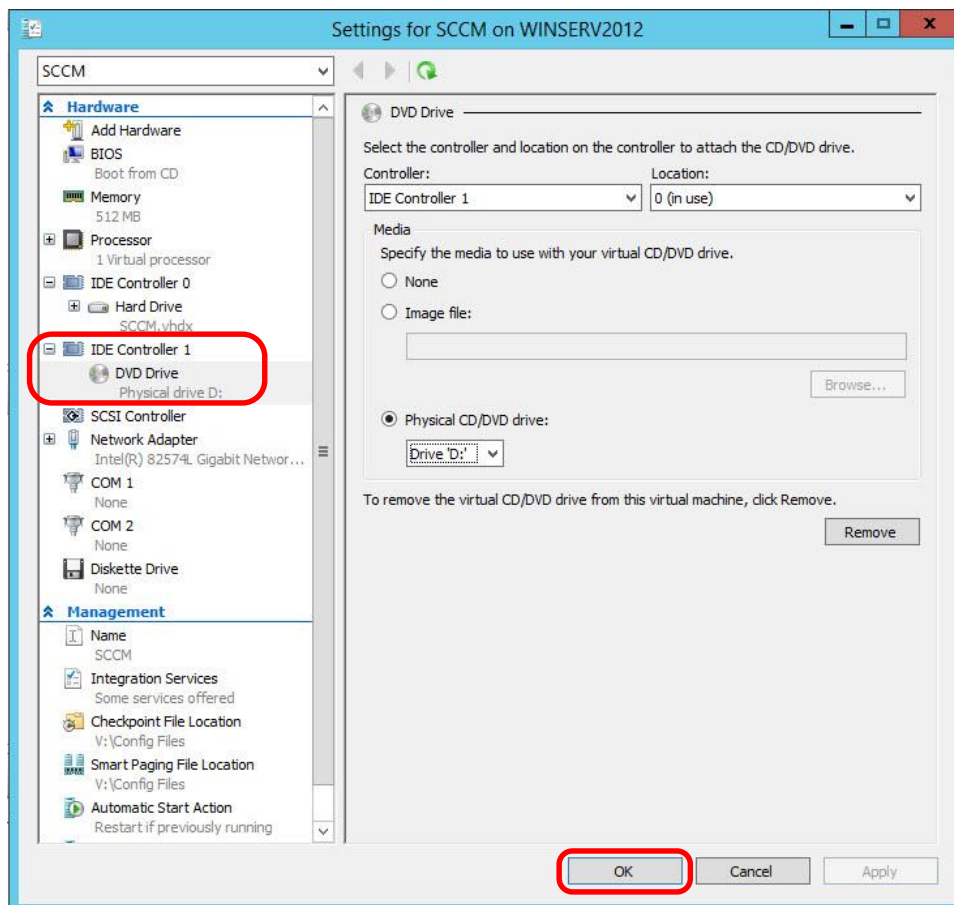
10. Click on the **Hyper-V** server and you will see the new **Virtual Machine** you just created.



11. Right click on your VM and click on **settings**

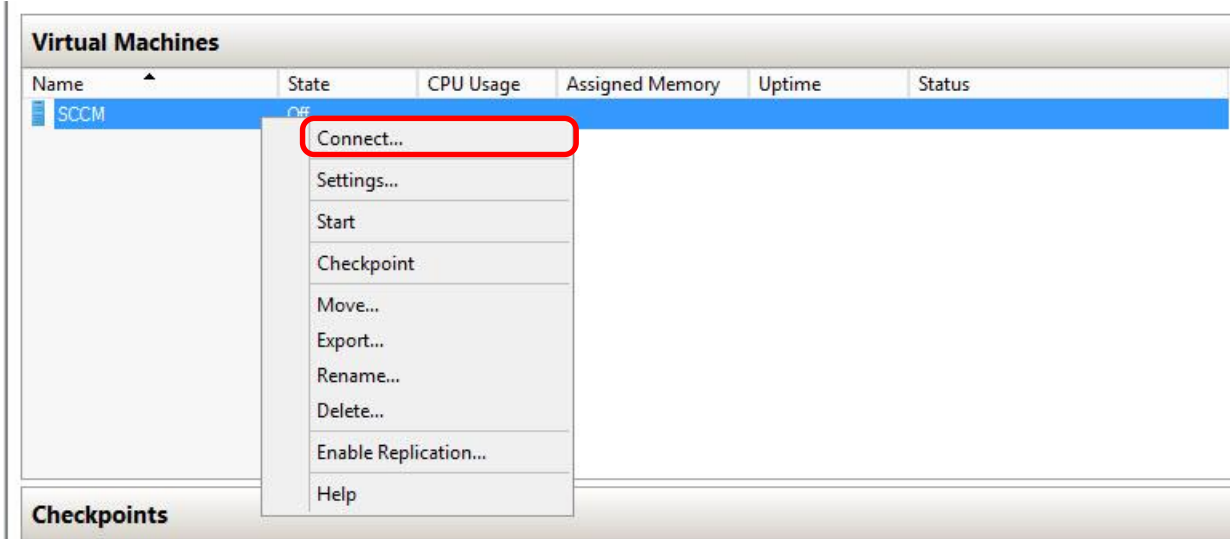


12. Under **IDE Controller 1**, select **DVD Drive**. Select either **Image File** or **Physical drive**. Click **OK** to close

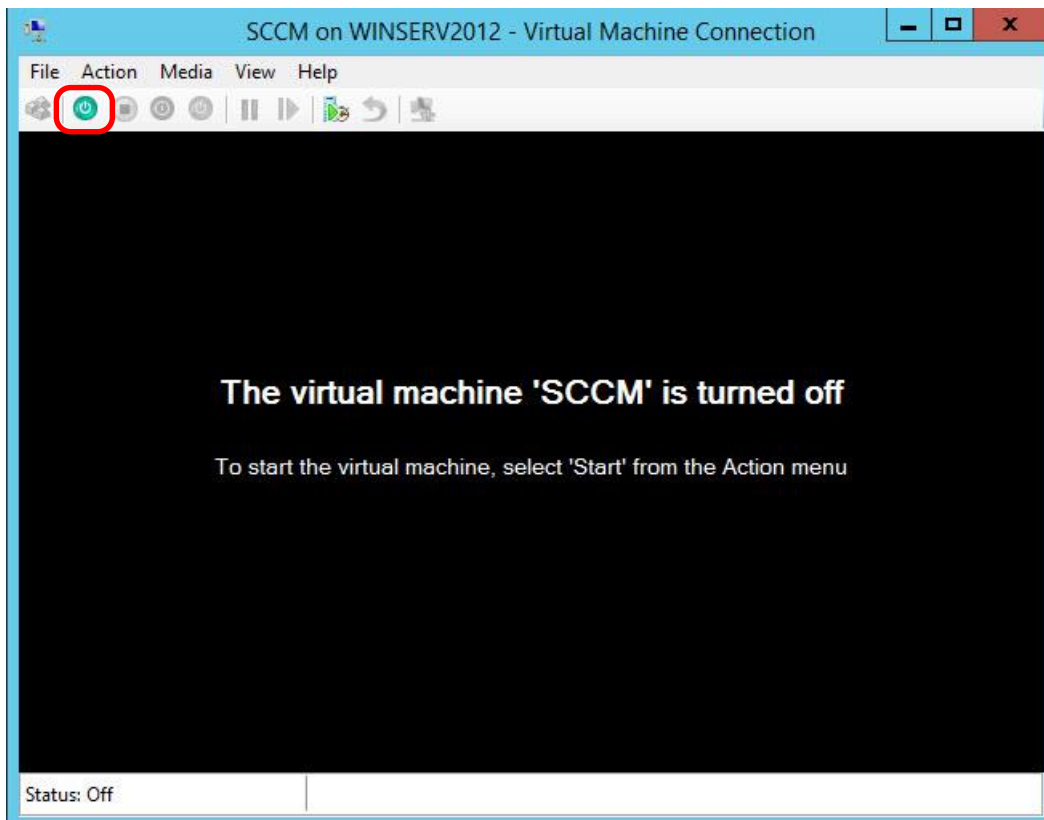




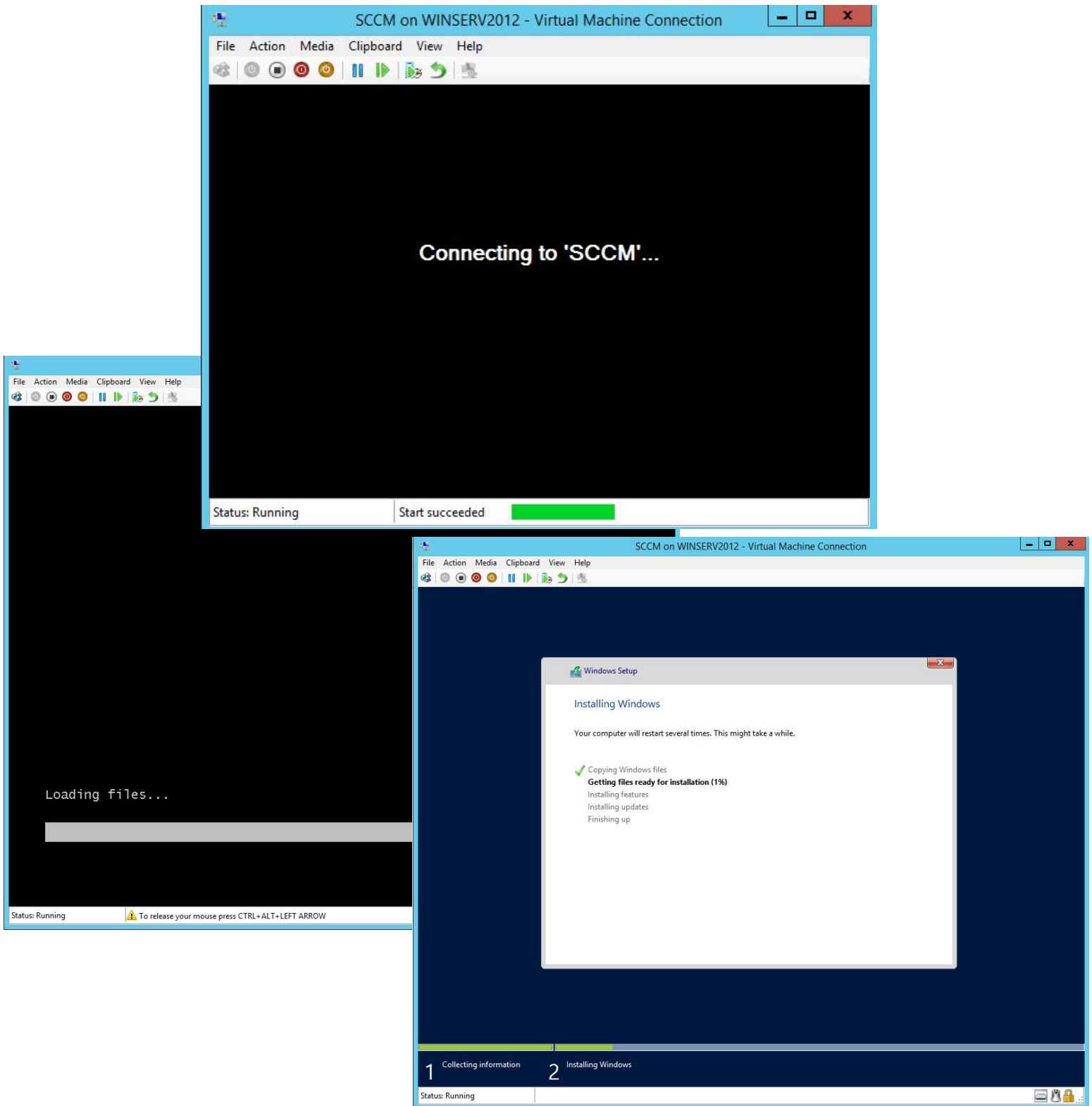
13. **Right click** on your VM and click on **Connect**



14. When the console screen pops up, click on the **Green Start Button** to power on the VM



You will be able to install the operation system normally

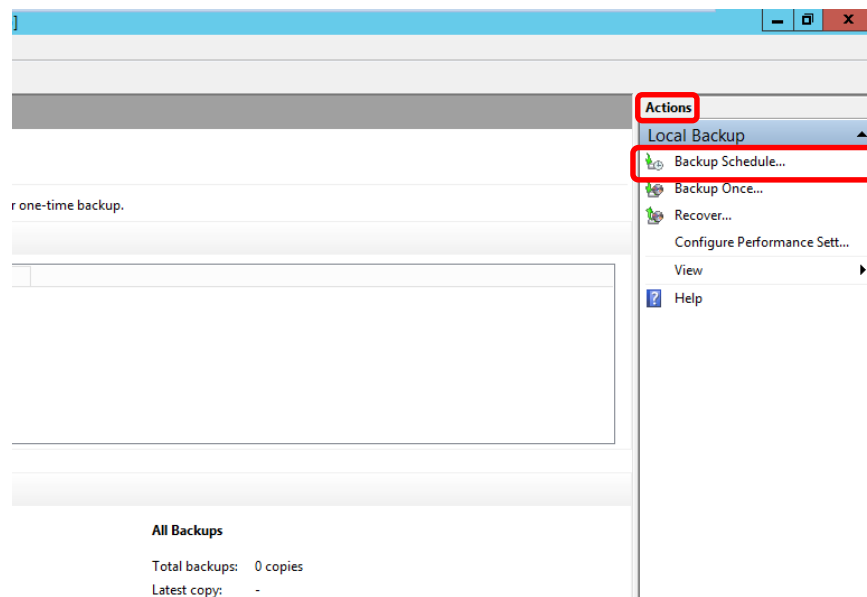


# Troubleshooting Hyper-V

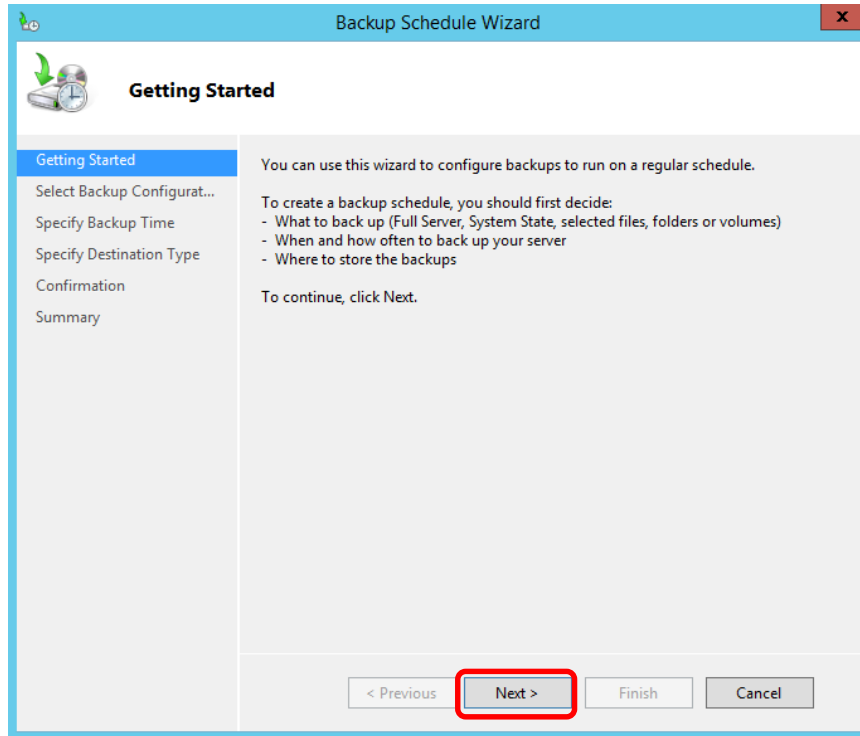
## *Tips for maintaining virtual machines with Hyper-V Manager*

### Backing up Hyper-V and VM's using Windows Server Backup

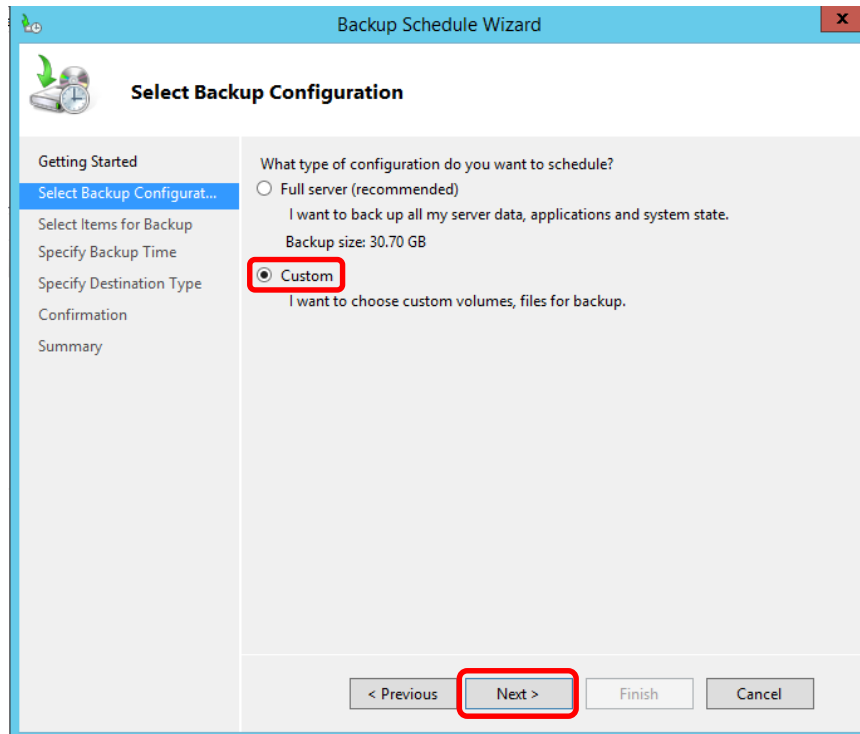
1. Make sure you have added the Windows Server Backup Feature before.
2. Open **Windows Server Backup**. Under Actions choose Backup Schedule



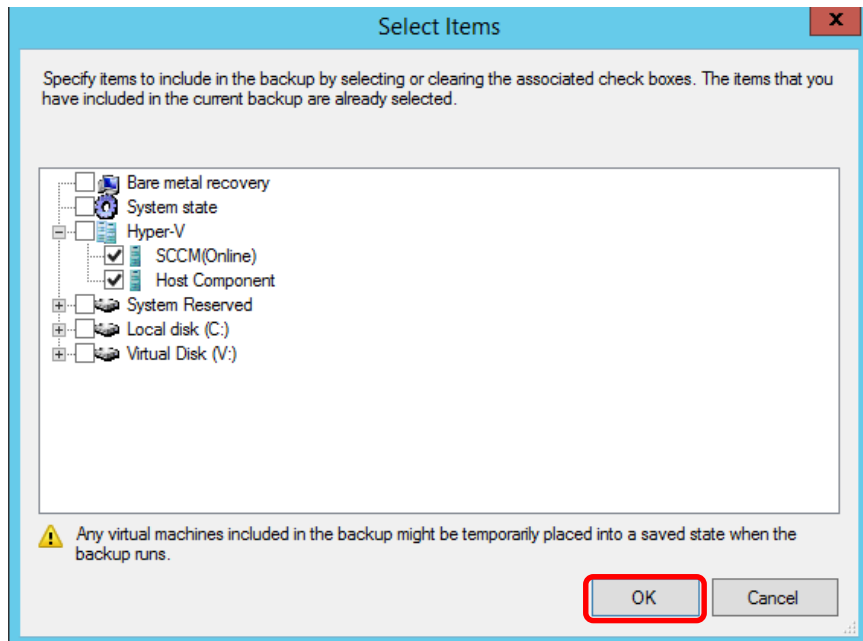
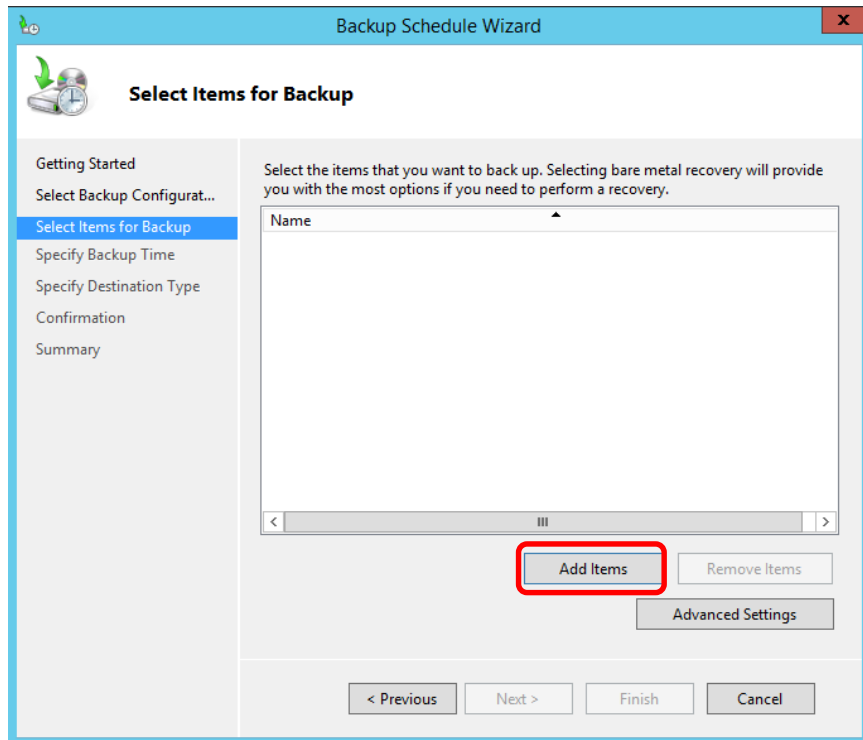
3. On Getting Started page, click **Next**

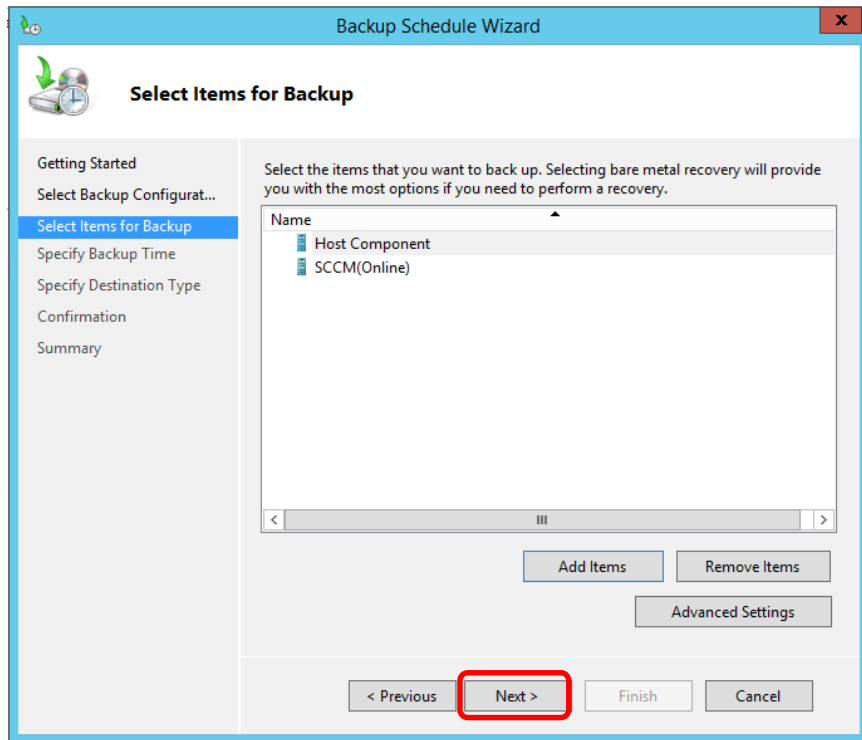


4. On Select **Backup Configuration** page, click on **Custom** and click **Next**

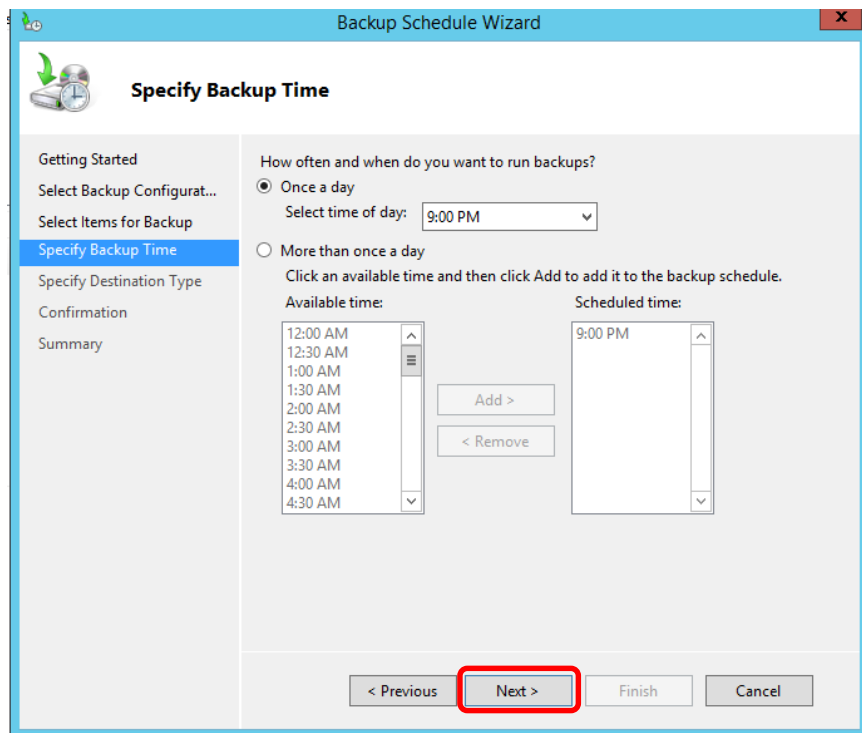


5. On **Select Items for Backup** page, click on **Add Items**. Select the items you wish to backup and click **OK**. Click **Next**

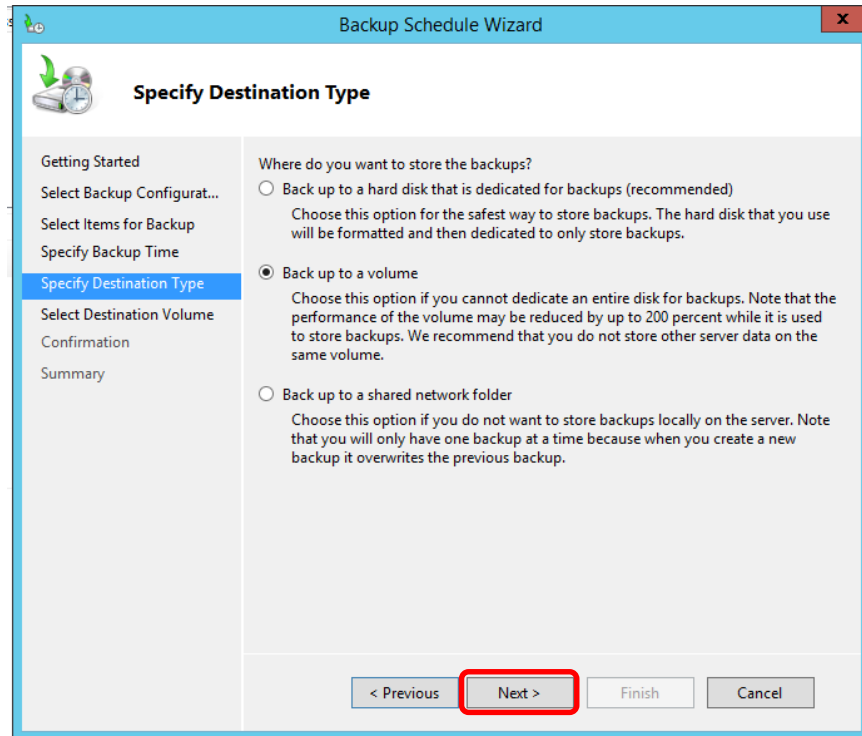




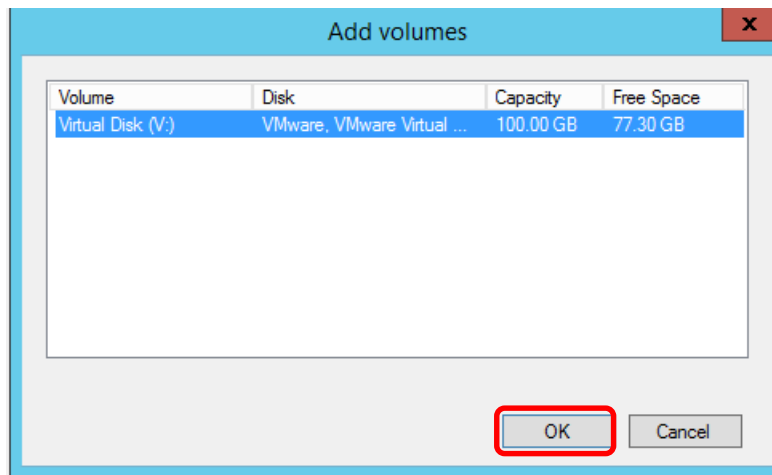
6. On **Specify Backup Time** page, select the specified time you want the backup to run. Click **Next**



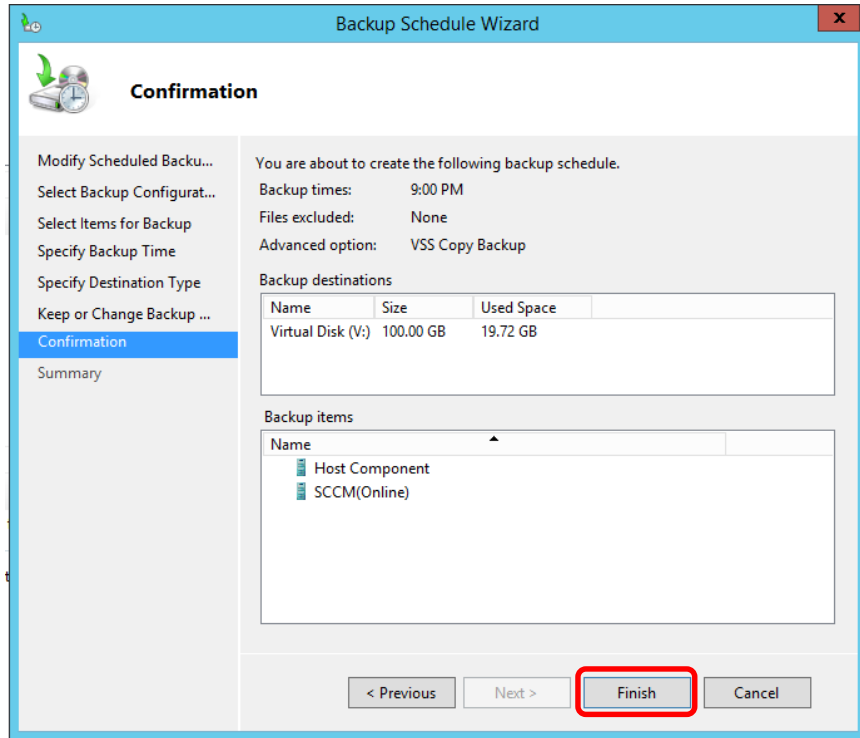
7. On **Specify Destination Type** page, choose where you want to store the backup and click **Next**



8. On the next page, click **Add** to add either the **Destination Volume, Disk, or Remote Share Folder**



9. Verify your settings and click **Finish**



10. Once your backup has been successfully created, click **Close**

