

## SETTING UP GREENRADIUS VIRTUAL APPLIANCE ON MICROSOFT HYPER-V

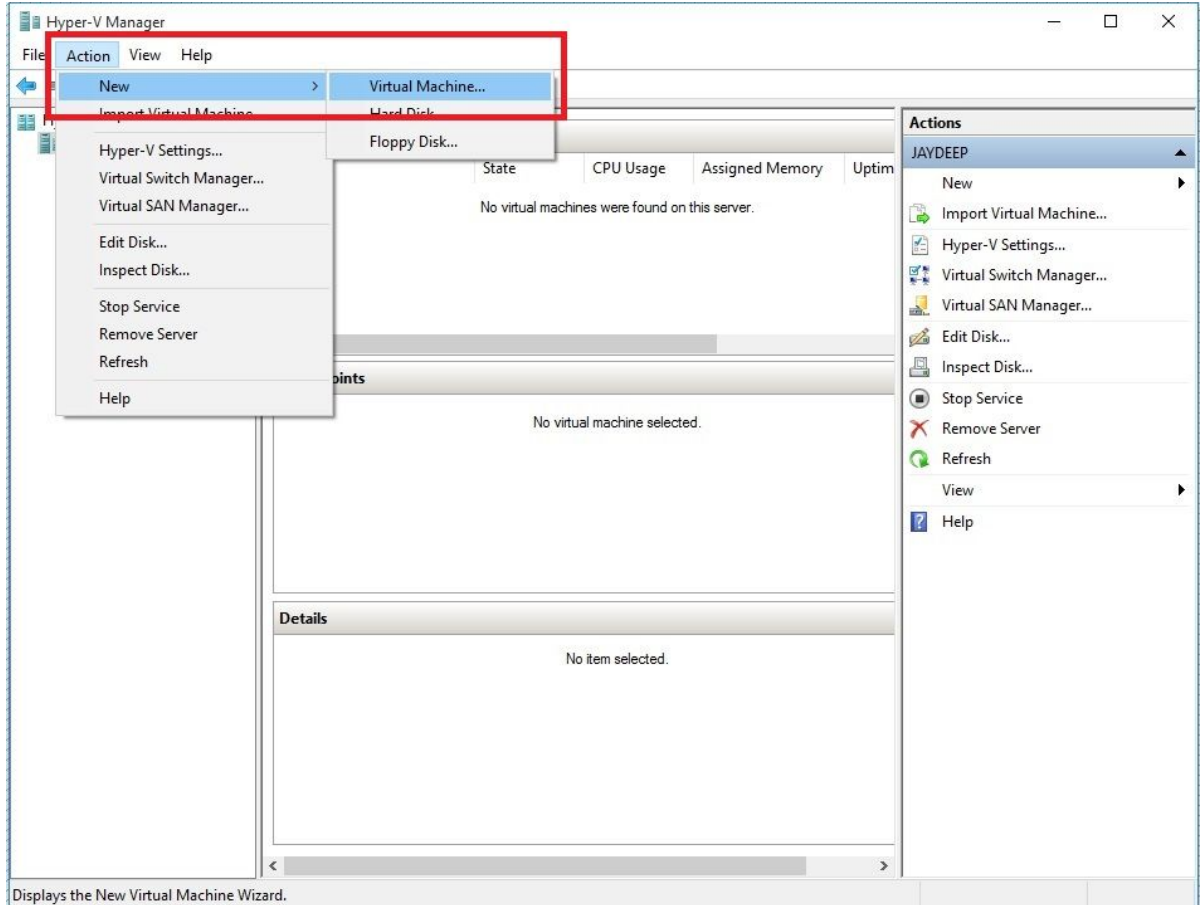
This document explains steps required to setup GreenRADIUS virtual appliance on Microsoft Hyper-V virtualization software

### PREREQUISITES

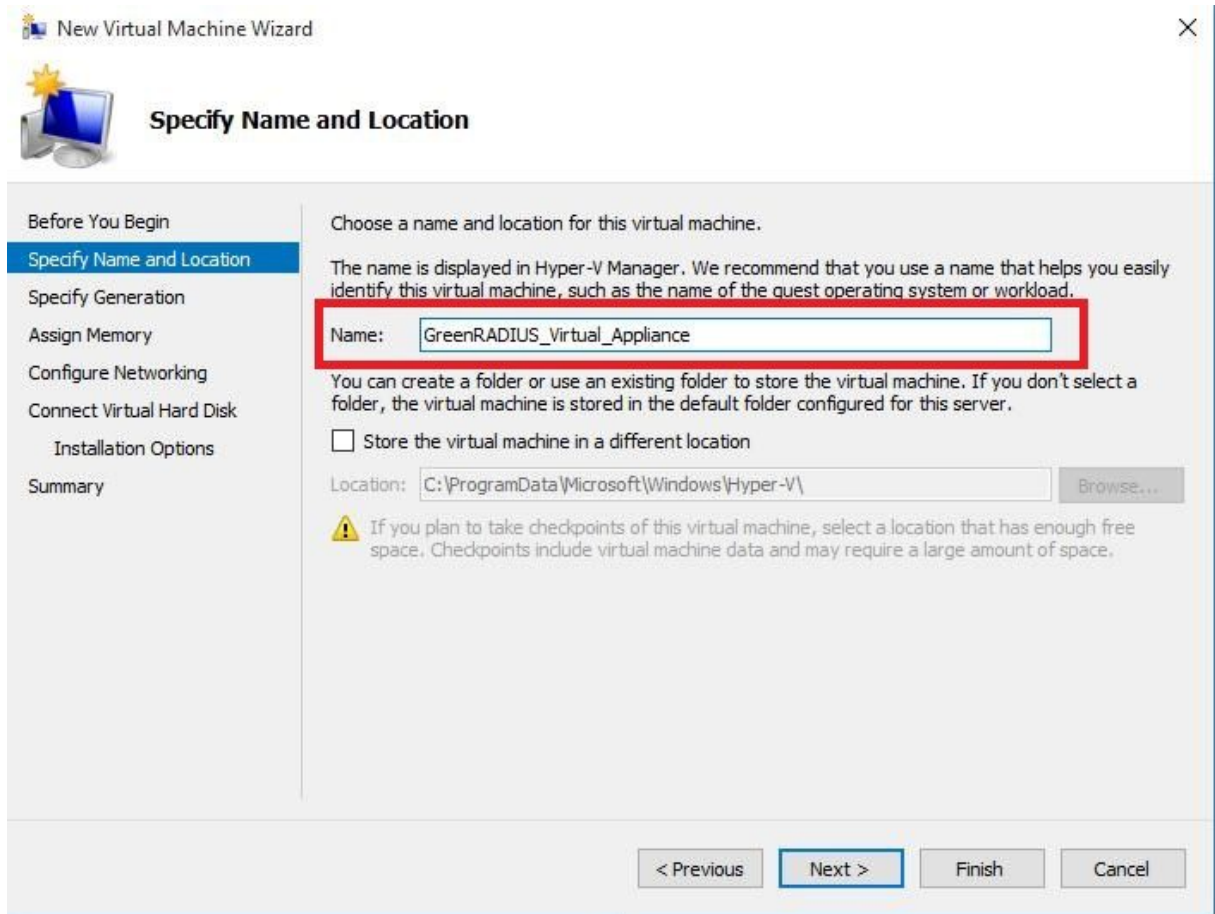
- Windows machine on which Hyper-V is installed (steps for installing Hyper-V can be found [here](#))
- GreenRADIUS virtual appliance OVA file (download it from [here](#))
- Microsoft Virtual Machine Converter 3.0 installed (download it from [here](#))
- Softwares to uncompress such as 7-Zip or WinZip

### STEPS

1. Login to Windows machine and extract GreenRADIUS OVA file using softwares to uncompress such as 7-Zip or WinZip to a folder (e.g. D:\GreenRADIUS Virtual Appliance)
2. It should create 'GreenRADIUS\_Virtual\_Appliance<version number>.vmdk' (e.g. GreenRADIUS\_Virtual\_Appliance\_V2.0.25.22.vmdk) file in that folder. Note the path of vmdk file
3. Open powershell using administrative access and run the following commands:
  - # Import-Module "C:\Program Files\Microsoft Virtual Machine Converter\MvmcCmdlet.psd1"
  - Convert GreenRADIUS Virtual appliance VMDK file (extracted in above steps) to Hyper-V file (i.e. VHDX) using following command and note the path of output VHDX file: (e.g. in following command given, vmdk file used is 'D:\GreenRADIUS Virtual Appliance\GreenRADIUS\_Virtual\_Appliance\_V2.0.25.22.vmdk' and output file is specified as 'D:\Demo\GreenRADIUS\_Virtual\_Appliance.vhdx'
    - # ConvertTo-MvmcVirtualHardDisk -SourceLiteralPath "D:\GreenRADIUS Virtual Appliance\GreenRADIUS\_Virtual\_Appliance\_V2.0.25.22-disk1.vmdk" -DestinationLiteralPath "D:\Demo\GreenRADIUS\_Virtual\_Appliance.vhdx" -VhdType DynamicHardDisk -VhdFormat Vhdx
4. Open 'Hyper-V Manager' console, select **Action** Tab, click on **New** and select **Virtual Machine**, as shown in the screenshot given below:



5. In **New Virtual Machine Wizard**, specify **Name** and **Location** and click on **Next**



New Virtual Machine Wizard

### Specify Name and Location

Before You Begin

**Specify Name and Location**

Specify Generation

Assign Memory

Configure Networking

Connect Virtual Hard Disk

Installation Options

Summary

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.

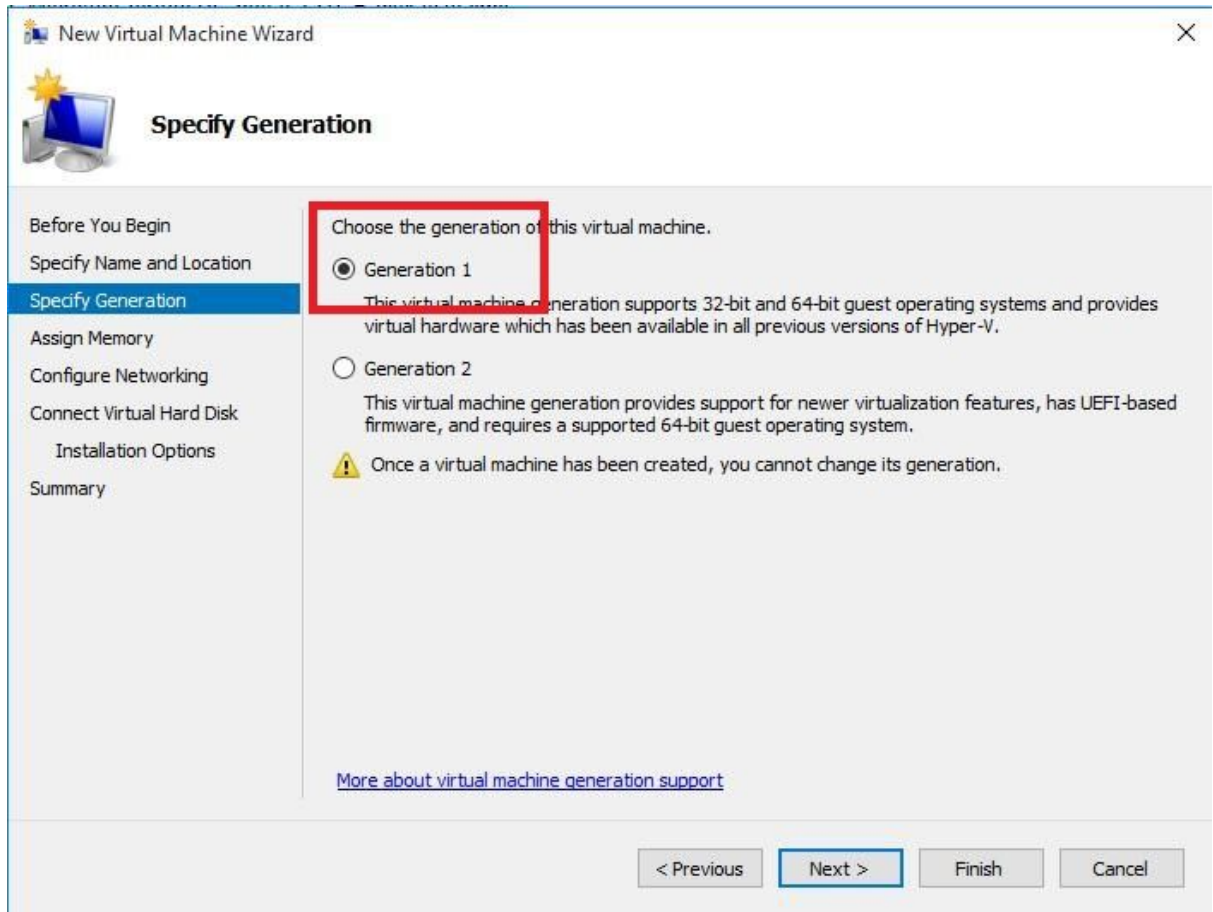
Store the virtual machine in a different location

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.

< Previous   **Next >**   Finish   Cancel

6. Select **Generation 1** and click on **Next**



The screenshot shows the 'New Virtual Machine Wizard' dialog box, specifically the 'Specify Generation' step. The dialog has a title bar with a close button (X) and a navigation pane on the left with the following steps: 'Before You Begin', 'Specify Name and Location', 'Specify Generation' (highlighted), 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk', 'Installation Options', and 'Summary'. The main content area is titled 'Specify Generation' and contains the following text:

Choose the generation of this virtual machine.

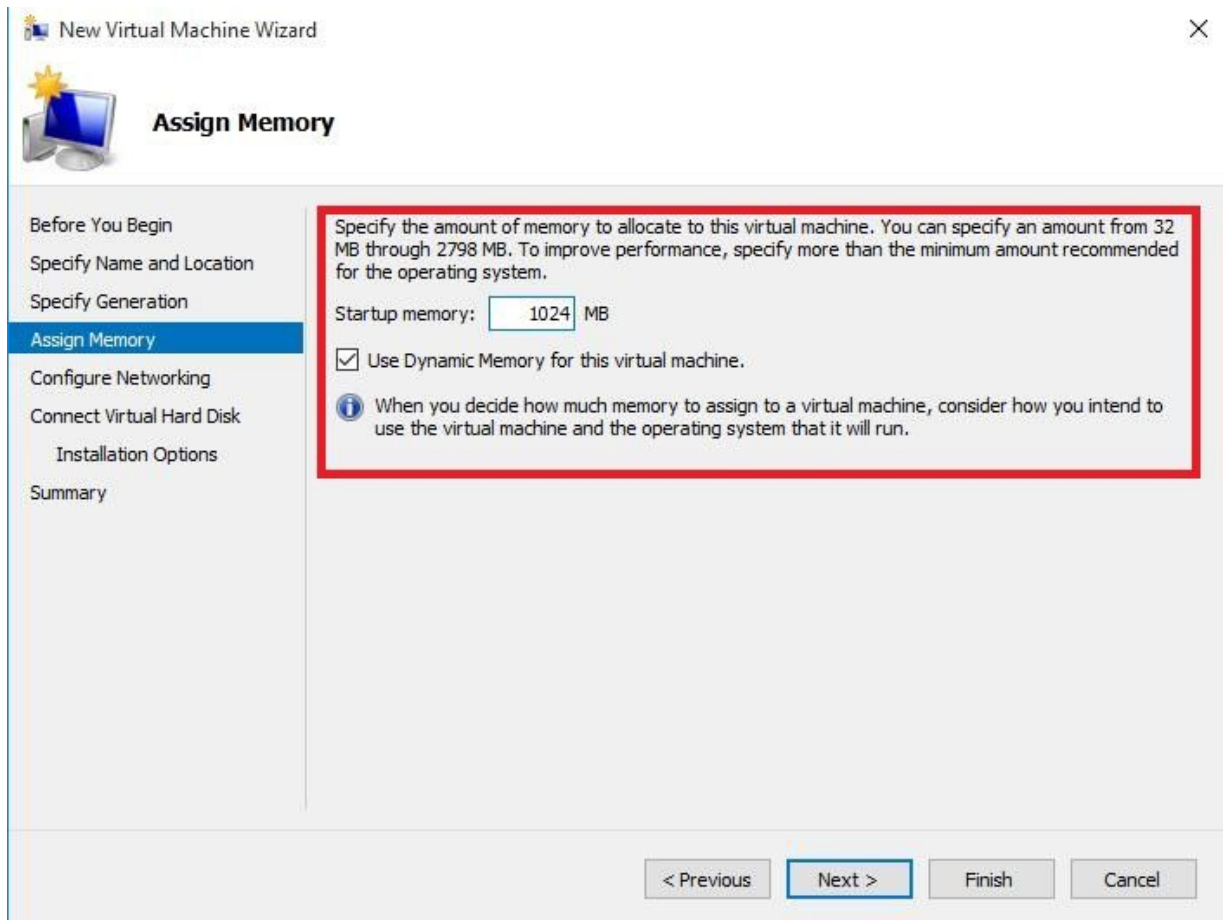
- Generation 1**  
This virtual machine generation supports 32-bit and 64-bit guest operating systems and provides virtual hardware which has been available in all previous versions of Hyper-V.
- Generation 2**  
This virtual machine generation provides support for newer virtualization features, has UEFI-based firmware, and requires a supported 64-bit guest operating system.

⚠ Once a virtual machine has been created, you cannot change its generation.

[More about virtual machine generation support](#)

At the bottom of the dialog, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'. The 'Next >' button is highlighted with a blue border.

7. Specify RAM in MB for **Startup Memory** and click on **Next**



New Virtual Machine Wizard

### Assign Memory

Before You Begin  
Specify Name and Location  
Specify Generation  
**Assign Memory**  
Configure Networking  
Connect Virtual Hard Disk  
Installation Options  
Summary

Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 32 MB through 2798 MB. To improve performance, specify more than the minimum amount recommended for the operating system.

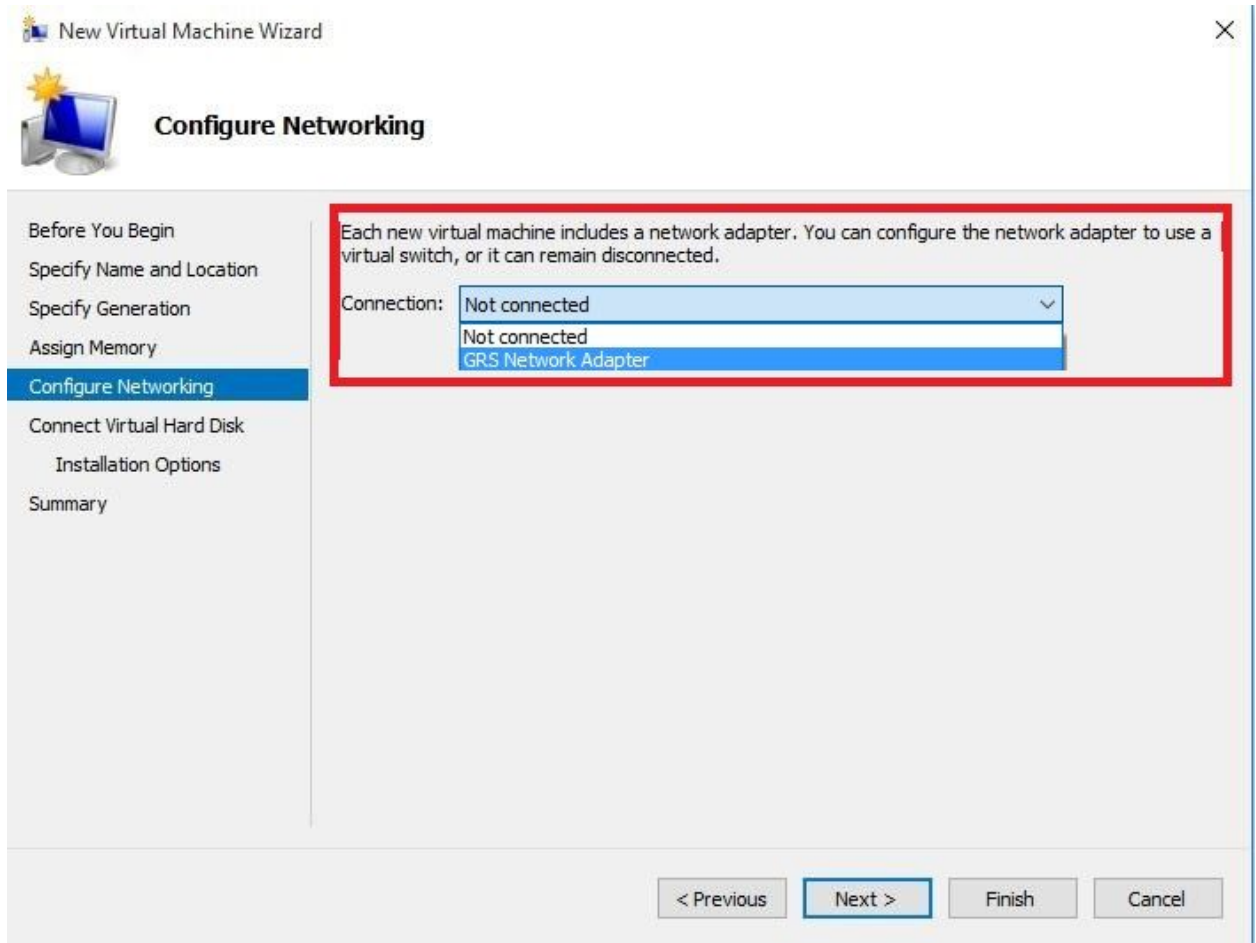
Startup memory:  MB

Use Dynamic Memory for this virtual machine.

**i** When you decide how much memory to assign to a virtual machine, consider how you intend to use the virtual machine and the operating system that it will run.

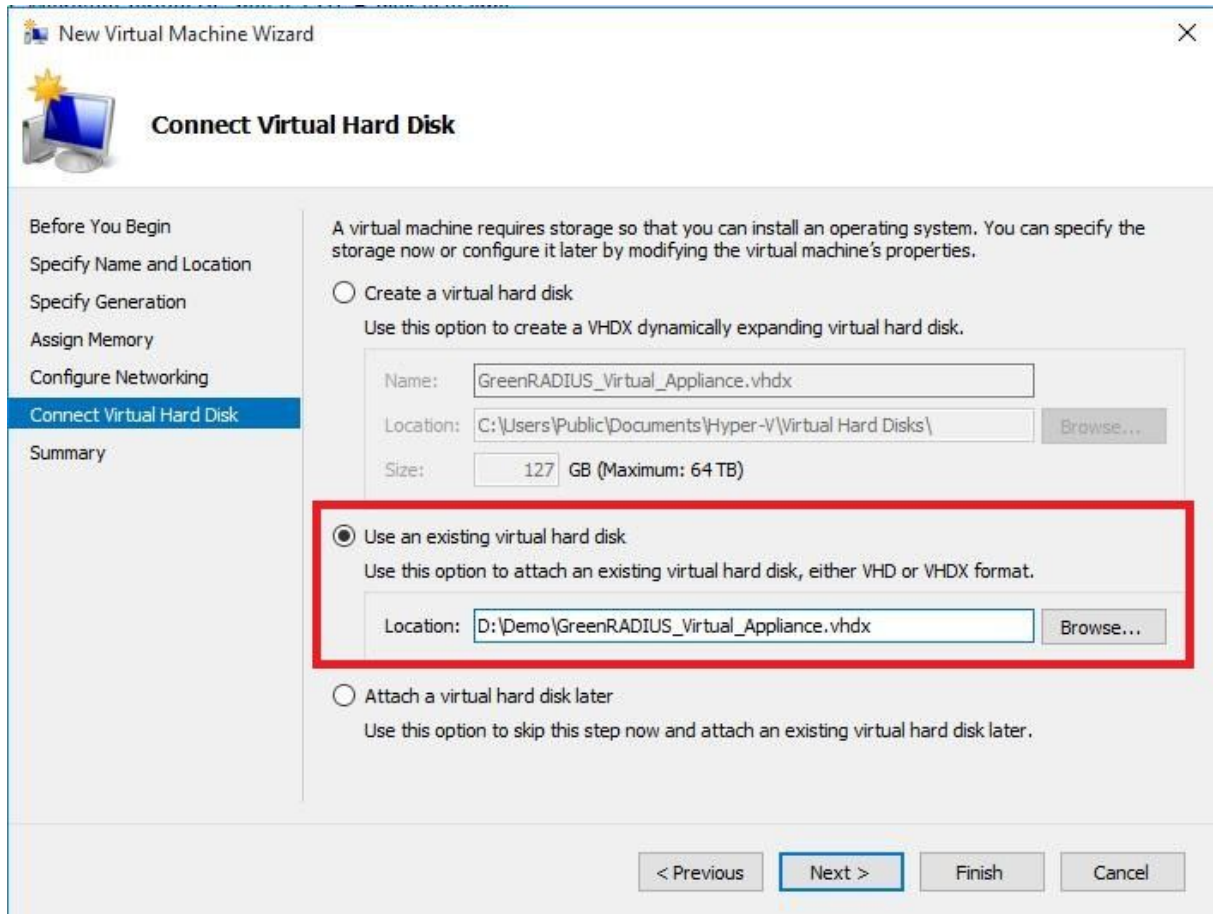
< Previous   **Next >**   Finish   Cancel

8. Select **Network Adapter** and click on **Next**



The screenshot shows the 'New Virtual Machine Wizard' dialog box, specifically the 'Configure Networking' step. The window title is 'New Virtual Machine Wizard' and it has a close button (X) in the top right corner. The main title of the step is 'Configure Networking'. 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' (which is highlighted in blue), 'Connect Virtual Hard Disk', 'Installation Options', and 'Summary'. The main content area contains the following text: 'Each new virtual machine includes a network adapter. You can configure the network adapter to use a virtual switch, or it can remain disconnected.' Below this text is a 'Connection:' label followed by a dropdown menu. The dropdown menu is open, showing three options: 'Not connected' (selected), 'Not connected', and 'GRS Network Adapter'. The entire content area is enclosed in a red rectangular border. At the bottom right of the dialog box, there are four buttons: '< Previous', 'Next >' (which is highlighted with a blue border), 'Finish', and 'Cancel'.

9. Select **Use an existing virtual hard disk** and provide the path of the vhdx file noted in **step 3**



The screenshot shows the 'New Virtual Machine Wizard' dialog box, specifically the 'Connect Virtual Hard Disk' step. The dialog has a sidebar on the left with the following steps: 'Before You Begin', 'Specify Name and Location', 'Specify Generation', 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk' (highlighted in blue), and 'Summary'. The main area contains the following text and options:

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.

Create a virtual hard disk  
Use this option to create a VHDX dynamically expanding virtual hard disk.

Name:   
Location:    
Size:  GB (Maximum: 64 TB)

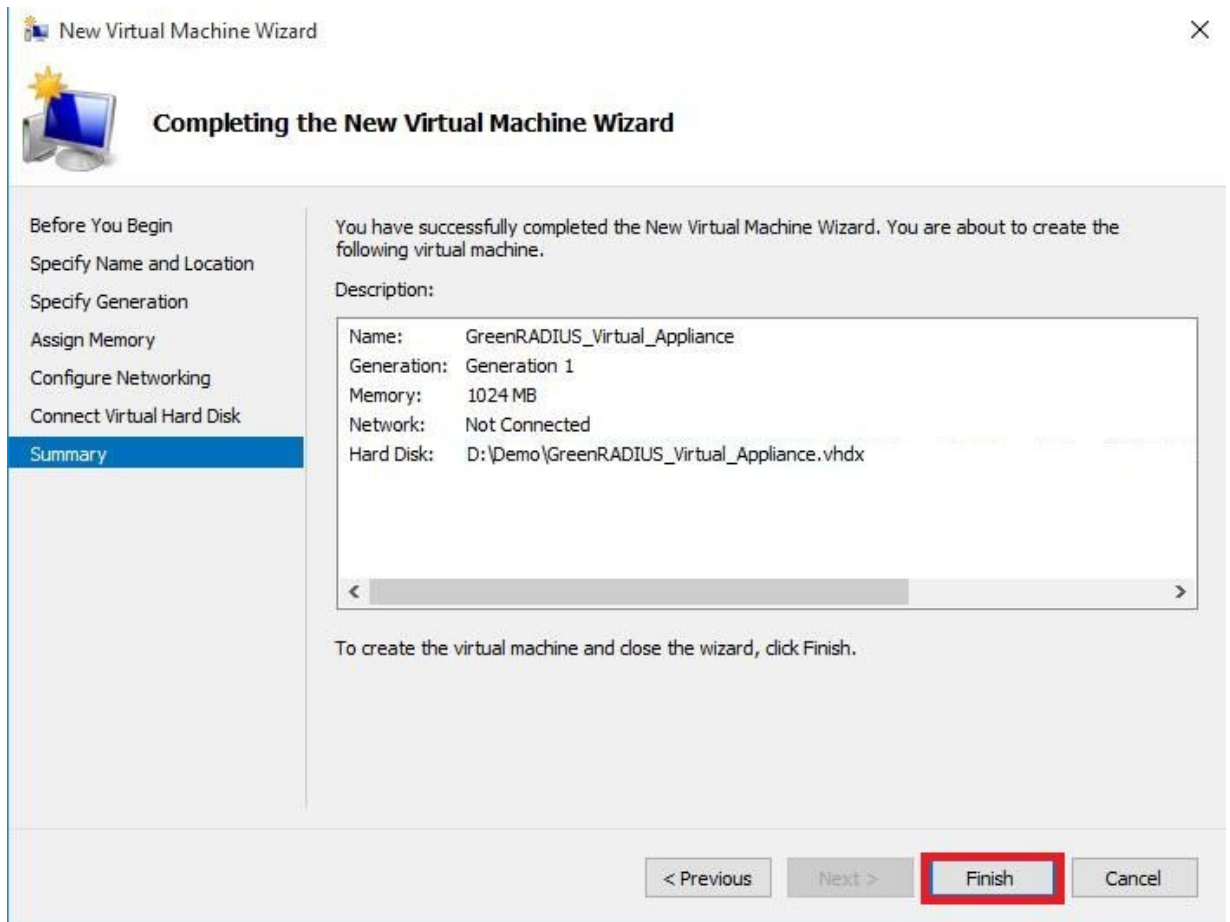
Use an existing virtual hard disk  
Use this option to attach an existing virtual hard disk, either VHD or VHDX format.

Location:

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, there are four buttons: '< Previous', 'Next >' (highlighted with a blue border), 'Finish', and 'Cancel'.

10. Review the settings and click on **Finish**



New Virtual Machine Wizard

### Completing the New Virtual Machine Wizard

Before You Begin  
Specify Name and Location  
Specify Generation  
Assign Memory  
Configure Networking  
Connect Virtual Hard Disk  
**Summary**

You have successfully completed the New Virtual Machine Wizard. You are about to create the following virtual machine.

Description:

Name:	GreenRADIUS_Virtual_Appliance
Generation:	Generation 1
Memory:	1024 MB
Network:	Not Connected
Hard Disk:	D:\Demo\GreenRADIUS_Virtual_Appliance.vhdx

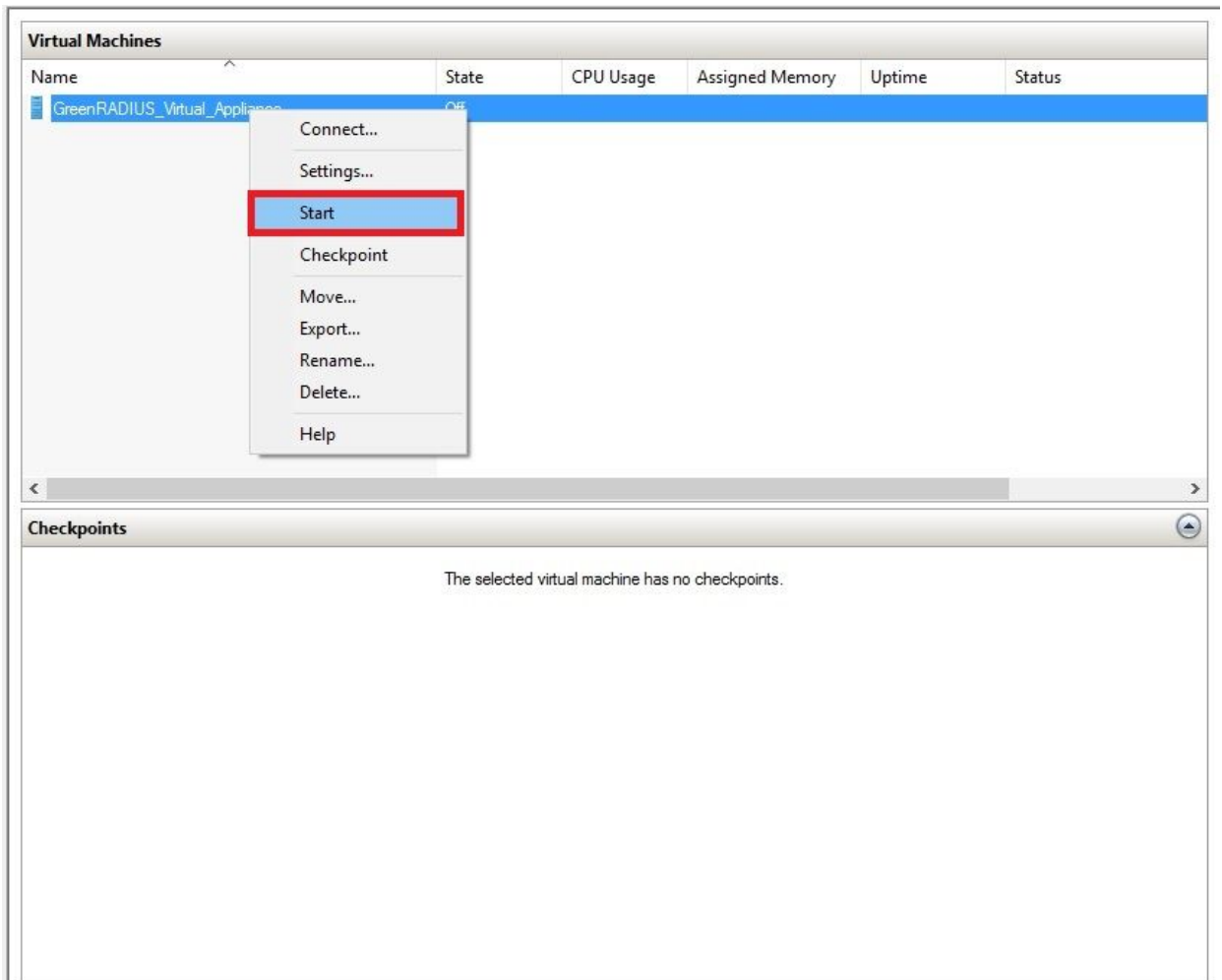
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To create the virtual machine and close the wizard, click Finish.

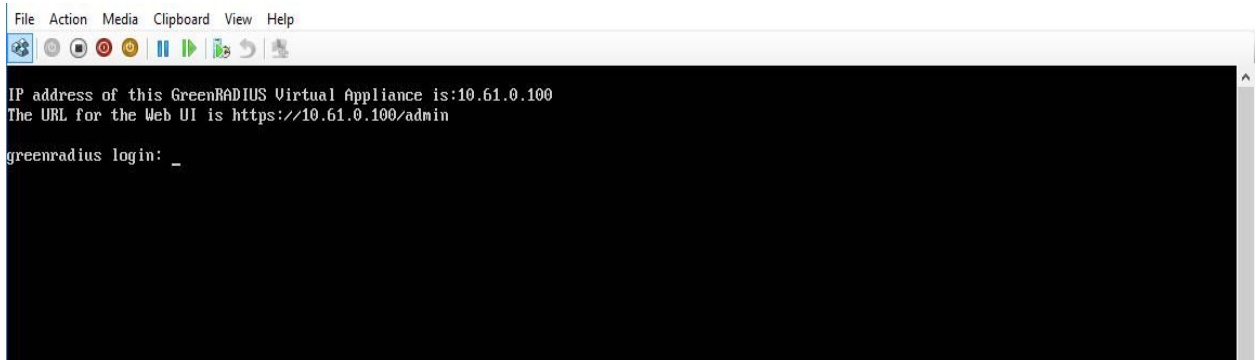
< Previous   Next >   **Finish**   Cancel



11. Under **Virtual Machines**, right click on newly created virtual machine and click on **Start**



12. You should see GreenRADIUS virtual appliance console window



13. Login to GreenRADIUS web admin console any web browser and using following link:  
<https://<hostname or IP address of GreenRADIUS virtual appliance>/admin>