

## Cisco Spaces: Connector Hyper-V

The chapter shows you how to install a connector as a Hyper-V instance. To do this, you must perform two tasks. The first task is to create a virtual switch and the second is to download and deploy Hyper-V image as a connector:

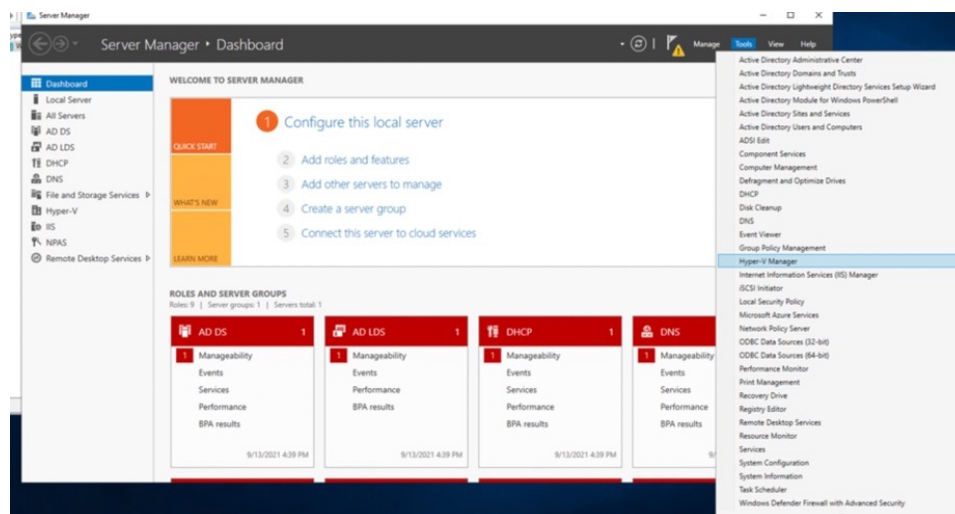
- [Creating a Virtual Switch, on page 1](#)
- [Downloading and Deploying HYPER-V, on page 8](#)

## Creating a Virtual Switch

This task shows you how to install a Hyper-V manager. The task also shows you how to use the Hyper-V manager to install a virtual switch.

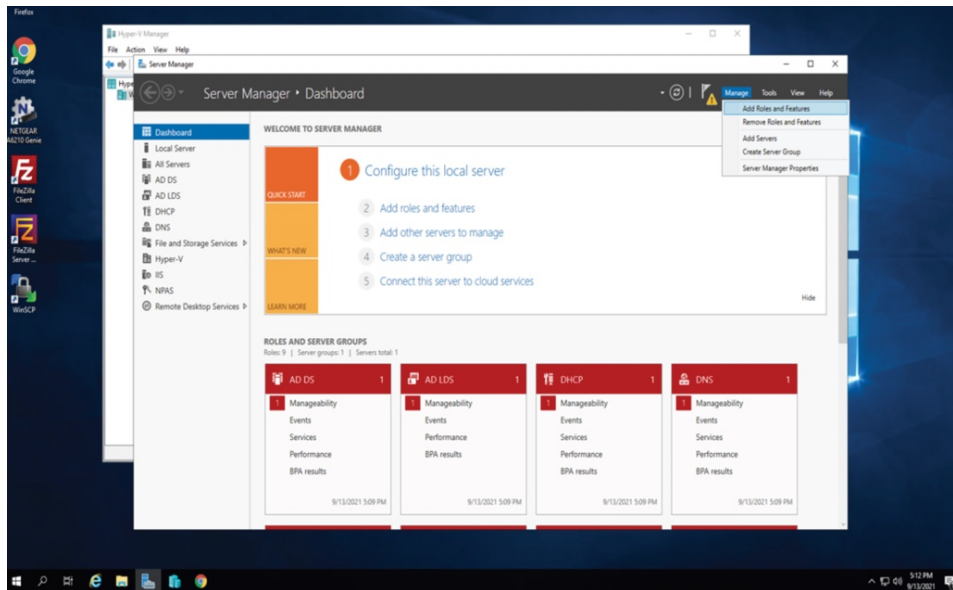
**Step 1** Navigate to **Windows > Server Manager**.

**Figure 1: Windows > Server Manager**



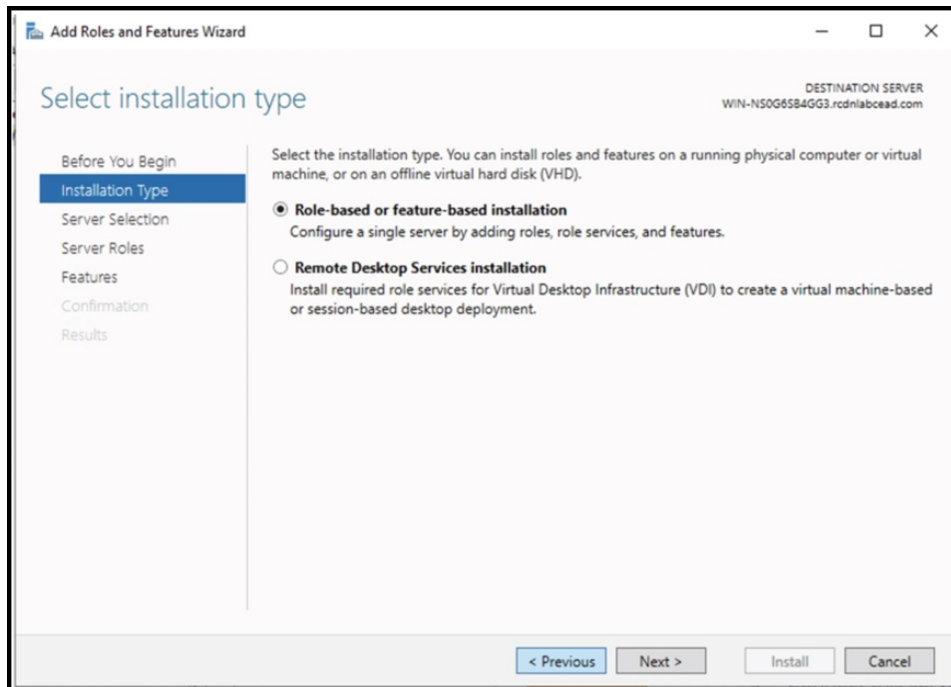
**Step 2** Choose **Manage > Add Roles and Features**.

Figure 2: Manage &gt; Add Roles and Features



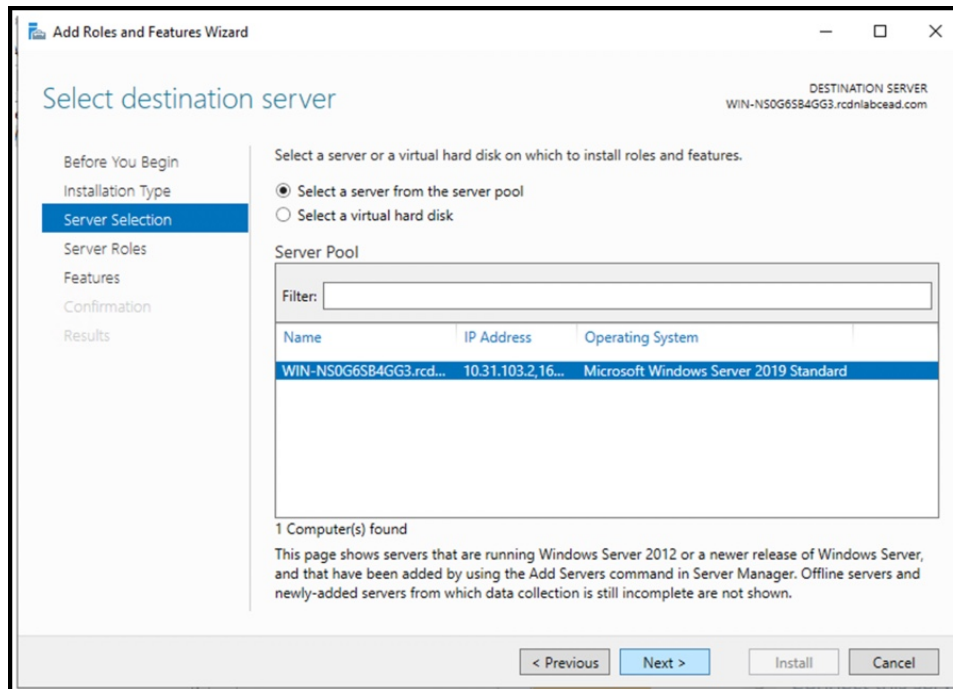
**Step 3** Click the **Role-based or feature-based installation** radio button.

Figure 3: Role-based or Feature-Based Installation



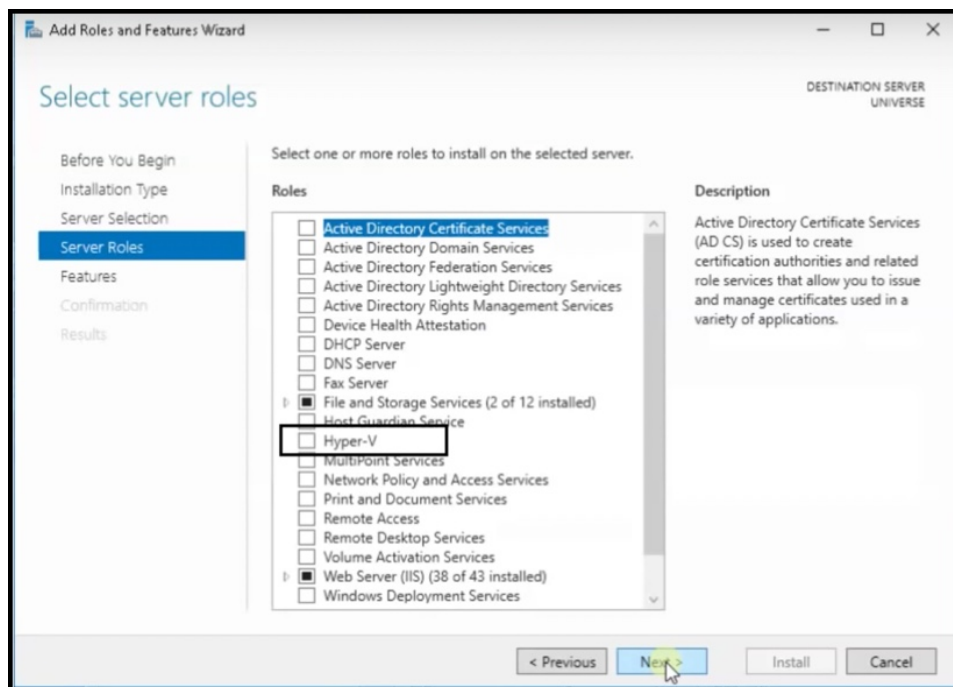
**Step 4** Click the **Select a server from the server pool** radio button.

Figure 4: Select a Server From the Server Pool

**Step 5**

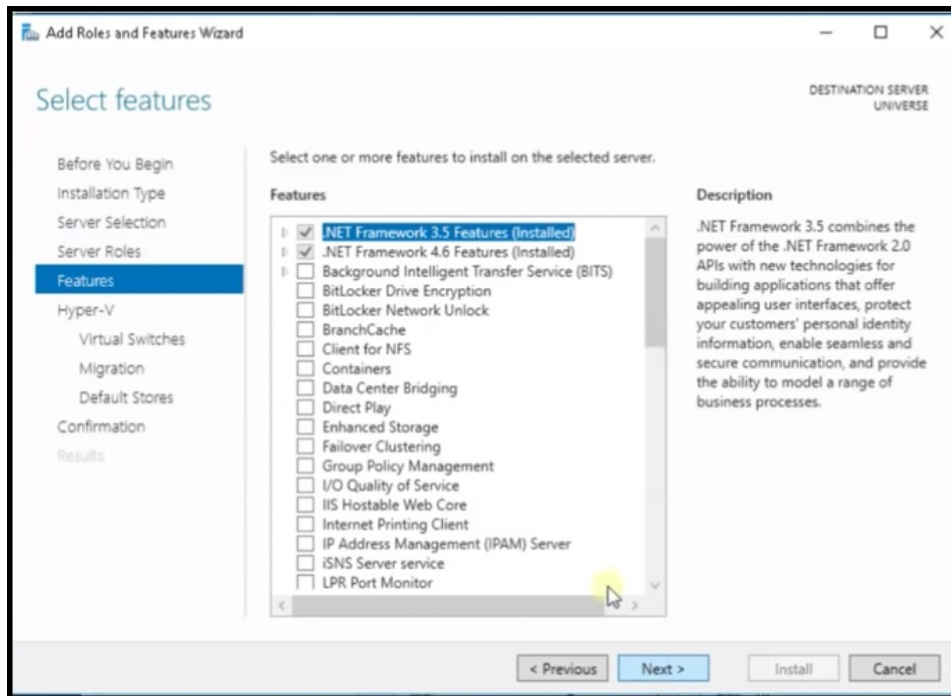
In the **Select server roles** window, check the Hyper-V checkbox, and click **Next**.

Figure 5: Select Server Roles

**Step 6**

In the **Select features** window, check the **.NET Framework** checkbox, and click **Next**.

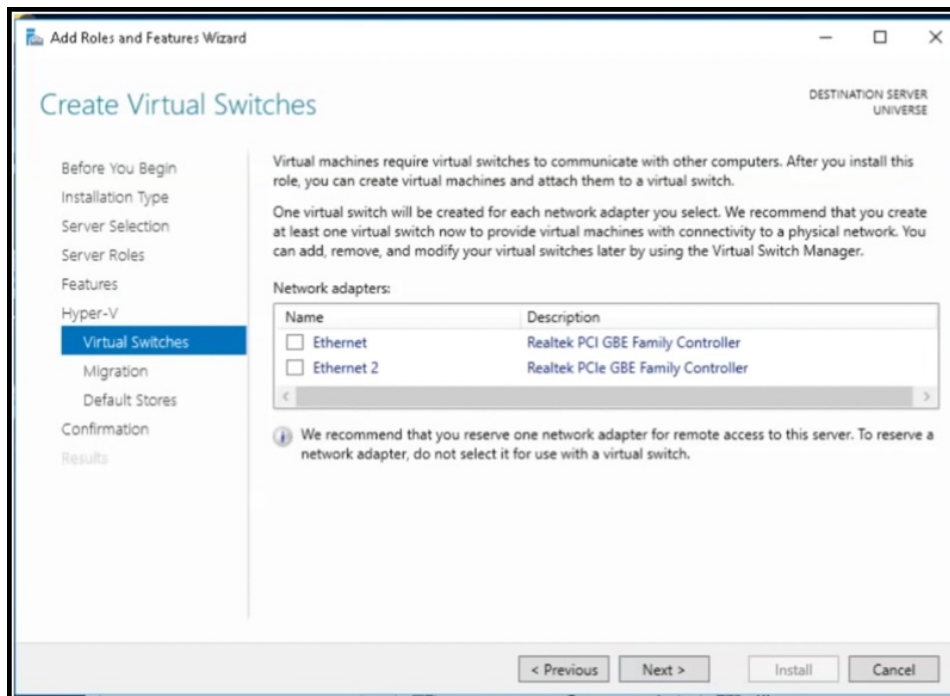
Figure 6: Select Features

**Step 7**

In the **Hyper-V** window, do the following:

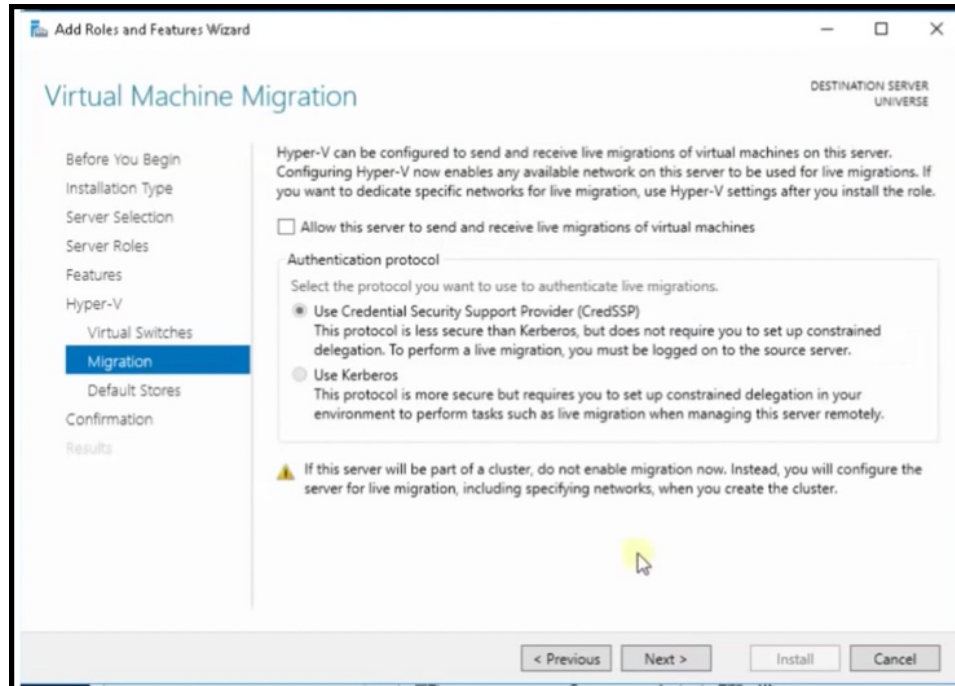
- a) In the **Virtual Switches** window, click **Next**.

Figure 7: Virtual Switches



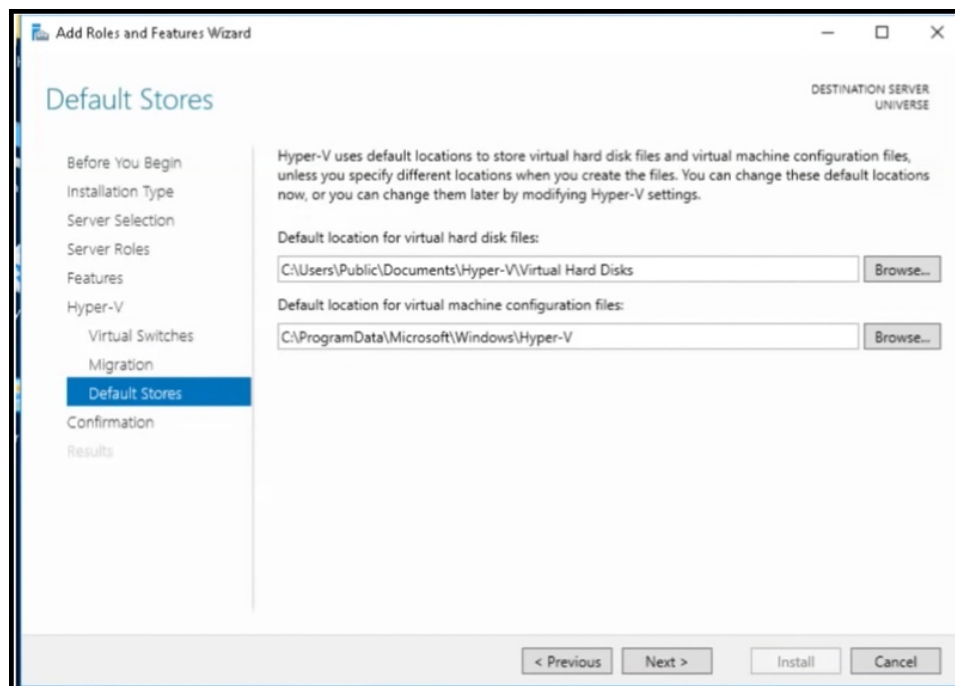
- b) In the **Migration** window, click **Use Credential Security Support Provider (CredSSP)** radio button, and click **Next**.

**Figure 8: Use Credential Security Support Provider**



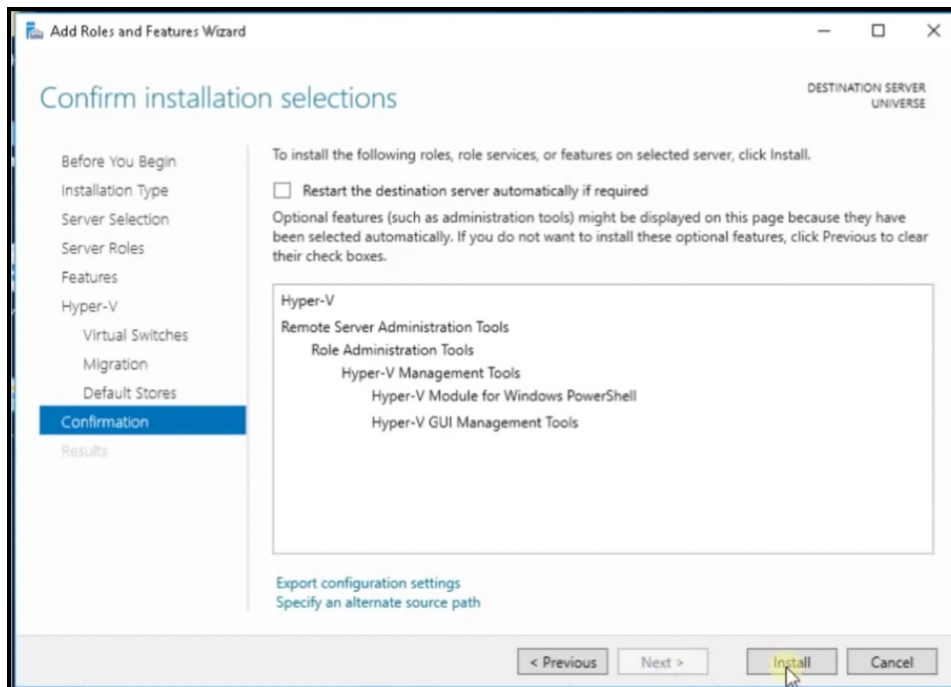
- c) In the **Default Stores** window, select the location to install files or retain the default locations, and click **Next**.

**Figure 9: Default Stores**



**Step 8** Confirm the installation settings for Hyper-V and click **Install**.

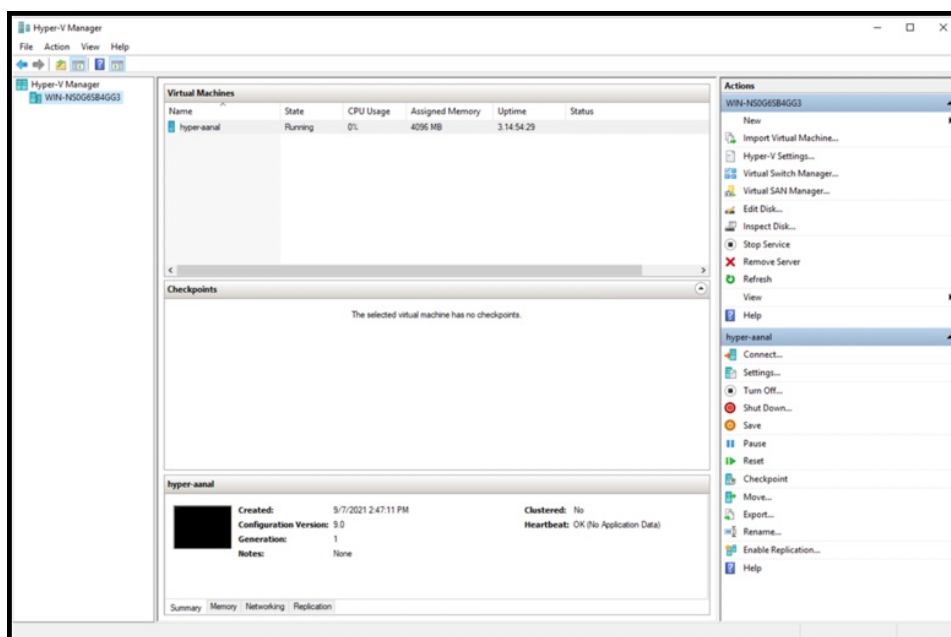
**Figure 10: Confirm the Installation Settings**



**Step 9** Open **Hyper-V Manager**.

**Step 10** In Hyper-V Manager, choose **Actions > Virtual Switch Manager**.

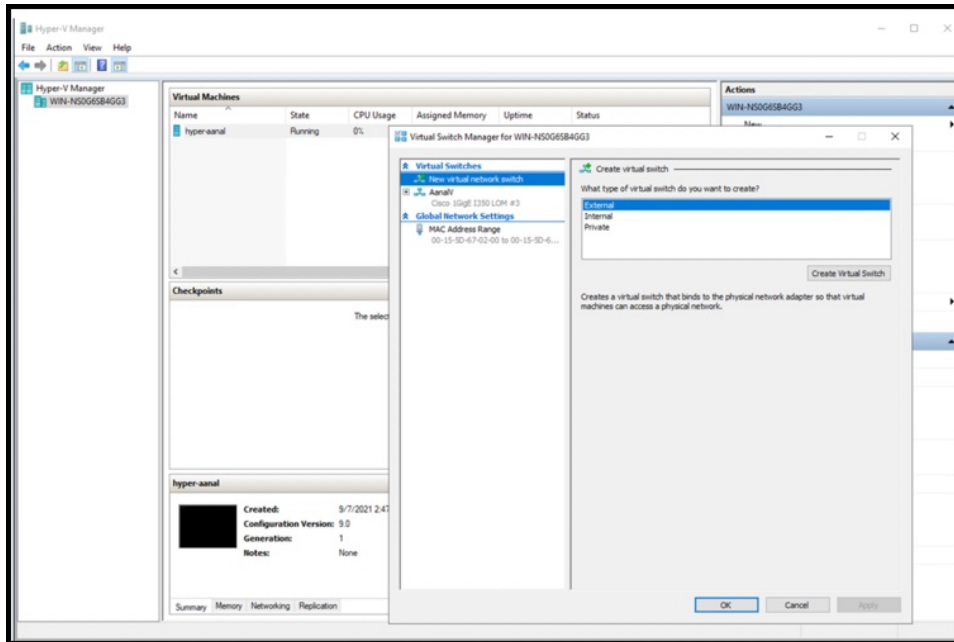
**Figure 11: Actions > Virtual Switch Manager**





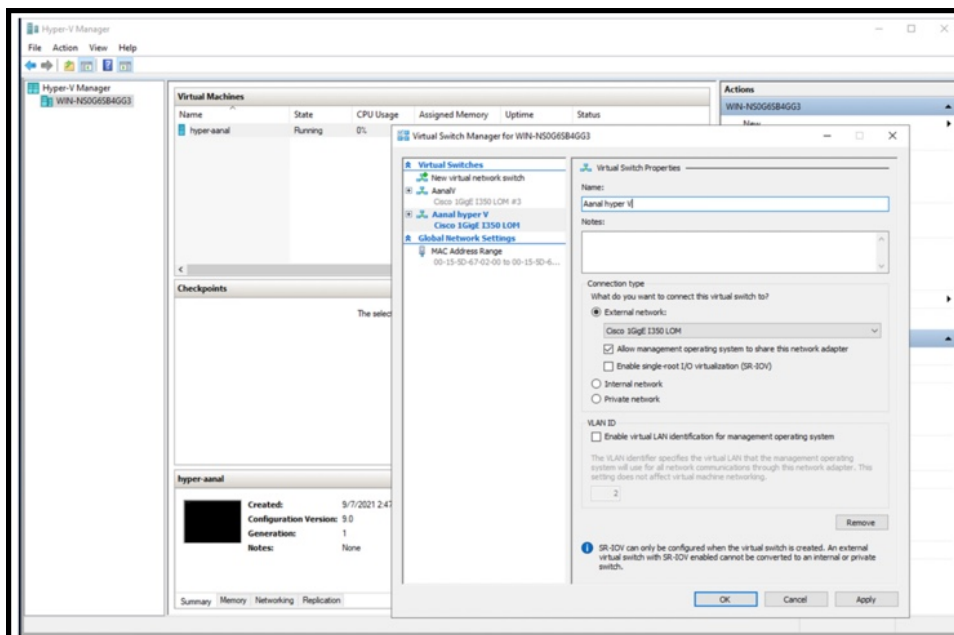
**Step 11** In the **Virtual Switch Manager** for window, click **New virtual network switch**. In the **Create virtual switch** window, click **External** and then click **Create Virtual Switch**.

**Figure 12: Create Virtual Switch**



**Step 12** In the **Virtual Switch Properties** window, provide a **Name** for the switch. From the **Connection Type** area, click the **External Network** radio button, and choose a network, and then click **Apply**.

**Figure 13: Virtual Switch Properties**



# Downloading and Deploying HYPER-V

## Before you begin

Create a vSwitch on HYPER-V. connector connects to this vSwitch. See [Creating a Virtual Switch, on page 1](#)

**Step 1** Download connector .hyperv (HYPERV) image from Cisco.com.

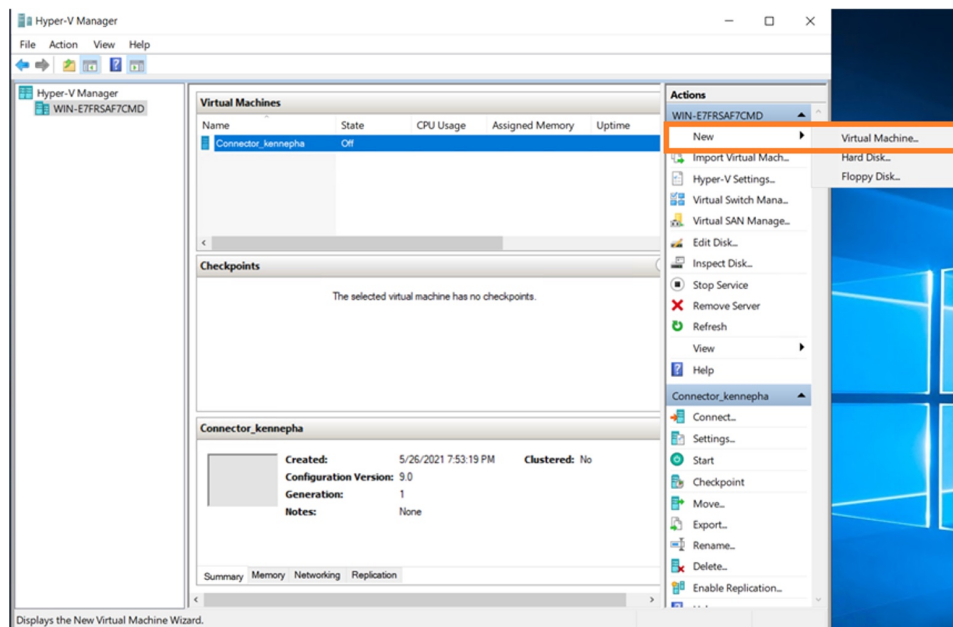


**Step 2** Untar the HYPER-V to obtain a .vhdx (VHDX) file. You can use this to deploy a HYPER-V connector instance. Store the VHDX file in a folder location where you plan to create the HYPER-V instance.

**Step 3** Open **Hyper-V Manager**.

**Step 4** Right-click the vSwitch created, and choose **New > Virtual machine**.

**Figure 14: Create New Virtual Machine**

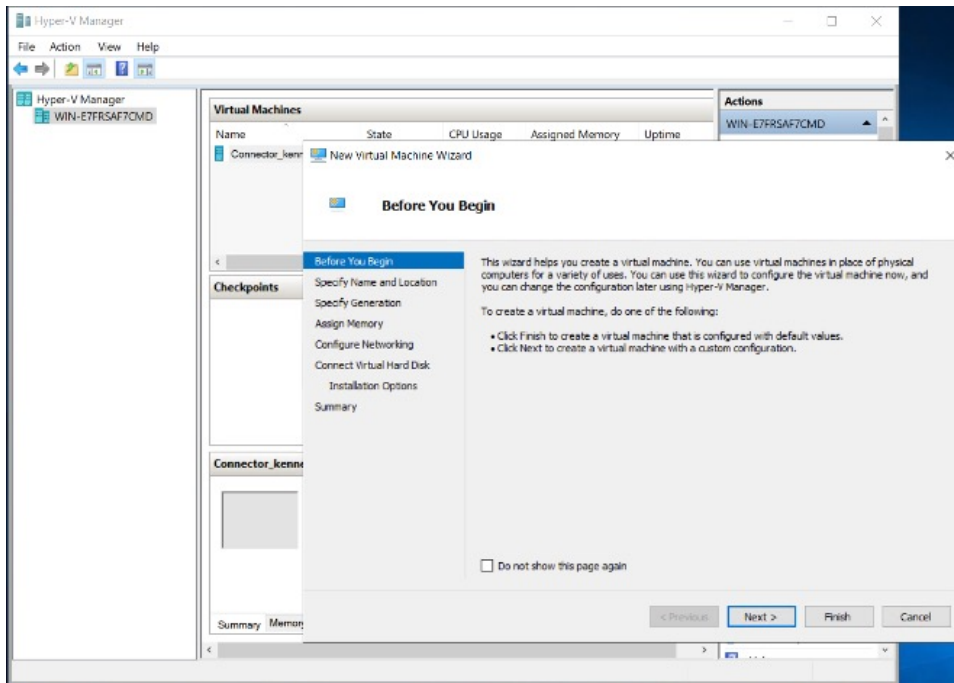


**Note** Do not use the **Import Virtual Machine** or **New > Hard Disk** options.

**Step 5** Click **Next** to begin HYPER-V deployment.

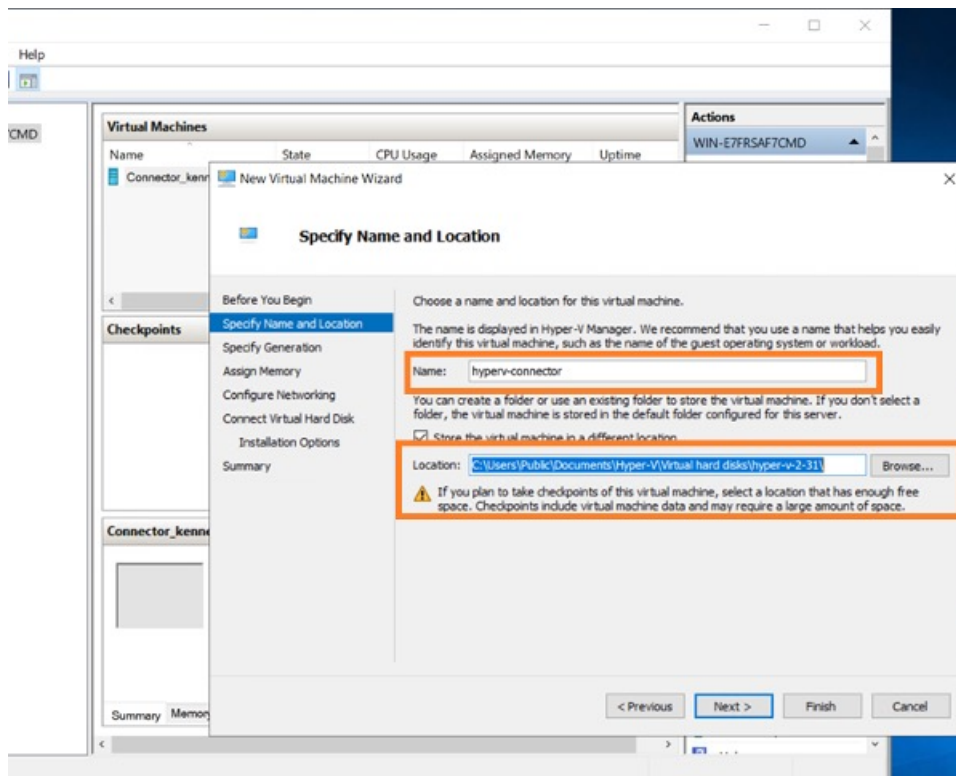


Figure 15: Click Next to Begin Deployment

**Step 6**

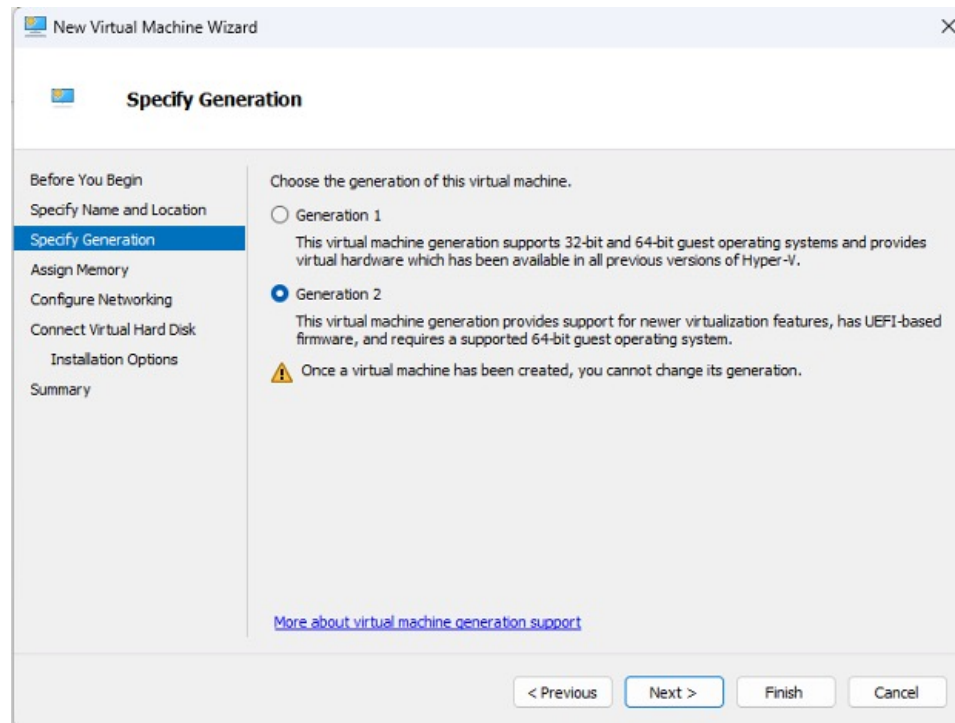
Provide the **Name** of the connector and select the location to create the virtual machine.

Figure 16: Name of Connector



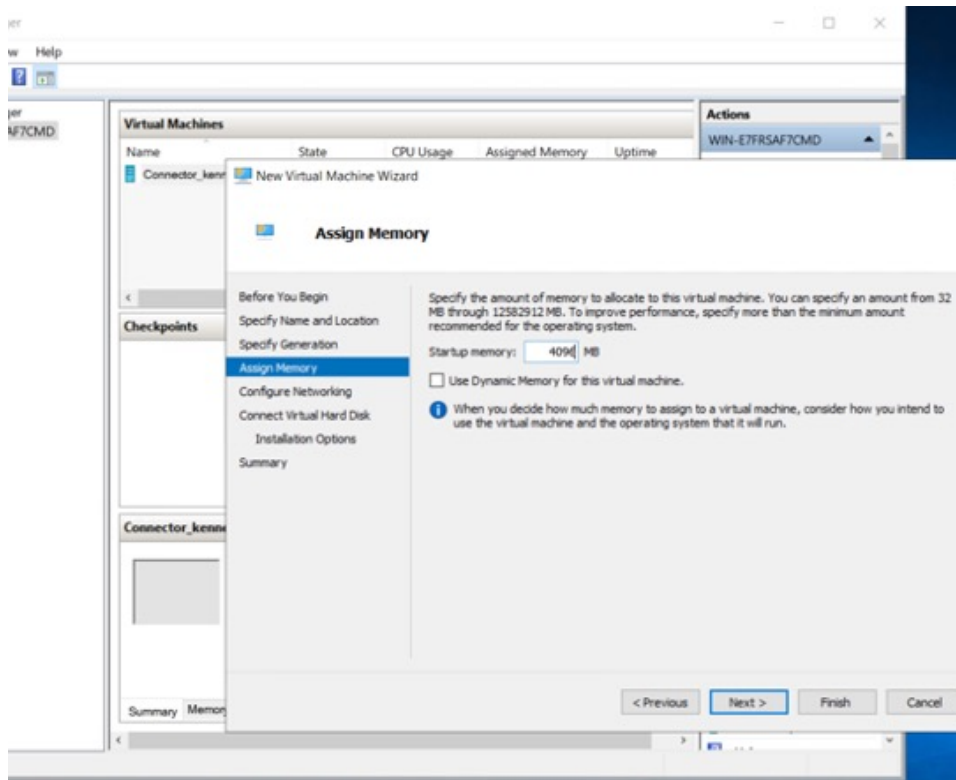
**Step 7** In the **Specify Generation** window, choose **Generation 2** VM.

**Figure 17: Specify Generation**



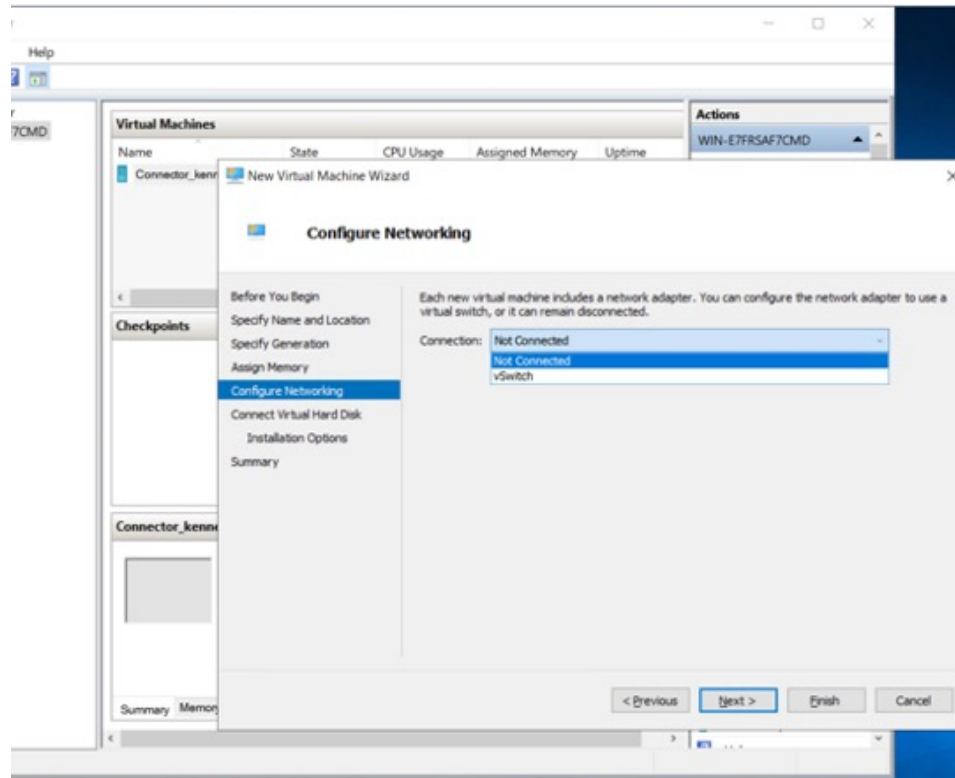
**Step 8** In the **Assign Memory** window, specify 4096 MB (4GB) of memory for the virtual machine instance.

**Note** 4096 MB (4GB) of memory is equivalent to the standard configuration of HYPER-V.

**Figure 18: Assign Memory**

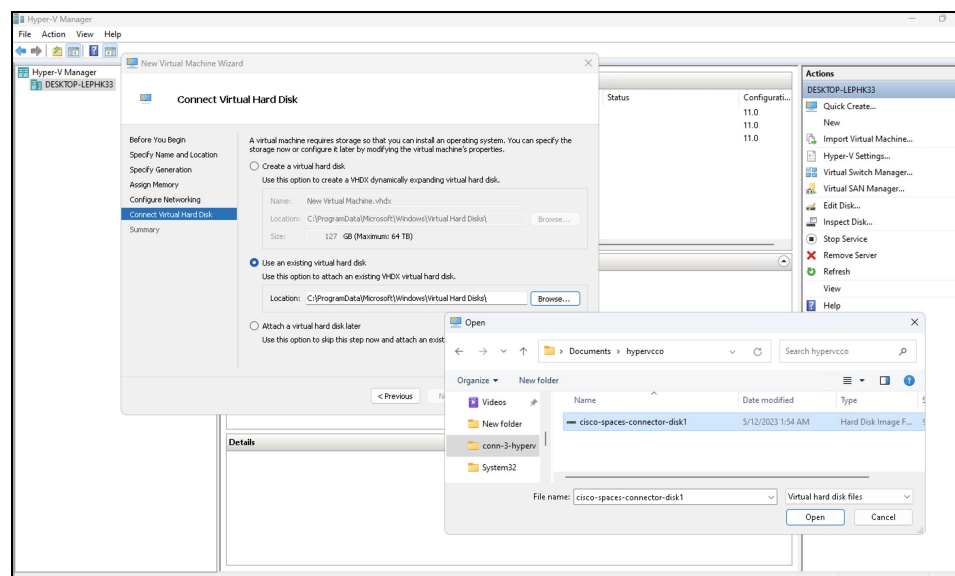
**Step 9** In the **Configure Networking** window, select the vSwitch that you created as a prerequisite.

Figure 19: Configure Networking

**Step 10**

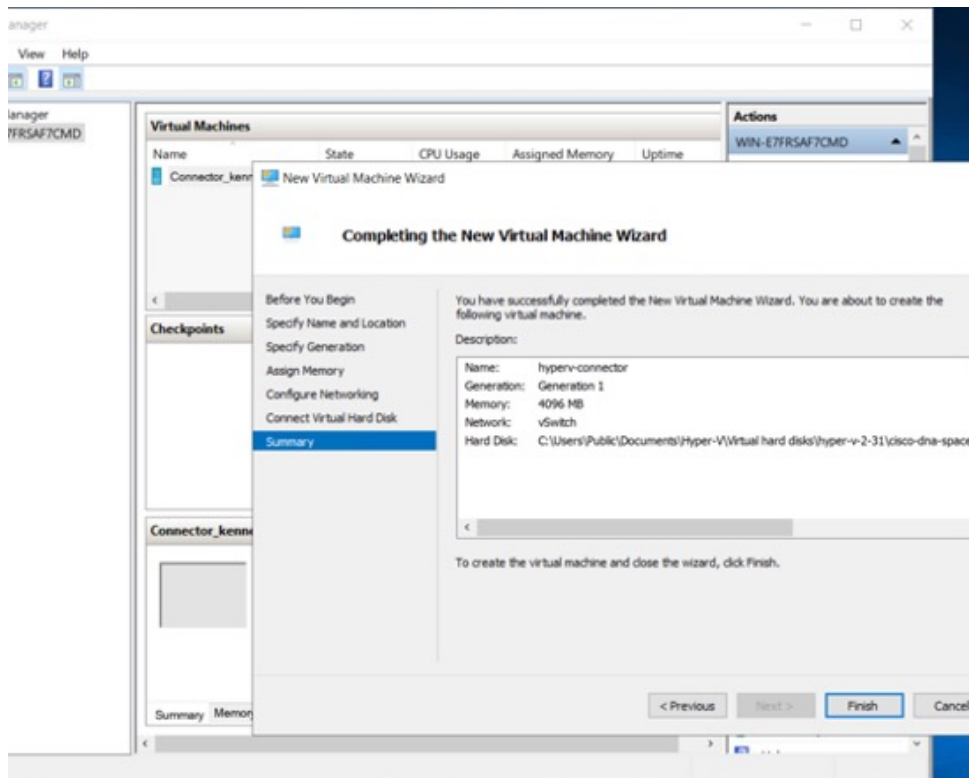
In the **Connect Virtual Hard Disk** window, select the **Use an existing hard disk** option, and select the folder location where the VHDX file has been stored (Step 1).

Figure 20: Connect Virtual Hard Disk



**Step 11** In the **Completing the New Machine Wizard** window, a final summary is displayed. Review this summary and click **Finish**.

*Figure 21: Completing the New Machine Wizard*

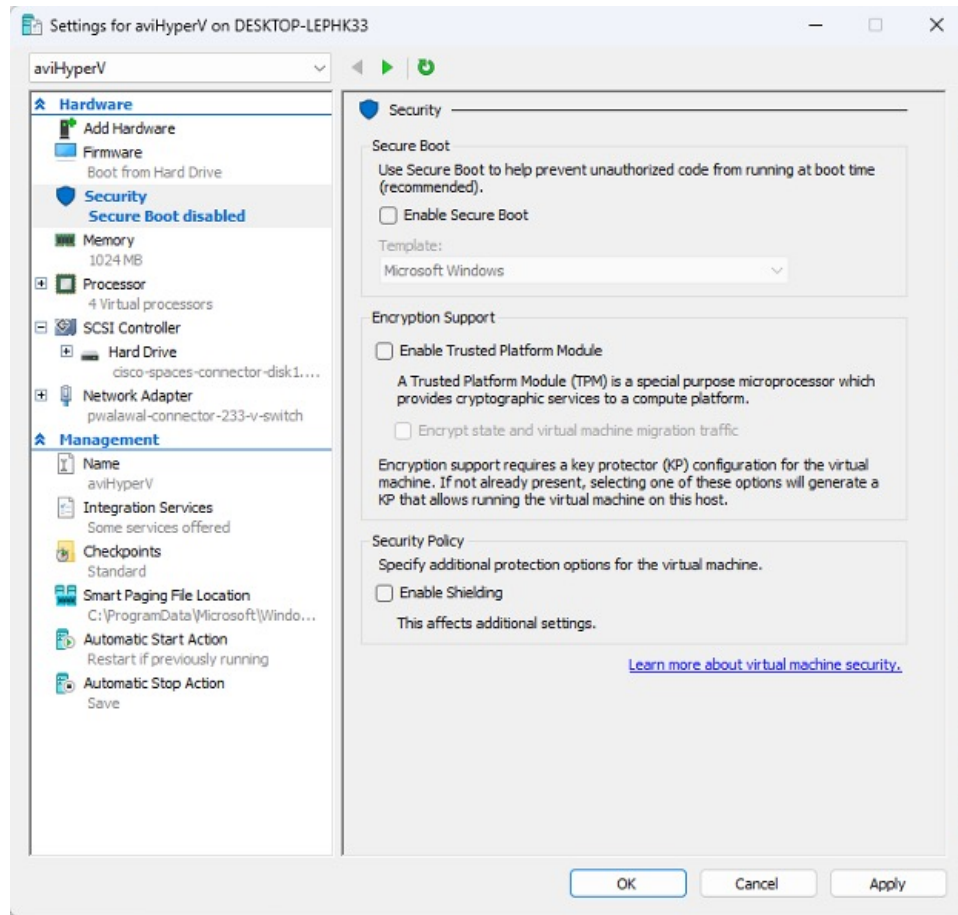


A HYPER-V instance is created.

**Step 12** Select the HYPER-V instance created, and click **Settings**.

- Navigate to **Security** and ensure you **uncheck** the **Enable Secure Boot** check box and leave the secure boot feature disabled.

Figure 22: Enable Secure Boot

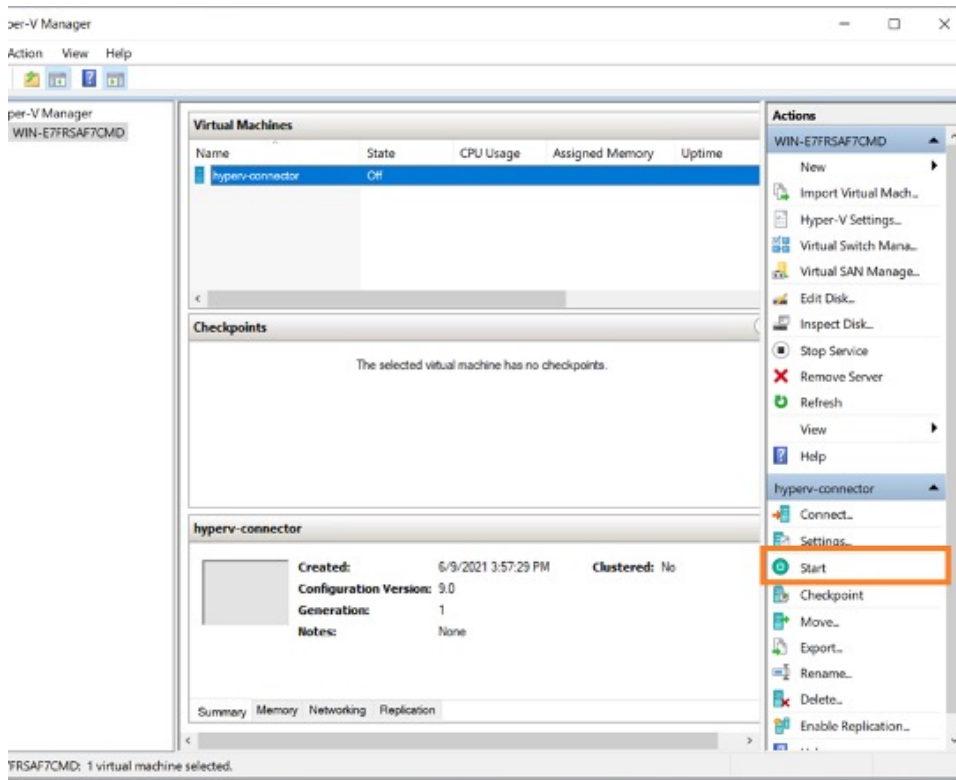


b) Navigate to **Security** and ensure that CPU count is set to 2 vCPUs to match **Standard** connector deployment.

### Step 13

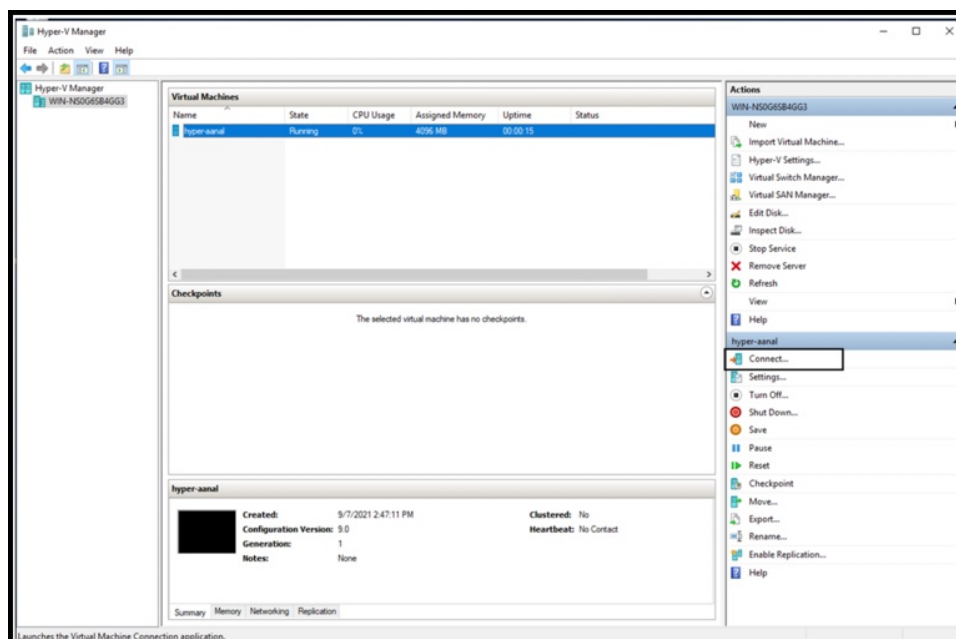
Select the HYPER-V instance created, and click **Start**.

Figure 23: Select The Hyper-V Instance

**Step 14**

Select the HYPER-V instance created, and click **Connect** to open the HYPER-V console.

Figure 24: Select The Hyper-V Instance





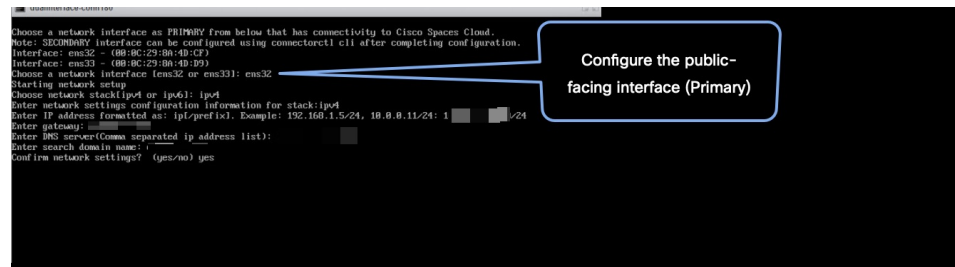
The virtual machine terminal is opened.

**Step 15** Log in to the terminal and enter the default username **root** and default password **root**.

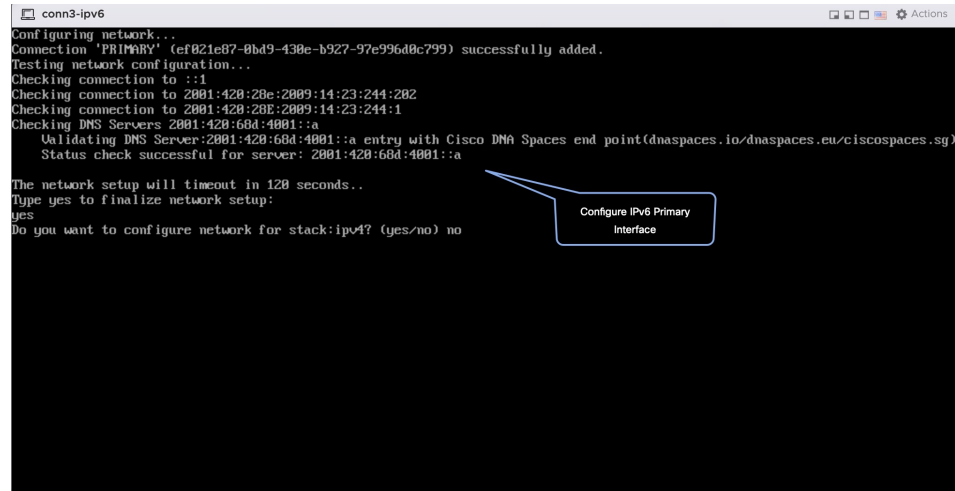
**Step 16** Configure the host name for the connector.

**Step 17** Choose an network interface to configure as PRIMARY.

**Figure 25: Configuring the Primary Interface: IPv4**



**Figure 26: Configuring the Primary Interface: IPv6**



**Step 18** Do one of the following, and then configure the network settings for the PRIMARY interface. Specify parameters such as IP address, hostname, and so on.

- Configure the IPv6 stack.
- Configure the IPv4 stack.

You can add multiple DNS servers as a comma separated list in this step. After the task is complete and the Cisco Spaces: Connector is deployed, you can login to the connector CLI, and run the **connectorctl network config** command to add more DNS servers or edit the existing list.

**Step 19** Confirm the setup.

**Note** Because this configuration window times out in 120 seconds, ensure that you provide the input on time to avoid reconfiguration.

**Step 20** Reset the password for the **spacesadmin** user.

**Step 21** Enter the time zone.

Figure 27: Time Zone

```

conn-3-244-99

Timezone setup
Would you like to setup timezone? (blank for default value (UTC))
yes
1. Africa - Press 1
2. America - Press 2
3. Asia - Press 3
4. Australia - Press 4
5. Europe - Press 5
Select an option from the list above: (blank for default (Default value is 2))
2
1. America/Anchorage - Press 1
2. America/Buenos Aires - Press 2
3. America/Chicago - Press 3
4. America/Denver - Press 4
5. America/Los Angeles - Press 5
6. America/Mexico City - Press 6
7. America/New York - Press 7
8. America/Phoenix - Press 8
9. America/Regina - Press 9
10. America/Santiago - Press 10
11. America/Sao Paulo - Press 11
12. America/Toronto - Press 12
13. America/Vancouver - Press 13
Select an option from the list above: (blank for default (Default value is 1))
5
Setting timezone and restarting services...
-

```

- Step 22** Enter the Network Time Protocol (NTP) server name to synchronize the system time with that of NTP server, or leave it blank if you do not want to configure an NTP server.

Figure 28: Configure NTP

```

dualinterface-conn180
Configure NTP
Enter comma separated NTP servers list (blank for no NTP server): ntp.esl.cisco.com
Checking status for server: ntp.esl.cisco.com
Status check successful for server: ntp.esl.cisco.com
Warning: The unit file, source configuration file or drop-ins of chronyd.service changed on disk. Run systemctl daemon-reload
to reload units.
NTP configuration: success

```

Figure 29: Configure NTP

```

Configure NTP
Enter comma separated NTP servers list (blank for no NTP server): rtp5-b5-rbb-ntp1-v6.cisco.com
Checking status for server: rtp5-b5-rbb-ntp1-v6.cisco.com
Status check successful for server: rtp5-b5-rbb-ntp1-v6.cisco.com
NTP configuration: success

```

- Step 23** Note the URL (<https://connector-ip>) before the automatic reboot. You can use this URL later to open the connector GUI.

Figure 30: ConnectorGUI

```

Cisco Spaces Connector UI:
https://10.22.244.180
Username log in: spacesadmin
The install is complete, a reboot will occur in 5 seconds...
-

```

