

# **Install the Virtual Center**

You need to complete several steps to install the Virtual Center:

- 1. Retrieve the Cisco Cyber Vision installation file.
- 2. Create a Virtual Machine on ESXi and deploy Cisco Cyber Vision ova file on the VM. OR

Create a Virtual Machine on Hyper-V, set the disk size, create and map the network interfaces.

The only configurations that may be required during deployment are memory and disks size customization.

- 3. Configure the Cisco Cyber Vision Center.
  - Retrieve the installation file, on page 1
  - ESXi, on page 2
  - Hyper-V, on page 9

## **Retrieve the installation file**

Before starting the VM installation, you must retrieve the virtual machine installation ova file.

To retrieve the virtual machine installation file:

#### Procedure

- **Step 1** Access Cisco Cyber Vision Software Download platform.
- **Step 2** Download the ova file required for Hyper-V or ESXi from the last version released. Ova files with the DPI option are also available.

To verify that the file you just downloaded is healthy, it is recommended to use the SHA512 checksum provided by Cisco.

To do so (Windows users):

- **Step 3** Access Cisco Cyber Vision download page.
- **Step 4** Download the file.
- Step 5Open a shell prompt such as Windows Powershell and use the following command to retrieve the file checksum:Get-FileHash .\CiscoCyberVision-<TYPE>-<VERSION>.<EXT> -Algorithm SHA512 | Format-List



**Step 6** In the download page, mouse over the file and copy the SHA512 checksum.

### Software Download

Downloads Home / Security / Network Visik	oility a			
	_	Details		$\times$
Q Search	$\supset$	Description :	VMware OVA (Center) - CiscoCyberVision-Center- 3.2.3.ova	
		Release :	3.2.3	
Expand All Collapse All		Release Date :	30-Apr-2021	
		FileName :	CiscoCyberVision-center-3.2.3.ova	
Latest Release	$\sim$	Size :	382.92 MB ( 401520640 bytes)	
		MD5 Checksum :	ad553391b4f43128ef922e1a98e7e58c 📋	
3.2.3		SHA512 Checksum :	1338bfb1a17110af80d751ae7b450f2b 📋	
All Release	~	Release Notes for 3.	2.3 Advisories 📑	
3	>	VMware OVA (C CiscoCyberVI) on Advisories	enter) - CiscoCyberVision-Center-3.2.3. .center-3.2.3.ova	ova

#### **Step 7** Compare both checksums.

- If both checksums are identical it means the file is healthy.
- If the checksums do not match try to download the file again.
- If, after downloading the file again the checksums still don't match, please contact Cisco support.

# ESXi

### **Create a Virtual Machine**

Before taking the steps below to create a VM on ESXi, **you must set two network interfaces** (the Administration and the Collection network interfaces), and a third if deploying a Center with DPI (the DPI network interface), accordingly to the infrastructure of the network. To do so, refer to VMware ESXi documentation.

To create the Virtual Machine and deploy Cisco Cyber Vision:

#### Procedure

**Step 1** Login to VMware EXSi.

Step 2	Click Create/Reg	gister VM.
--------	------------------	------------

VMWare' ESXi"				Help 🗕	Q Search -
Navigator	esx				
Image       Manage       Monitor       Image       Image	esx Version: 6.7: State: Non	Register VM in Shut down in Reboot 0 Update 2 (Build 13981272) mal (not connected to any vCenter Server) 8 days	🤁 Refresh   🏠 Actions	CPU USED: 526 MHz MEMORY USED: 30.53 GB STORAGE USED: 475.71 GB	FREE: 27 GH2 2% CAPACITY: 27.5 GH2 FREE: 96 83 08 24% CAPACITY: 127.48 08 FREE: 63 TB 6% CAPACITY: 7.27 TB
	▼ Hardware		✓ Configuration		
	Manufacturer	Dell Inc.	Image profile	(Updated) ESXi-6.7. dard (VMware, Inc.)	0-20190402001-stan
	Model	PowerEdge R440 12 CPUs x Intel(R) Xeon(R) Gold 5118 C	vSphere HA state	Not configured	
		PU @ 2.30GHz	▶ vMotion	Not supported	
	Memory	127.46 GB	▼ System Information		
	Persistent Memory      Question Virtual flash	0 B 0 B used, 0 B capacity	Date/time on host	Tuesday, January 0 C	7, 2020, 12:30:03 UT
	✓ Q Networking		Install date	Tuesday, August 06,	2019, 15:59:07 UTC
	Hostname	esx	Asset tag		
	IP addresses	1. unsid: 10.2.3.16	Serial number	H4Y9JY2	
		2 vitil 360 Aut 07575155	BIOS version	2.2.11	
	DNS servers	1.10.2.3.254	BIOS release date	Friday, June 14, 201	9, 02:00:00 +0200
	🕄 Recent tasks				

The wizard to create a new virtual machine opens.

**Step 3** Click Deploy a virtual machine from an OVF or OVA file.

<b>vm</b> ware <sup>,</sup> ESXi	•		Help 🗸	Q Search
Navigator	esx			
🔻 🖥 Host	🔁 New virtual machine			FREE: 27 GHz
Manage Monitor > ⑦ Virtual Machines > 🗄 Storage > 🖉 Networking	<ul> <li>Select creation type</li> <li>Select OVF and VMDK files</li> <li>Select storage</li> <li>License agreements</li> <li>Deployment options</li> <li>Additional settings</li> <li>Ready to complete</li> </ul>	Select creation type How would you like to create a Virtual Machine? Create a new virtual machine Deploy a virtual machine from an OVF or OVA file Register an existing virtual machine	This option guides you through the process of creating a virtual machine from an OVF and VMDK flies.	276 CAPACITY: 27 5 0H PREE: 06 03 GB 24 06 CAPACITY: 72 40 GB FREE: 04 TB 0% CAPACITY: 7.27 TB 0190402001-stan
	<b>vm</b> ware <sup>®</sup>			
	Dire service	1. 10.2.3.204	Back Next Finish Cancel	02:00:00 +0200
	Recent tasks			

**Step 4** Give a name to the virtual machine and select the Cisco Cyber Vision OVA file. Select the DPI OVA file to enable the sensor function on the Center VM.

🔁 New virtual machine - CCV_Center	
<ul> <li>1 Select creation type</li> <li>2 Select OVF and VMDK files</li> <li>3 Select storage</li> </ul>	Select OVF and VMDK files Select the OVF and VMDK files or OVA for the VM you would like to deploy
<ul> <li>4 Deployment options</li> <li>5 Ready to complete</li> </ul>	Enter a name for the virtual machine. CCV_Center
	Virtual machine names can contain up to 80 characters and they must be unique within each ESXi instance.
	× 📾 CiscoCyberVision-center-3.2.0.ova
<b>vm</b> ware <sup>.</sup>	
	Back Next Finish Cancel

1 Select creation type	Select OVF and VMDK files
2 Select OVF and VMDK files 3 Select storage	Select the OVF and VMDK files or OVA for the VM you would like to deploy
5 Select storage 4 Deployment options 5 Ready to complete	Enter a name for the virtual machine.
5 Ready to complete	CCV_Center_dpi
	Virtual machine names can contain up to 80 characters and they must be unique within each ESXi instance.
	× 🖾 CiscoCyberVision-center-dpi-3.2.0.ova
<b>vm</b> ware <sup>®</sup>	
	Back Next Finish Cancel

**Step 5** Select a disk with sufficient storage. Refer to Requirements for installation.

L

<b>vm</b> ware <sup>,</sup> Esxi	$\sim$					magnass	Help <del>-</del>	Q Search
"" Navigator	🗆 📔 esx							
🔻 🚪 Host	🔁 New virtual machine - Cisco Cyber	Vision VM						FREE: 27 GHz
Manage       ✓ 1 Select creation type         ✓ Virtual Machines       ✓ 2 Select OVF and VMDK files         ✓ Storage       ✓ 3 Select storage         ✓ Networking       ✓ 2 Deployment options         6 Additional settings       7 Ready to complete	Select storage         Select the storage type and datastore         Standard       Persistent Memory         Select a datastore for the virtual machine's configuration files and all of its' virtual disks.						CAPACITY: 27.5 GHE FRE: 90.35 GHE FRE: 90.35 GHE CAPACITY: 127.46 GB FRE: 8.8 TB 6% CAPACITY: 7.27 TB	
	<b>vm</b> ware <sup>.</sup>	Name v datastore1	Capacity ~ 7.27 TB	Free ~ 6.8 TB	Type ~ VMFS6	Thin pro ~ Supported	Access v Single 1 items	0190402001-stan 020, 12:30:03 UT 19, 15:59:07 UTC
	Recent tasks	1. 10.2.3.29			Back N	lext Fi	inish Cancel	02:00:00 +0200

#### **Step 6** Map the network interfaces you have previously created to the VM's ports (1), as shown below:

- The Administration network interface as eth0.
- The Collection network interface as eth1.
- If deploying a Center with DPI, the DPI network interface as eth2.

**Step 7** Set disk provisioning as Thin (2).

**Step 8** Set the Deployment type as Small, Medium or Large (3). The deployment size for an OVA DPI file is Large by default.

Small: Intel Xeon, 8 cores, 16GB RAM

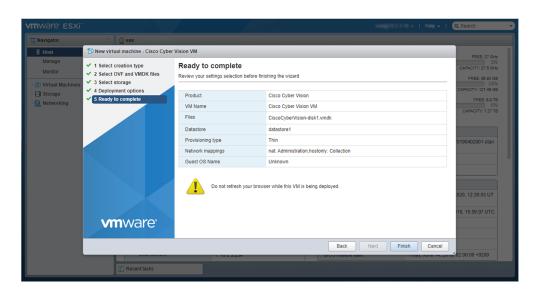
Medium: Intel Xeon, 10 cores, 32GB RAM

Large: Intel Xeon, 16 cores, 64GB RAM

**Step 9** Disable the virtual machine's automatic start (4).

🔁 New virtual machine - CCV_Cent	er		
<ul> <li>1 Select creation type</li> <li>2 Select OVF and VMDK files</li> <li>3 Select storage</li> </ul>	Deployment options Select deployment options		
4 Deployment options     5 Ready to complete	Network mappings	nat Administration	
	Deployment type	Small Use this configuration for small deployments. This deployment will r	~ need 2 vC
	Disk provisioning	PUs and 8GB Memory for the vApp.	
	Power on automatically		
<b>vm</b> ware <sup>®</sup>		Back Next Finish	Canc
		Back Next Finish	Canc
<ul> <li>New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VMDK files</li> </ul>	er Deployment options Select deployment options	Back Next Finish	Canc
<ul> <li>New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VMDK files</li> <li>3 Select storage</li> </ul>	Deployment options	nat Administration	Canc
<ul> <li>Pi New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VIMDK files</li> <li>3 Select storage</li> <li>4 Deployment options</li> </ul>	Deployment options Select deployment options		Canc
<ul> <li>Pi New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VIMDK files</li> <li>3 Select storage</li> <li>4 Deployment options</li> </ul>	Deployment options Select deployment options	nat Administration v	Canc
<ul> <li>New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VIMDK files</li> <li>3 Select storage</li> <li>4 Deployment options</li> </ul>	Deployment options Select deployment options Network mappings	1 nat Administration v hostonly Collection v dpi DPi v	Canc
<ul> <li>New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VIMDK files</li> <li>3 Select storage</li> <li>4 Deployment options</li> </ul>	Deployment options Select deployment options Network mappings Disk provisioning	nat Administration ~ hostonly Collection dpl DPl ~	Canc
<ul> <li>New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VIMDK files</li> <li>3 Select storage</li> <li>4 Deployment options</li> </ul>	Deployment options Select deployment options Network mappings Disk provisioning	nat Administration ~ hostonly Collection dpl DPl ~	Canc
<ul> <li>New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VMDK files</li> <li>3 Select storage</li> <li>4 Deployment options</li> </ul>	Deployment options Select deployment options Network mappings Disk provisioning	nat Administration ~ hostonly Collection dpl DPl ~	Canc
<ul> <li>New virtual machine - CCV_Cent</li> <li>1 Select creation type</li> <li>2 Select OVF and VMDK files</li> <li>3 Select storage</li> <li>4 Deployment options</li> </ul>	Deployment options Select deployment options Network mappings Disk provisioning	nat Administration ~ hostonly Collection dpl DPl ~	Canc

**Step 10** Check the new VM's settings before clicking Finish.



Your new VM is displayed in the virtual machine list.

Monitor Virtual machine		Power off 📑 Su	spend   🧲 Refresh   🔅	Actions	O Search					
			1 Create / Register VM   🖉 Console   🕨 Power on 💷 Power of 💵 Suspend   🧭 Refresh   🏠 Actions 🔍 Search							
	<ul> <li>Status</li> </ul>	V Used space	~ Guest OS ~	Host name ~	Host CPU ~	Host mem				
📲 Virtual Machines 🛛 🔲 🔲 🔲 🔲	• ***	43.08	Other (54-60)	Children	0.58%	0.98				
Storage	• ***	4.00-08	Cline: (54-56)	Unimput	0.001	0.10				
> 🧟 Networking	@ To.	10.40.08	(That (54-64)	Uningun	12 181	4.03.08				
🗐 🍈 vitti Cartar	• ***	14.45.08	Cliver (54-64)	Uningun	23 Miles	8.05.08				
E. Start Ma	@ 14.	87.81.08	Detran DNU1Umur 1	Unknown	0.001	110				
🗆 🍈 600, ya jen	• ***	18.01.08	Cline: (54-56)	Uningun	211 6810	8.05.08				
🗖 🍘 Pré-center	• TA.	5.41.08	(Thur (54-64)	Uningun	0.001	110				
🗆 🍈 600, ya jaw	• ***	8.15.08	Other (54-64)	Uningun	17.5810	4.03-08				
🗖 🍏 MPR Cause Frag D	ante a ta	5.04.08	Uburtle Linux (54-54)	Unknown	0.58%	110				
🗐 🍈 114, 10, 101	• ***	1271-08	Cline: (54-56)	Uningun	21.584	2.21.08				
💷 🐞 Annalas	@ To.	18.00.08	Detran ONLIGHUS 1.	Unknown	5.68%	1.85-08				
🗐 👩 Anna 199	• ***	200.448	Other (54-50)	Uningun	0.0810	0.148				
🗐. 📳 Cisco Cyber Vision	n VM 📀 No	200 MB	Other (64-bit)	Unknown	0 MHz	0 MB				
Quick filters	~					13 items				

### **Boot the Virtual Machine**

After creating the VM, you can proceed to its first boot.

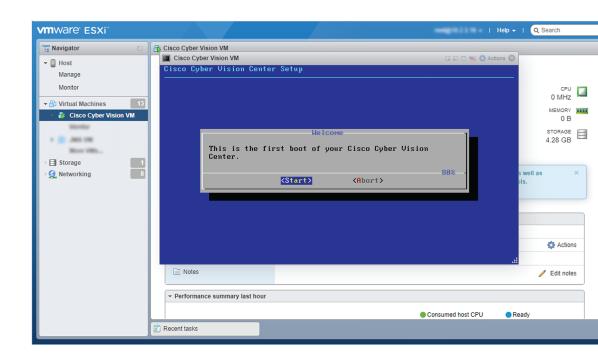
**1.** Click the VM in the list.

		😭 Create / Register VM   👹 Console   🕨 Power on 🔳 Power off 🔢 Suspend   🦿 Refresh   🎄 Actions 🔍 Q Search									
Monitor	. Virtual machine	✓ Status ✓	Used space	~ Guest OS ~	Host name	Host CPU V	Host mem				
🗿 Virtual Machines	13 0.		43.08	Other (54-56)	Uningun	0.98%	0.10				
Storage			4.00-08	Other (54-64)	Uningun	0.001	110				
🧕 Networking	<b>8</b>	Q 74	10.40.08	Other (54-64)	Uninput	12 1810	4.02.08				
	D. State Carter	•	14.45.08	Cline: (54-64)	Uningun	23.98%	8.05.08				
			87.81.08	Deban DNULmus 1.	Uningun	0.68%	110				
	🗆 🐞 6000, ya., per		19.01.08	Climer (64-64)	Unimput	211 10010	1.05.08				
	D. Statement		5.41.08	(thur (54-54)	Uningun	0.001	110				
	🗆 🐞 6000, vii, mil		8.15.08	Cliver (54-64)	Uningun	17.5810	4.02.08				
	D. State Care Pag Dealty		5.04.08	Uburtle Linux (54-54)	Uningun	0.58%	110				
	🗆 🐞 saa, sa, sa		12.71.08	Cliver (64-64)	Uningun	21.58%	2.21.08				
	D. Standard		10.00.00	Deban DNULmus 1.	Uningun	5.58%	1.85-08				
		• ***	200 148	(ther (54-60)	Unknown	0.58%	0.108				
	🔲 🚰 Cisco Cyber Vision VM	📀 No	200 MB	Other (64-bit)	Unknown	0 MHz	0 MB				

2. Power on the VM.

vm	ware" <b>ESX</b> i"			Help -   Q Search
	🔁 Cisco Cyber Vision VM			
	🕼 Console 🛛 Monitor 📔 🕨 Power	on 📕 Power off 🔢 Suspend 🤘	🔉 Restart \mid 🥒 Edit 🕴 🧲 Refresh 🕴 🏠 Actions	
🛃 👔 🛐 🛄 🐂 Narigator		Cisco Cyber 1 Guest OS Compatibility VMware Tools CPUs Memory	Other (64-bit) ESXI 6.0 virtual machine No 2 4 GB	CPU 0 MHz 0 B STORAGE 200 MB ■
	▼ General Information			
	General Information     General Information	No network information		
	VMware Tools	VMware Tools is not installed.		🔅 Actions
	▶	1 disk		
	Dia Notes			🥒 Edit notes
	✓ Hardware Configuration			
	Recent tasks			

3. Wait a few moments for the VM initiation to complete. The following screen is displayed:



4. Press Ctrl+Alt to retrieve the control of your keyboard and mouse.

The Virtual Center is now ready for basic configuration.

# Hyper-V

### **Create a Virtual Machine**

To create a new VM:

#### Procedure

Step 1Open Hyper-V Manager.

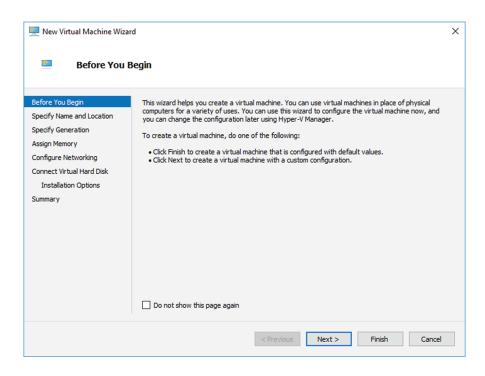
The following home screen appears:

Hyper-V Manager							- 🗆 X
File Action View Help							
🗢 🏟 🖄 📰 🚺 🗊							
Hyper-V Manager	Virtual Machines						Actions
	Name	State	CPU Usage	Assigned Memory	Uptime	Status	WIN-ENHJR2D8JNR
	CCV_V300_01	Off					New
							Import Virtual Machine
							Hyper-V Settings
							🚰 Virtual Switch Manager
							🛃 Virtual SAN Manager
							🚄 Edit Disk
							Inspect Disk
	<						> Stop Service
	Checkpoints						Kemove Server
			The set of state		-1-1-		🖏 Refresh
			The selected virtu	al machine has no checkp	oints.		View
							I Help
							CCV_V300_01
							📲 Connect
							Settings
							Start
							B Checkpoint
	CCV_V300_01						Move
							iviove

**Step 2** Access the New Virtual Machine Wizard by clicking Action > New > Virtual Machine.

📲 Нур	er-V Manager				
File A	ction View Help				
🧢 e	New	>	Virtual Mac	chine	
H	Import Virtual Machine		Hard Disk		
	Hyper-V Settings		Floppy Disk		
	Virtual Switch Manager			State	CPU
	Virtual SAN Manager		V300_01	Off	
	Edit Disk Inspect Disk				

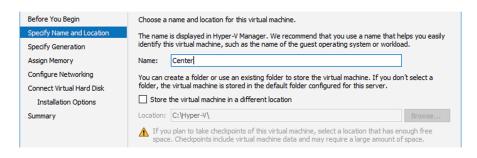
The New Virtual Machine Wizard is displayed.



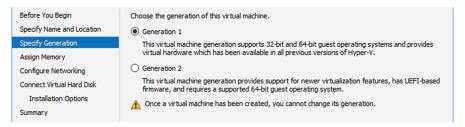
**Step 3** Click Next to start.

**Step 4** Give the new VM a name (e.g. 'Center').

**Step 5** If necessary, give the Virtual Center a different location on the server than the one set by default. In any case, the location chosen must have enough remaining space in case you plan to create snapshots (i.e. VM backups).

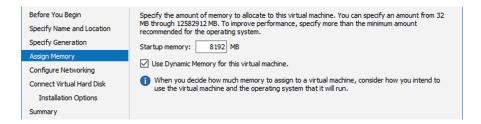


#### **Step 6** Set the VM as Generation 1.

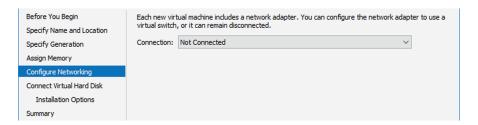


#### **Step 7** Assign memory to the VM.

#### **Note** The minimum configuration required is 8192 MB.



#### **Step 8** Leave the network connection disconnected.



**Step 9** Select 'Use an existing hard disk' and choose the VHDX file.

Before You Begin Specify Name and Location Specify Generation Assign Memory	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.
Configure Networking	Name: Center.vhdx
Connect Virtual Hard Disk	Location: C:\Hyper-V\Virtual hard Disks\ Browse
Summary	Size:       127       GB (Maximum: 64 TB) <ul> <li>Use an existing virtual hard disk</li> <li>Use this option to attach an existing virtual hard disk, either VHD or VHDX format.</li> </ul>
	Location: C:\Hyper-V\Virtual hard Disks\CiscoCyberVision-3.0.0_1.vhdx Browse
	<ul> <li>Attach a virtual hard disk later</li> <li>Use this option to skip this step now and attach an existing virtual hard disk later.</li> </ul>

#### **Step 10** Click 'Finish' to create the VM and close the wizard.

Before You Begin Specify Name and Location Specify Generation	You have succe following virtua Description:	essfully completed the New Virtual Machine Wizard. You are about to create the I machine.	
Assign Memory Configure Networking Connect Virtual Hard Disk	Name: Generation: Memory: Network:	Center Generation 1 8192 MB Not Connected	
Summary	Hard Disk:	C: \Hyper-V\\Virtual hard Disks\CiscoCyberVision-3.0.0_1.vhdx (VHDX, dynamically e	xpar
	< To create the v	virtual machine and close the wizard, click Finish.	>

The Virtual Center created is displayed inside Hyper-V Manager home screen.

### Configure the disk size

To configure the disk size:

#### Procedure

**Step 1** In the Hyper-V Manager select the Center.

**Step 2** Click Action > Settings.

E H	yper-V M	anager	
File	Action	View Help	
<b>(</b> =	Co	nnect	
H	Set	tings	tual Machines
	Sta	rt	me
	Ch	eckpoint	CCV_V300_01
	Mo	ove	Center
	Exp	oort	

**Step 3** Click Hard Drive, then Edit.

Center	$\sim$	ن   ∢					
Hardware	^	Hard Drive					
BIOS Boot from CD		You can change how this virt operating system is installed virtual machine from starting	on this disk, cha				
Security Key Storage Drive disa	abled	Controller:		Location:			
Memory 8192 MB		IDE Controller 0 Media	~	0 (in use)			`
Processor 1 Virtual processor		You can compact, convert by editing the associated				tual har	rd disk
IDE Controller 0		Virtual hard disk:					
<ul> <li>Hard Drive</li> <li>CiscoCyberVision-</li> </ul>	3.0.0_1	C:\Hyper-V\Virtual ha	rd Disks\CiscoCy	berVision-3.0.0	_1.vhdx		
IDE Controller 1		Ne	w E	lit In:	spect	Brow	/se
None		O Physical hard disk:					
SCSI Controller							

The Edit Virtual Hard Disk Wizard displays.

**Step 4** Click Next to proceed until the Choose Action tab.

🚅 Edit Virtual Har	d Disk Wizard	×	
	ate Virtual Hard Disk		
Before You Begin Locate Disk Choose Action Summary	Location: C:\H		×
	Before You Begin Locate Disk Choose Action Configure Disk Summary	<ul> <li>What do you want to do to the virtual hard disk?</li> <li>Compact</li> <li>This option compacts the file size of a virtual hard disk. The storage capacity of remains the same.</li> <li>Convert</li> <li>This option converts a virtual hard disk by copying the contents to a new virtual hard disk can use a different type and format than the original virtual hard disk can use a different type and format than the original virtual hard disk.</li> <li>Expand</li> <li>This option expands the capacity of the virtual hard disk.</li> </ul>	l hard disk. The new
		< Previous Next > Finish	Cancel

- **Step 5** As you are on the Choose Action tab select the Expand option.
- **Step 6** Configure a new size for the virtual hard disk.

It is recommended:

- that you set the minimum size at 16GB for a demo installation with small amounts of data.
- that you set the minimum size at 64GB for a cartography.
- that you set the minimum size at 250GB for a production environment.

The size you set here is a maximum. The virtual drive will expand as data is written on the virtual disk.

🚄 Edit Virtual Hard	Disk Wizard	×	
Expa	nd Virtual Hard Disk		
Before You Begin Locate Disk Choose Action Configure Disk Summary	Current size is betw New size: 250	GB (Maximum: 64 TB)	×
	Before You Begin Locate Disk Choose Action Configure Disk Summary	You have successfully completed the Edit Virtual Hard Disk Wizard. You are about to changes. Description: Virtual Hard Disk: CiscoCyberVision-3.0.0_1.vhdx (VHDX, dynamically expanding Action: Expand Configuration: New virtual disk size: 250 GB	
		To complete the action and close the wizard, click Finish.	
		< Previous Next > Finish	Cancel



### **Create the network interfaces**

To create the Admin and Collection network interfaces:

#### Procedure

- **Step 1** Select the Center.
- **Step 2** On the Actions menu, open the Virtual Switch Manager.

Hyper-V Manager								
File Action View Help								
🗢 🄿 🙍 🖬 🚺 🖬								
📰 Hyper-V Manager	Virtual Machines							Actions
WIN-ENHJR2D8JNR								WIN-ENHJR2D8JNR
	Name	State	CPU Usage	Assigned Memory	Uptime	Status		New
	CCV_V300_01	Off Off						🔒 Import Virtual Machine
	Contor	<b>U</b> II						Hyper-V Settings
								Virtual Switch Manager
								🔒 Virtual SAN Manager
								🛃 Edit Disk
								Inspect Disk
	<						>	Stop Service
	Checkpoints						۲	× Remove Server
			The selected virtua	I machine has no checkpo	oints.			🖏 Refresh
								View
								Help
								Center
								📲 Connect
								Settings
								🕙 Start
	Cantas							🔂 Checkpoint
	Center						1	P Move

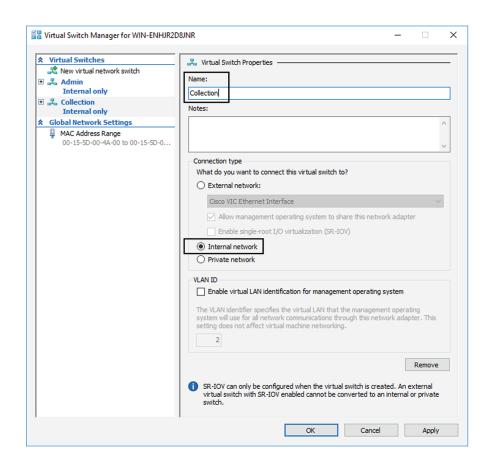
The Virtual switch manager opens.

E Virtual Switch Manager for WIN-ENHJR2D	DBJNR — — X
<ul> <li>Virtual Switches</li> <li>New virtual network switch</li> <li>Global Network Settings</li> <li>MAC Address Range 00-15-5D-00-4A-00 to 00-15-5D-0</li> </ul>	Create virtual switch What type of virtual switch do you want to create? External Internal Private Create Virtual Switch Creates a virtual switch that can be used only by the virtual machines that run on this physical computer, and between the virtual machines and the physical computer. An internal virtual switch does not provide connectivity to a physical computer. An

- Step 3 Click 'New virtual network switch'.
- **Step 4** The new virtual switch displays.
- Step 5 Name it 'Admin'.
- **Step 6** Select 'Internal network'.

Virtual Switches	🛃 Virtual Switch Properties
📌 New virtual network switch	
📲 Admin	Name:
Internal only	Admin
Global Network Settings	Notes:
MAC Address Range 00-15-5D-00-4A-00 to 00-15-5D-0	
00-15-5D-00-4A-00 to 00-15-5D-0	^
	· · · · · · · · · · · · · · · · · · ·
	Connection type
	What do you want to connect this virtual switch to?
	O External network:
	Cisco VIC Ethernet Interface
	Allow management operating system to share this network adapter
	Enable single-root I/O virtualization (SR-IOV)
	Internal network
	O Private network
	VLAN ID
	Enable virtual LAN identification for management operating system
	The VLAN identifier specifies the virtual LAN that the management operating
	system will use for all network communications through this network adapter. This
	setting does not affect virtual machine networking.
	2
	Remove
	SR-IOV can only be configured when the virtual switch is created. An external
	virtual switch with SR-IOV enabled cannot be converted to an internal or private switch.
	Sinceri

- **Step 7** Create a second virtual switch and name it 'Collection'.
- **Step 8** Select 'Internal network'.



### Map the network interfaces

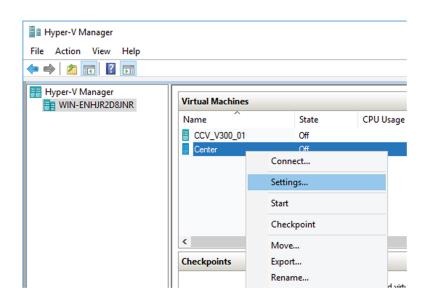
To add a network card:

ICS CyberVision needs two network adapters (i.e. network card) to which the Admin and Collection network interfaces will be assigned. Each new VM includes a network card when created which is available within the hardware list. Therefore, you need to create another one during this step.

#### Procedure

**Step 1** Right click the Center and click again 'Settings'.

L



The settings window for the Virtual Center is displayed.

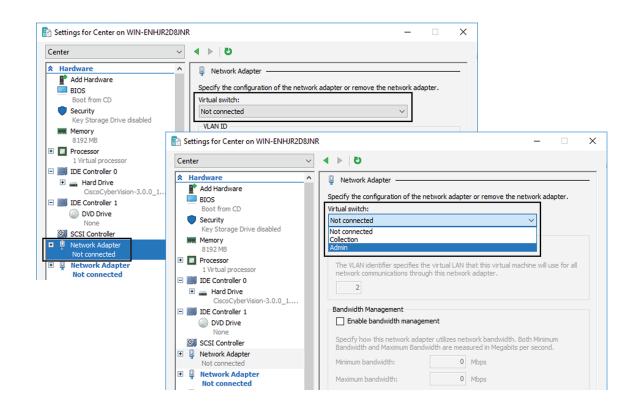
- Step 2 Click 'Add Hardware'.
- Step 3 Select 'Network Adapter'.
- Step 4 Click 'Add'.

enter	~	◄ ► 8		
Hardware Add Hardware	^	Add Hardware		
BIOS		You can use this setting to add devices to your virtual machine.		
Boot from CD		Select the devices you want to add and click the Add button.		
Security		SCSI Controller		_
Key Storage Drive disa	bled	Network Adapter		
Memory		RemoteFX 3D Video Adapter		
8192 MB		Legacy Network Adapter		
Processor		Fibre Channel Adapter		
1 Virtual processor				_
IDE Controller 0			Add	
🛨 🛖 Hard Drive				
CiscoCyberVision-3	3.0.0 1	Virtual machines are created with one network adapter. You can add add	itional netwo	ork

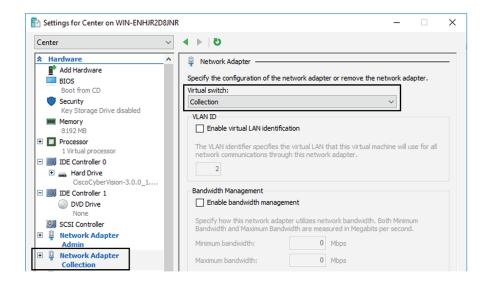
The second network adapter needed is created. Now you need to map each network adapter to a Virtual Switch.

To proceed to the network mapping:

- **Step 5** Select the first network adapter.
- **Step 6** Select 'Admin' as Virtual Switch.
  - **Note** You must configure network interfaces in order of appearance inside the network list to avoid confusions:
  - **Note** The first network card as the Administration network interface (eth0).
  - **Note** The second one as the Collection network interface (eth1).



**Step 7** Repeat the previous action for the second network adapter and select 'Collection' as Virtual Switch.



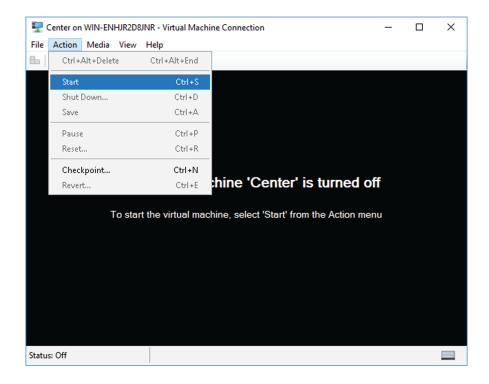
### **Boot the Virtual Machine**

You can now proceed to the Virtual Center first boot.

1. Click Center on Hyper-V Manager and click 'Connect'.

Virtual Machines		
Name	State	CPU Usage
CCV_V300_01	Off	
Center	<u>^"</u>	
	Connect	
	Settings	
	Start	
	Checkpoint	
	Name	Name State CCV_V300_01 Off Center Connect Settings Start

**2.** Start the Virtual Center.



Once the VM configuration completed successfully, the following screen appears:

Cisco Cyt	er Vision Center Setup		
	Welcome	-	
	This is the first boot of your Cisco Cyber Vision		
	Center.		
		80%	
	(Start) (Abort)		
Status: Runnir	10		Δ
	ן ניי ו		-

The Virtual Center is now ready for basic configuration.



**Note** Keeping your Virtual environment safe and clean. Once the VM first boot has completed successfully, Cisco recommends to shut down the Virtual Center and to delete the Virtual Disk from Hyper-V hardware list. Keeping interfaces to the minimum lowers possible access doors for attackers.