

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:

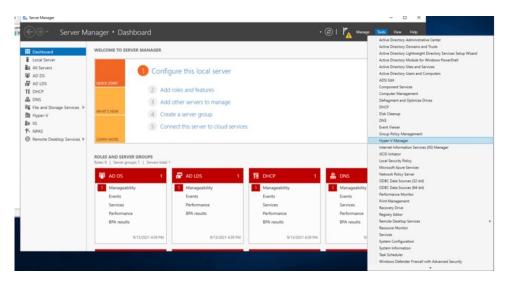
- Creating a Virtual Switch, on page 1
- Downloading and Deploying HYPER-V, on page 8

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 installs 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 > Add Roles and Features

Firefax						
-	Hyper-V Manager				- 0 X	
	File Action View Help					
Google Chrome	< el>				- 0	×
	Server M	lanager • Dashboard			I TA Manage Tools View	
1911	Server M	lanager • Dashboard			Add Roles and Features	rep
					Remove Roles and Features	45
NETGEAR AS210 Genie	Dashboard	WELCOME TO SERVER MANAGER			Add Servers	
	Local Server				Create Server Group	
FieZila Client	III All Servers 單 AD DS	1 Config	ure this local server		Server Manager Propertie	6
FileZilla	AD LDS	QUICK START				
	11 DHCP		roles and features			
z	A DNS	(2) A44	ather second to prove an			
FileZilla	II File and Storage Services ₽	WHAT'S NEW	other servers to manage			
Server	B Hyper-V	WHATS NEW 4 Crea	ite a server group			
PD.	ED IIS	5 Con	nect this server to cloud services			
WinSCP	PL NPAS				Hid	
WinSCP	Remote Desktop Services	LEARN MORE				
		ROLES AND SERVER GROUPS Roles: 9 Server groups: 1 Servers total: 1				
		🛱 AD DS 1	🗗 AD LDS 1	T DHCP 1	🔒 DNS 1	*
		1 Manageability	1 Manageability	1 Manageability	1 Manageability	
		Events	Events	Events	Events	
		Services	Performance	Services	Services	
		Performance	BPA results	Performance	Performance	
		BPA results		BPA results	BPA results	
		9/13/2021 5:09 PM	9/13/2021 5:09 PM	9/13/2021 5:09 PM	9/13/2021 5:09 PM	
# 2 HH	é 🖿 ⊾ 🛍 🌖					512PM
- × H	🤅 🛤 🔚 🚺 🧕					^ 12 40 \$12 PM \$13/2021 ₽

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

Figure 3: Role-based or Feature-Based Installation

📩 Add Roles and Features Wizard		-		×
Select installation	type	DESTIN /IN-NS0G6S84GG3.rcd	ATION SERV dnlabcead.c	
Before You Begin Installation Type Server Selection Server Roles Features Confirmation Results	 Select the installation type. You can install roles and features on a runnin machine, or on an offline virtual hard disk (VHD). Role-based or feature-based installation Configure a single server by adding roles, role services, and features. Remote Desktop Services installation Install required role services for Virtual Desktop Infrastructure (VDI) to or session-based desktop deployment. 			
	< Previous Next >	Install	Cance	1

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

Figure 4: Select a Server From the Server Pool

Add Roles and Features Wizard	1					×
Select destination	n server		v	DESTIN VIN-NS0G6SB4GG3.rc	IATION SER dnlabcead.c	
Before You Begin Installation Type Server Selection		a virtual hard disk on which r from the server pool I hard disk	to install roles and feature	5.		
Server Roles Features Confirmation Results	Server Pool Filter: Name	IP Address	Operating System			
	WIN-NS0G6SB40	GG3.rcd 10.31.103.2,16	Microsoft Windows Ser	ver 2019 Standard		
	and that have bee	und servers that are running Win en added by using the Add S rers from which data collecti	Servers command in Server	Manager. Offline		
		< Pre	vious Next >	Install	Cance	el

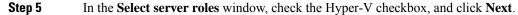
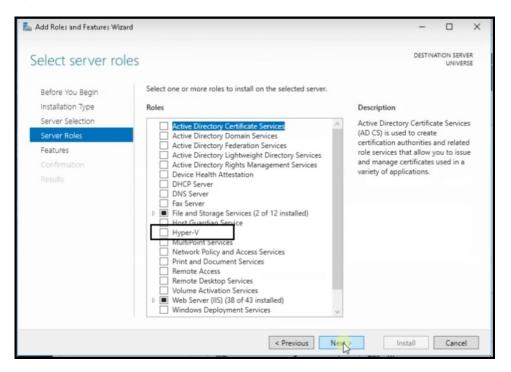


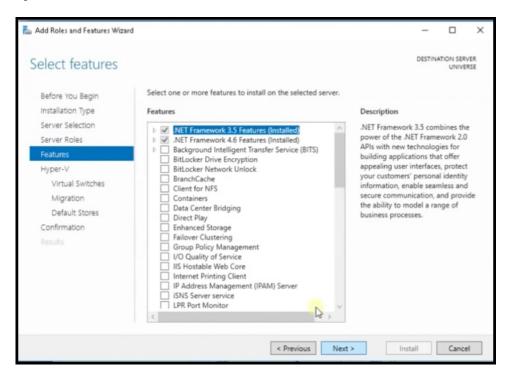
Figure 5: Select Server Roles





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

📥 Add Roles and Features Wizard			-		×
Create Virtual Sw Before You Begin Installation Type Server Selection Server Roles Features	Virtual machines require role, you can create virtua One virtual switch will be at least one virtual switch	virtual switches to communicate with other computers. al machines and attach them to a virtual switch. created for each network adapter you select. We recom now to provide virtual machines with connectivity to a dify your virtual switches later by using the Virtual Swite	After you i mend that physical n	t you crea etwork. Y	rse s ate
Hyper-V	Name	Description			_
Virtual Switches	Ethernet 2	Realtek PCI GBE Family Controller			
Migration	L] Ethernet 2	Realtek PCIe GBE Family Controller			
Default Stores	¢				2
Confirmation Results		you reserve one network adapter for remote access to not select it for use with a virtual switch.	this server.	. To reser	ve a
		< Previous Next > In	stall	Cance	ł

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

Add Roles and Features Wiza	rd	-		×
Virtual Machine Before You Begin Installation Type Server Selection Server Roles Features Hyper-V		on this s	nigration	RSE s. If
Virtual Switches Migration Default Stores Confirmation	This protocol is less secure than Kerberos, but does not require you to set up of delegation. To perform a live migration, you must be logged on to the source. Use Kerberos This protocol is more secure but requires you to set up constrained delegation environment to perform tasks such as live migration when managing this serve	server. n in you	ır	
Results	If this server will be part of a cluster, do not enable migration now. Instead, you server for live migration, including specifying networks, when you create the clu		nfigure ti	te
	< Previous Next > Instal	. [Cance	H

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**.

🚡 Add Roles and Features Wizard		-		×
Default Stores	D	ESTINAT	UNIVER	
Before You Begin Installation Type Server Selection Server Roles	Hyper-V uses default locations to store virtual hard disk files and virtual machine conf unless you specify different locations when you create the files. You can change these now, or you can change them later by modifying Hyper-V settings. Default location for virtual hard disk files:			ns
Features	C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks		Browse	
Hyper-V	Default location for virtual machine configuration files:			
Virtual Switches	C:\ProgramData\Microsoft\Windows\Hyper-V		Browse	
Migration				
Default Stores				
Confirmation				
Results				
	< Previous Next > Install		Cancel	

Figure 9: Default Stores

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

Figure 10: Confirm the Installation Settings

📥 Add Roles and Features Wizard	1	-		×
Confirm installation	on selections	DESTINA	ATION SERV UNIVER	
Before You Begin Installation Type Server Selection	To install the following roles, role services, or features on selected server, click Inst Restart the destination server automatically if required Optional features (such as administration tools) might be displayed on this page b been selected automatically. If you do not want to install these optional features, i	because ti		ear
Server Roles Features Hyper-V Virtual Switches	their check boxes. Hyper-V Remote Server Administration Tools			
Migration Default Stores Confirmation	Role Administration Tools Hyper-V Management Tools Hyper-V Module for Windows PowerShell Hyper-V GUI Management Tools			
Results				
	Export configuration settings Specify an alternate source path			
	< Previous Next > Inc	tall	Cance	

Step 9 Open Hyper-V Manager.

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

Figure 11: Actions > Virtual Switch Manager

File Action View Help							-	D X
Hyper-V Manager	Virtual Machines						Actions	
WIN-NS0G6584GG3	Name						WIN-NS0G65B4GG3	
	hyper-aanal	State Running	CPU Usage	Assigned Memory 4096 MB	Uptime 3.14:54:29	Status	New	•
	nyper-aanai	Hunning	0.0	4035 MB	3.14.54.23		Ca Import Virtual Machine	
							Hyper-V Settings	
							Virtual Switch Manager	
							Virtual SAN Manager	
							🖬 Edit Disk	
							Inspect Disk	
							Stop Service	
							× Remove Server	
	< .						> B Paleach	
	Checkpoints						View	•
					1			
			The selected v	ritual machine has no che	okponts.		Help	
							hyper-aanal	-
							- Connect	
							Settings	
							Turn Off	
							Shut Down	
							Save	
							II Pause	
							IÞ Reset	
	hyper-aanal						B Checkpoint	
	utper-same						Move	
	Creat	ted: 9	7/2021 2:47:11 P	м	Clustere	ed: No	Export	
		guration Version: 9.			Heartbe	sat: OK (No Application Data)	=) Rename	
		ration: 1					B Enable Replication	
	Noter	s: N	one				Help	
							e nop	
	Summary Memory Net	working Replication						

Step 11In 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.

WIN-NS0G6SB4GG3	Virtual Machines						Actions
	Name	State	CPU Usage	Assigned Memory	Uptime	Status	WIN-NS0G6584GG3
	hyper-aanal	Running	0%	Virtual Switch Manage	r for WIN-NS0G658	84GG3	×
				Virtual Switches New virtual networ J. New virtual networ J. New virtual networ J. New virtual network Global Network Set MAC Address Rang 00-15-50-67-02-0	OM #3 tings	Create virtual switch — What type of virtual switch do you v Cotornal Internal Private	vant to create?
	< Checkpoints		_			Creates a virtual switch that binds t machines can access a physical nets	Create Virtual Switch
	hyper-sanal Crea	ted:	9/7/2021 2:47				
		iguration Version: eration: s:	9.0 1 None				

Figure 12: Create Virtual Switch

Step 12In 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

per-V Manager WIN-NS0G65B4GG3	Virtual Machines				Action	
	Name	State	CPU Usag	e Assigned Memory Uptime	Status	IS0G6584GG3
	hyper-sanal	Running	0%	Virtual Switch Manager for WIN-NS0G65	184GG3	×
				Virtual Switches New virtual network switch Annaly	Name:	
				Cisco 1GigE 1350 LOM #3	Aanal hyper V	
				🖲 🎝 Aanal hyper V	Notes:	
				Cisco 1GigE 1350 LOM A Global Network Settings		2
	<		_	MAC Address Range 00-15-5D-67-02-00 to 00-15-5D-6		~
	Checkpoints				Connection type	
	Concorposito				What do you want to connect this virtual switc	h to?
			The select		External network:	
					Cisco 1GigE 1350 LOM	~
					Allow management operating system to	share this network adapter
					Enable single-root I/O virtualization (SR	1-10V)
					O Internal network	
					O Private network	
					VLAN ID	
					Enable virtual LAN identification for manage	ement operating system
	hyper-aanal		_		The YLAN identifier specifies the virtual LAN th system will use for all network communications setting does not affect virtual machine network	through this network adapter. This
			/7/2021 2:47			
		figuration Version: S				Remove
	Nob		lone		SR-10V can only be configured when the vir virtual switch with SR-10V enabled cannot be switch.	tual switch is created. An external e converted to an internal or private

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.

C cisco-spaces-connector3-i84-may2023.hyperv 5/3/2023 12:23 PM HYPERV File 5,742,600 KB

- **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

Action View Help							
* 2 🖬 🖬 🖬							
Hyper-V Manager WIN-E7FRSAF7CMD	Virtual Machines					Actions	
- mit-criticate remo	Name	State	CPU Usage	Assigned Memory	Uptime	WIN-E7FRSAF7CMD	
	Connector_kenr	epha Off				New 🕨	Virtual Machine
						1 Import Virtual Mach	Hard Disk
						Hyper-V Settings	Floppy Disk
						Virtual Switch Mana	
						🔬 Virtual SAN Manage	
	<					💰 Edit Disk	
	Checkpoints				(Inspect Disk_	
		_				Stop Service	
		The selected v	irtual machine has no	checkpoints.		× Remove Server	
						Refresh	
						View >	
						P Help	
						Connector_kennepha	
						Connect	
	Connector_kenne	epha				Settings	
		Created:	5/26/2021 7:53:19	PM Clustered: N		Start	
		Configuration Version:	9.0			Checkpoint	
		Generation:	1			Move	
		Notes:	None			Export	
						Rename	
						-	
	Summary Memor	Networking Replication	n			Delete	
	4					Enable Replication	

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

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

typer-V Manager WIN-E7FRSAF7CMD	Virtual Machines			Actions
michiorica	Name Connector_kene	New Virtual Machine Wiz		WIN-E7FRSAF7CMD
	Connector_kenne	Before You Regin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	The witzed helps you create a virtual machine. Y computers for a vierity of vaces. You can use the you can change the configuration later using Hyp To create a virtual machine, do one of the follow • Click Finish to create a virtual machine that is • Click Next to create a virtual machine with a c	: wizard to configure the virtual machine now, an er-V Manager. ing: configured with default values.
			Do not show this page again	

Figure 15: Click Next to Begin Deployment

Step 6 Provide the **Name** of the connector and select the location to create the virtual machine.

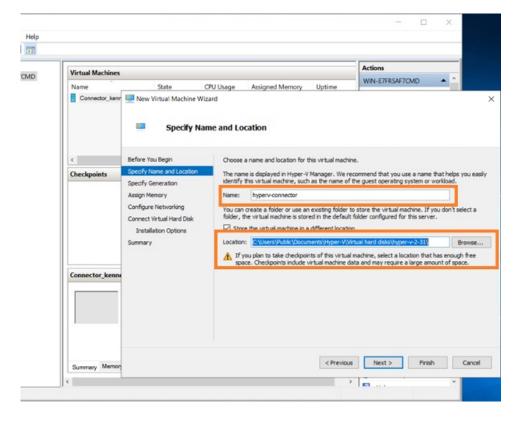


Figure 16: Name of Connector

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

Figure 17: Specify Generation

New Virtual Machine Wiz	ard	×
Specify Gen	eration	
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	 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. 	
	< Previous Next > Finish Cancel	

Step 8In the Assign Memory window, specify 4096 MB (4GB) of memory for the virtual machine instance.Note4096 MB (4GB) of memory is equivalent to the standard configuration of HYPER-V.

Figure 18: Assign Memory

Virtual Mac	hines	Actions		
Connector	Liene Rew Virtual Machine Wizan Assign Memor Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Dak Installation Options Summary		ice, specify more than the minimum amount gn to a virtual machine, consider how you inte	

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

Figure 19: Configure Networking

Virtual Machines			Actions
Name	State C	PU Usage Assigned Memory Uptime	WIN-E7FRSAF7CMD
Connector_kenr	New Virtual Machine Wize Configure M		
¢	Before You Begin	Each new virtual machine includes a network virtual switch, or it can remain disconnected.	adapter. You can configure the network adapt
Checkpoints	Specify Name and Location	Connection: Not Connected	
	Specify Generation Assign Memory	Not Connected	
	Configure Networking	vSwitch	
	Connect Virtual Hard Disk Installation Options Summary		
Connector_kenn			

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).

Hyper-V Manager le Action View Help le 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	New Virtual Machine Wiz	ard	×			Actions
DESKTOP-LEPHK33	Connect Vir Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking	tual Hard Disk A visual machine regares strange to that you can instal and configure a blanc by modifying the visual ma O create a visual hand data. Use this option to create a VER dynamically expanding Tame: The Visual Refore-hold:	chine's properties.	Status	Configurati 11.0 11.0 11.0	DESKTOP-LEPHK33 Cuick Create New hyper-V Settings Hyper-V Settings Virtual Skich Manager Virtual Skich Manager d Edit Disk.
	Connet Wruul Hard Dirk Summary	Locator: Clytogran,Data/Morosoft/Window(Initial See: 1:27 02 (Monimum: 41 TB) D Use an existry vitual had dak: Use this open tacks an existry VMCV vitual had da Locator: Clytogram.Data/Morosoft/Window(Vitual Atlach a vitual had dak liter Use the option to slip this step nov and attach an exist	lsk. al Hard Disks, Browse Dpen	nents > hypervcco		Alf Disk. Alf Disk. Alf Disk. Stop Service Stop Service Affects Help Kenov Server Alfop Kenov Kenov
		< Previous N	Organize New folder Videos New folder Cisc	e ^	Date modified 5/12/2023 1:54 /	I v II S Type S AM Hard Disk Image F S
		le tails	System 32	>-spaces-connector-disk1	Vir	tual hard disk files V Open Cancel

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**.

CMD	Virtual Machines				Actions
	Name	🕎 New Virtual Machine Wi	CPU Usage Assigned Memory izard g the New Virtual Machine V	Uptime Wizard	WIN-E7FRSAF7CMD
	< Checkpoints	Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hand Disk Summary	following virtual machine. Description: Name: hypen-connector Generation: Generation 1 Memory: 4096 MB Network: vSWKch	x	fachine Wilzard. You are about to create th
	Connector_kenne		< To create the virtual machine and	d dose the wizard	, dick 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**.
 - a) 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

viHyperV ~	< ► 0
Hardware Add Hardware Firmware Boot from Hard Drive Security	Security Secure Boot Use Secure Boot to help prevent unauthorized code from running at boot time (recommended).
 Security Security Security Security Security Security Security Processor Virtual processors SCSI Controller Hard Drive cisco-spaces-connector-disk1 Network Adapter pwalawal-connector-233-v-switch Management Name avityperV Integration Services Some services offered Checkpoints Standard Smart Paging File Location C:\ProgramData\Vicrosoft\Windo Automatic Start Action Restart if previously running Automatic Stop Action Save 	 Enable Secure Boot Template: Microsoft Windows Encryption Support Enable Trusted Platform Module A Trusted Platform Module (TPM) is a special purpose microprocessor which provides cryptographic services to a compute platform. Encryption support requires a key protector (VP) configuration for the virtual machine. If not already present, selecting one of these options will generate a KP that allows running the virtual machine on this host. Security Policy Specify additional protection options for the virtual machine. Enable Shielding This affects additional settings.

- 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**.

er-V Manager			- 0
ction View Help			
2 🖬 🛛 🖬			
er-V Manager WIN-E7FRSAF7CMD	Virtual Machines		Actions
THE CONSTRAINTS	Name State	CPU Usage Assigned Memory	Uptime WIN-E7FRSAF7CMD
	hyperv-connector Off		New
			🛱 Import Virtual Mach
			Hyper-V Settings_
			Virtual Switch Mana
			🔒 Virtual SAN Manage
	c		Edit Disk
	Checkpoints		Inspect Disk_
	checipoints		Stop Service
	The set	ected virtual machine has no checkpoints.	× Remove Server
		Befresh	
			a second s
			View
			P Help
			hyperv-connector
			Connect
	hyperv-connector		En Settings.
	Created:	6/9/2021 3:57:29 PM Clustered: N	lo 💿 Start
	Configuration Ve		B Checkpoint
	Generation:	1	Move_
	Notes:	None	Export_
			E Rename
			Delete.
	Summary Memory Networking Re	plication	Enable Replication.
	<		> Enable Repircation

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

Hyper-V Manager									-		×
File Action View Help											
💠 🔶 🙍 🖬 📓 🖬											
Hyper-V Manager	Virtual Machines						Actions			_	_
CE HITTEROUSPICOS	Name	State	CPU Usage	Assigned Memory	Uptime	Status	WIN-NS0G	6584GG3			
	hyper-sanal	Running	0%	4096 MB	00:00:15		New				,
								t Virtual Machine			
								-V Settings			
								Switch Manager			
							🔬 Virtua	SAN Manager			
							💰 Edit D	isk			
							_ Inspec	t Disk			
							Stop S	ervice			
							× Remo	ve Server			
	¢						O Refres	h			
	Checkpoints					۲	View				,
			The selected vi	tual machine has no ch	eckpoints.		Help				
							hyper-aan	al			
							- Conne		-		
							E Settin				
							Turn (
							Shut D				
							Save				
							II Pause				
							Reset				
	hyper-aanal						B Check				
		ated: 9	7/2021 2:47:11 PI		Clustered	h No	P Move				
		figuration Version: 9.				t: No Contact	Export				
		veration: 1					📲 Renar				
	Not	es: N	one					Replication			
							Help				
	Summary Memory N	etworking Replication									
		intering repression									
aunches the Virtual Machine Con	nection application.										

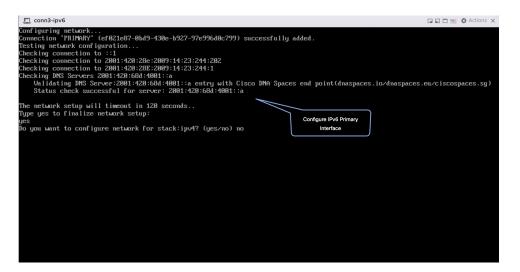
The virtual machine terminal is opened.

- **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

Uddiniteri iduz-cunit i tou	Lar loci	
Choose a network interface as PRIMARY from below that has connectivity to Cisco Spaces Cloud.		
Note: SECONDARY interface can be configured using connectorctl cli after completing configuration. Interface: ens32 - (00:00:29:80:40:0F)		
Interface: ens33 - (00:0C:29:0A:4D:D9) Choose a network interface [ens32 or ens33]: ens32	Configure the public-	
Starting network setup	facing interface (Primary)	
Choose network stack[ipv4 or ipv6]: ipv4 Enter network settings configuration information for stack:ipv4	lacing interface (Fillinary)	
Enter IP address formatted as: ip[/prefix]. Example: 192.168.1.5/24, 18.0.0.11/24: 1		
Enter gateway: Enter DNS server(Comma separated ip address list):		
Enter search domain name:		
Confirm network settings? (yes/no) yes		

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
	1. HHTIGA - FTCSS 1 2. America - PTCSS 2
	2. Herefild = Fress 2 3. Asia = Press 3
	3. Australia - Press 4
	1. Hustralia - Fress 4 5. Europe - Press 5
	Select an option from the list above: (blank for default (Default value is 2)) 2
	a. 1. America∠Anchoraue - Press 1
	2. America/Burnos Aires - Press 2
	2. nmcrita/bicago - Press 2 3. nmcria/bicago - Press 3
	J. America/Entrago - Fress 5
	1. mmcrica/benver = rress 1 5. mmcrica/benver = Press 5
	5. America/basico_City - Press 6
	7. America/New York - Press 7
	8. America/Newsita Press 6
	9. America/Regima - Press 9
	1. America/Santiao - Press 10
	10. America/Sourcego - Tress to 11. America/Sourcego - Press 11
	12. America/Doroto - Press 12
	13. America/Unorouver – Press 13
	Select an option from the list above: (blank for default (Default value is 1))
	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

ualInterface-conn180	🕼 🖬 🖿 🐜 🖨 Actions 🛞	
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 Aarning: The unit file, source configuration file or drop-ins of chronyd.service changed on tich NTP configuration: success	Configure NTP	
Figure 29: Configure NTP		

arated NTP servers list (blank for no NTP server): rtp5-b5-rbb-nfp1-v6.cisco.com for server: rtp5-b5-rbb-ntp1-v6.cisco.com Configure NTP

atus for server: rtp5-b5-rbb-ntp1-v6.cisco.com k successful for server: rtp5-b5-rbb-ntp1-v6.cisco.com

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