

## Hitachi Content Platform Gateway Windows VM ISO Installation Guide

v4.3.8

### Windows Only

This document describes how to install the Hitachi Content Platform Gateway software onto a Windows VM using the ISO installation.

MK-HCPG017-02 March 2023

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### **Chapter 1 Introduction**

The objective of this document is to describe how to install the HCP Gateway Windows software onto a VM from a Windows 4.3.8 ISO.

The HCP Gateway Windows 4.3.8 ISO **HCPG-4.3.8-Windows-Server-2019\_2023-02-27\_00-17-21**.isomust be copied to a datastore on the VMWare ESXi host before creating the new VM.

The Windows 4.3.8 ISO contains 5 different disk configurations. The first 3 options (HCPG without SAN) are for deploying the ISO onto an ESXi hosted VM and the last 2 are for deploying the ISO onto a Hitachi appliance with SAN storage. The appropriate number of SCSI Controllers and Hard Disks need to be created in the VM (see below for the details). Please refer to the **HCP Gateway** v4\_3\_8 Windows Appliance ISO Installation Guide for instructions for deploying the ISO onto a Hitachi appliance with SAN storage.



- 1. The HCPG (2-disks) (C & D on one disk, E one disk) option requires the VM to be configured with 2 ESXi VMDK disks and 2 SCSI Controllers
  - Hard disk 1 connected to SCSI Controller 0 configured as type LSI Logic SAS - must be at least 200GB and will be used by the Windows OS as the C: drive and by the MariaDB database as the D: drive. The C: and D: drives require a minimum of 100GB each. The formula for determining the size of the D: drive is 4GB per 1 million files, so if the expectation is that the Gateway will handle 100 million files, the size of Hard Disk 1 should be set to at least 500GB (100GB for the C: drive and 400GB for the D: drive)
  - Hard disk 2 connected to SCSI Controller 1 configured as type LSI Logic SAS - this is the cache drive and must be at least 100GB and will be the E: drive. This disk must be sized according to the amount of data the customer wants to keep in the cache, including the amount of data being written to and read from the HCP Gateway that is temporarily stored on the

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cache. The capacity will need to be increased if compression and encryption are used on the HCP Gateway shares to compress/encrypt and decompress/decrypt files.

#### NOTE:

It is required to add SCSI Controller 1 and save the VM configuration before adding any disks to SCSI Controller 1.

- 2. The **HCPG (3-disks) (C, D, E, on separate disks)** option requires the VM to be configured with 3 ESXi VMDK disks and 2 SCSI Controllers
  - Hard disk 1 connected to SCSI Controller 0 configured as type LSI Logic SAS - must be at least 100GB and will be used by the Windows OS as the C: drive
  - Hard disk 2 connected to SCSI Controller 0 configured as type LSI Logic SAS - must be at least 100GB and will be used by the MariaDB database as the D: drive. The formula for determining the size of the D: drive is 4GB per 1 million files, so if the expectation is that the Gateway will handle 100 million files, the size of Hard Disk 2 should be set to at least 400GB
  - Hard Disk 3 connected to SCSI Controller 1 configured as type LSI Logic SAS - this is the cache drive and must be at least 100GB and will be the E: drive. This disk must be sized according to the amount of data the customer wants to keep in the cache, including the amount of data being written to and read from the HCP Gateway that is temporarily stored on the cache. The capacity will need to be increased if compression and encryption are used on the HCP Gateway shares to compress/encrypt and decompress/decrypt files.

#### NOTE:

It is required to add SCSI Controller 1 and save the VM configuration before adding any disks to SCSI Controller 1.

- 3. The **HCPG with local storage (4 disks) (C, D, Cache, Local Storage)** option requires the VM to be configured with 4 ESXi VMDK disks and 2 SCSI Controllers
  - Hard disk 1 connected to SCSI Controller 0 configured as type LSI Logic SAS - must be at least 100GB and will be used by the Windows OS as the C: drive
  - Hard disk 2 connected to SCSI Controller 0 configured as type LSI Logic SAS - must be at least 100GB and will be used by the MariaDB database as the D: drive. The formula for determining the size of the D: drive is 4GB per 1 million files, so if the expectation is that the Gateway will handle 100 million files, the size of Hard Disk 2 should be set to at least 400GB
  - Hard Disk 3 connected to SCSI Controller 1 configured as type LSI Logic SAS - this is the cache drive and must be at least 100GB and will be the E: drive. This disk must be sized according to the amount of data the customer wants to keep in the cache, including the amount of data being written to and read from the HCP Gateway that is temporarily stored on the cache. The capacity will need to be increased if compression and encryption are used on the HCP Gateway shares to compress/encrypt and decompress/decrypt files.

 Hard Disk 4 - connected to SCSI Controller 1 configured as type LSI Logic SAS - this is the local storage drive and must be at least 100GB and will be the L: drive. This disk must be sized according to the amount of data the customer wants to keep in local storage. In Windows Explorer, create the folder L:\Storage and use this folder when adding a local storage in the HCP Gateway UI Storage page.

### NOTE:

It is required to add SCSI Controller 1 and save the VM configuration before adding any disks to SCSI Controller 1.

The minimum VM Resources for HCP Gateway on Windows Server:

- CPU/cores 10 cores (hyper threading enabled)
- Memory 128 GB RAM
- OS Disk C:\ 100 GB
- Database Disk D:\ 100 GB (4 GB per million files)
- Cache Disk E:\ 1 TB+ (see notes below)
- Network 2 x 1 GigE (1 Data and 1 Management network) or 1 x 10 GigE (4 Network Interfaces are needed if using Clustering)

The recommended VM Resources for HCP Gateway on Windows Server:

- CPU/cores 20 cores (hyper threading enabled)
- Memory 128 GB RAM per CPU (total of 256 GB RAM)
- OS Disk C:\ 100 GB
- Database Disk D:\ 1-2 TB (4 GB per million files)
- Cache Disk E:\ 1 TB+ (see notes below)
- Network 1 x 1 GigE (Management network) and 1 x 10 GigE (Data network)
- (4 Network Interfaces are needed if using Clustering)

### Recommended CPU & RAM Sizing

Total Number of Files	Total CPU Cores	Total RAM
250M	20	256GB
500M	20	256-512GB
1B	20	512GB

### **Cache Disk Sizing**

If using local storage, do not use the cache drive for local storage, add a separate drive for local storage.

In the Windows version, the E:\ drive contains the following components:

- Virtual File System E:\SAM
- Temporary cache E:\Cache

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- Reports E:\Reports
- Backup Restore E:\Backup\Restore

When sizing the Cache Disk (E:\ drive in Windows) the primary consideration is the space required by the cache and the items listed above. When data is ingested into the HCP Gateway it lands in a temporary cache, where it stays for 3 minutes to enable file close operations. Cache storage is governed by policies. A Tiering Policy can be used to set the minimum time a file remains on cache (e.g. 1 month or 1 minute). A Copy Policy is used to keep files on the cache until they are subject to the Caching Policy and also write them to the HCP storage after the Copy time expires. Shares created with an Archive Mode policy or a Server Mode Tiering or Copy policy can be configured to keep files in cache until they are subject to the Caching Policy. The Caching Policy works with a high and low watermark. Files remain in the cache until the high watermark is reached then the HCP Gateway drains the cache on a first in first out basis. The Cache Disk is also used as a temporary storage location when recovering the HCP Gateway Database from Backup.

### **Chapter 2 Documentation Conventions**

The following conventions are used throughout this manual to represent specific types of information.

All images, diagrams, or drawings are listed as Figures in the following format:

Select Mode (1)

Select Read/Write option (2)

Select Apply (3)

Select Cancel (4)

0	Mode	Read/Write	• ~	
-		Read/Writ	e	2
		Read-Only	1	-
		WORM		
	3	Apply	Cancel	4

**WARNING**: Precautionary note in a box.

**Note:** Commentary or additional information need on the topic.

# Chapter 3 Create New VM from CD/DVD ISO

Open the VMWare ESXi host console and navigate to the feature to create a new VM that will be installed using the HCP Gateway 4.3.8 Windows ISO in the CD/DVD drive. Enter the VM name (1), **Guest OS family as Windows** (2), **Guest OS Version** as **Microsoft Windows Server 2019** (64-bit) (3) then select **Next** (4) to continue. On the next screen, select the datastore that will contain the VM configuration files and virtual disks and select **Next**.

Select creation type Select a name and guest OS Select storage	Select a name and g Specify a unique name and OS	uest OS	
Customize settings	Name		
Ready to complete	Test-HCPGW-ISO 1		
	Identifying the guest operating sys installation.	tern here allows the wizard to provide the appropriate defaults for th	ne operating system
	Compatibility	ESXi 7.0 U2 virtual machine	×
	Guest OS family	Windows	~
	Guest OS version	Microsoft Windows Server 2019 (64-bit)	~
		Enable Windows Virtualization Based Security (1)	
<b>vm</b> ware		•	

Select the appropriate resources for the VM to meet the customer requirements from the options documented above in **Chapter 1 Introduction**. This example shows **Option 2** (3 disks C, D, E, on separate disks) documented above in **Chapter 1 Introduction**.

- **CPU** (1) take into account whether the HCP Gateway shares will be handling compression, encryption and deduplication.
- **Memory** (2) take into account whether the HCP Gateway shares will be handling compression, encryption and deduplication. Also take into account how many files will be handled by the Gateway, as the number of files increases, additional memory can be allocated to the MariaDB database.
- Hard disk 1 (3) must be at least 100GB and will be used by the Windows OS for the C: drive
- Hard disk 2 (Add a new Standard Hard Disk) (4) must be at least 100GB and will be used for the MariaDB database D: drive. The formula for determining the size of the D: drive is 4GB per 1 million files, so if the expectation is that the Gateway will handle 100 million files, the size of Hard Disk 2 should be set to at least 400GB
- Hard Disk 3 (Add a new Standard Hard Disk) (5) this is the cache drive and must be at least 100GB. Open Hard disk 3 (10) and after adding SCSI Controller 1, verify that this disk is using Controller location SCSI controller 1 (11) and SCSI (1:0) (12). This disk must be sized according to the amount of data the customer wants to

keep in the cache and the amount of data being written to and read from the HCP Gateway. The capacity will need to be increased if compression and encryption are used on the HCP Gateway shares to compress/encrypt and decompress/decrypt files.

- SCSI Controller 0 (6) accept the default, for this example, LSI Logic SAS.
- SCSI Controller 1 (7) accept the default, for this example, LSI Logic SAS.

#### NOTE:

It is required to add SCSI Controller 1 and save the VM configuration before adding any disks to SCSI Controller 1.

• Network Adapter 1 (8) - select the appropriate network for the HCP Gateway and select Connected. Additional Network Adapters can be added to the HCP Gateway to meet customer requirements, for example, to separate the management network from the data network.

Note that if the ESXi host supports the **VMXNET 3** adapter type, set the adapter type to **VMXNET 3** and make sure VMWare Tools are installed after creating the VM.

• **CD/DVD Drive 1** (9) - select **Datastore ISO file** and verify that **Connect** is selected, which will bring up a VMWare ESXi Datastore browser.

ady to complete	Virtual Hardware VM Options	]				
	Add hard disk 🛤 Add netwo	ork adapter 🗧 A	dd other device			
	CPU	16 ~	0 1			
	• 🛲 Memory	128	GB	~ 2		
	+ 🖾 Hard disk 1	100	GB	~ 3		0
	> 🖾 New Hard disk	400	GB	~ 🖪		0
	> 🖾 New Hard disk	1	ТВ	~ 6		0
	SCSI Controller 0	LSI Logic	sas 🗸 🧕			0
	Kew SCSI Controller	LSI Logic	sas 🗸 🗸			0
	SATA Controller 0					0
	USB controller 1	USB 3.1			~	0
	INIE Network Adapter 1	VM Netwo	ork	8	Connect	0
	✓	Datastore	ISO file	9	Connect	0
mware	Status	Connect	at power on			

Select creation type Select a name and quest OS	Customize settings		
Select storage	Configure the virtual machine hardwa	are and virtual machine additional options	_
Customize settings Ready to complete	🔟 👻 🖾 New Hard disk	1 TB ~	0
	Maximum Size	3.46 TB	
	Location	[datastore1] Test-HCPGW-ISO/ Browse	
	Disk Provisioning	<ul> <li>Thin provisioned</li> <li>Thick provisioned, lazily zeroed</li> <li>Thick provisioned, eagerly zeroed</li> </ul>	
	Shares	Normal V 1000	
	Limit - IOPs	Unlimited ~	
	Controller location	SCSI controller 1 1 SCSI (1:0) 12 V	
	Disk mode	Dependent ~	
<b>m</b> ware	Sharing	None	

In the VMWare ESXi Datastore Browser, select the **HCP Gateway Windows 4.3.8 ISO** (1) and select **Select** (2) to continue.

^	<ul> <li>HDI-Migrator-Demo-2</li> <li>HDI-Migrator-Release</li> <li>HDI2</li> <li>HDI3</li> <li>HDI4</li> <li>iSCSI-Server</li> <li>ISO</li> <li>Kirk-HCPGW-420-ISO</li> <li>kit-linux-414-67</li> </ul>	^	<ul> <li>Clone-For-Stater-Replica-Test</li> <li>Clone2-For-Stater-Replica-Test</li> <li>HCPG42</li> <li>Hitachi-HCPG42</li> <li>AlB-UI-Alpha.iso</li> <li>firmware-11.5.0-amd64-netinst.iso</li> <li>HCPG-4.2.0-Windows-Appliance-USB</li> <li>HCPG-4.3.3-Windows-Server-2019.iso</li> <li>HCPG-4.3.8-Windows-Server-2019.iso</li> </ul>	ĥ	HCPG-4.3.8-Windows 10.26 GB Tuesday, November 01,	
ų	Paul paul-esxi60-hcpg-41 paul-esxi60-hcpg-41 Paul-HCPG-411-No Paul-HCPG-411-No	¥	<ul> <li>HCPG-414-Linux-Appliance.iso</li> <li>HCPG-414-Linux-Cluster-Node-ESXI</li> <li>HCPG-414-Linux-ESXI-67.ova</li> <li>HCPG-414-Windows-Appliance.iso</li> <li>HCPG-420-Windows-Appliance.iso</li> <li>HCPG-421 Windows-Appliance.iso</li> </ul>	*		1

Select VM Options (1), open the Boot Options (2), select Firmware option EFI (3), select Force BIOS setup (4), select Next (5) to continue.

stomize settings ady to complete	Virtual Hardware VM Options	D
	VMware Remote Console Options	Lock the guest operating system when the last remote user disconnects
	VMware Tools	Expand for VMware Tools settings
	<ul> <li>Power management</li> </ul>	Expand for power management settings
	2 - Boot Options	
	Firmware	Choose which firmware should be used to boot the virtual machine:
	Enable UEFI secure boot	Whether or not to enable UEFI secure boot for this VM
	Boot Delay	Whenever the virtual machine is powered on or reset, delay boot by
	Force BIOS setup	The next time the virtual machine boots, force entry into the BIOS setup screen.
	Failed Boot Recovery	When the virtual machine fails to find a boot device, automatically retry boot after
	+ Advanced	Expand for advanced settings
mware	h Films Changel NDN/	Evened for fiber ebeneol ND0/

Review the selections, select **Back** (1) to go back, and make any modifications or select **Finish** (2) to create the VM.

ect creation type ect a name and guest OS ect storage	Ready to complete Review your settings selection before	e finishing the wizard
tomize settings	Name	Test-HCPGW-ISO
dy to complete	Datastore	datastore1
	Guest OS name	Microsoft Windows Server 2019 (64-bit)
	Compatibility	ESXi 7.0 U2 virtual machine
	vCPUs	16
	Memory	128 GB
	Network adapters	1
	Network adapter 1 network	HCP Private Network
	Network adapter 1 type	E1000e
	IDE controller 0	IDE 0
	IDE controller 1	IDE 1
	SCSI controller 0	LSI Logic SAS
	SCSI controller 1	LSI Logic SAS
<b>m</b> ware <sup>®</sup>	SATA controller 0	New SATA controller
	Hard disk 1	

After the VM is created, power on the VM and open a console window. In the **Boot Manager**, select **EFI VMware Virtual SATA CDROM Drive (0.0)** (1) and select the **Enter** key

boot nanager	
Boot normally EFI Virtual disk (0.0) EFI Virtual disk (0.0) EFI Virtual disk (0.0) EFI VMware Virtual SATA CDROM Drive (0.0) EFI Network Enter setup Reset the system Shut down the system	Device Path: PciRoot(0x0)/Pci(0x11,0x 0)/Pci(0x1,0x0)/Sata(0x0 ,0x0,0x0)
↑↓=Move Highlight <enter>=Select Entry</enter>	

For this example, select the HCPG (3-disks) (C, D, E, on separate disks) (1) and select the Enter key



The installation process will begin. The Windows Operating system with HCP Gateway software will be installed to the VM. Screens like the one shown below will appear where a step may take a few minutes to complete.

Partclone	
Partclone v0.3.17 http://partclone.org	
Starting to restore image (-) to device (/dev/sda4)	
Calculating bitmap Please wait	
done!	
File system: NTFS	
Device size: 106.7 GB = 26056447 Blocks	
Space in use: 17.3 GB = 4226766 Blocks	
Free Space: 89.4 GB = 21829681 Blocks	
Block size: 4096 Byte	
Elapsed: 00:00:44 Remaining: 00:04:16 Rate: 3.4	6GB/min
Current Block: 703758 Total Block: 26056447	
Date Diack Descent	
Data Block Process:	44 669
	14.00%
Tatal Block Process:	
TOTAL DIOCK TOCCSS.	2 709
	2.70%

After the installation is complete, the VM will shut down.

WARNING: It is required to disconnect the CD/DVD from the VM and do not connect it at power on before powering on the VM.

## Chapter 4 Create New VM from USB ISO

Open the VMWare ESXi host console and navigate to the feature to create a new VM that will be installed using the HCP Gateway 4.3.8 Windows ISO on a USB stick attached to the ESXi host. Enter the VM name (1), **Guest OS family** as **Windows** (2), **Guest OS Version** as **Microsoft Windows Server 2019 (64-bit)** (3) then select **Next** (4) to continue. On the next screen, select the datastore that will contain the VM configuration files and virtual disks and select **Next**.

Select creation type Select a name and guest OS Select storage	Select a name and g Specify a unique name and OS	uest OS	
Customize settings	Name		
Ready to complete	Test-HCPGW-ISO 1		
	Identifying the guest operating sys installation.	stem here allows the wizard to provide the appropriate defaults for th	e operating system
	Compatibility	ESXi 7.0 U2 virtual machine	~
	Guest OS family	Windows	~
	Guest OS version	Microsoft Windows Server 2019 (64-bit)	~
		Enable Windows Virtualization Based Security ()	
<b>vm</b> ware		0	

Select the appropriate resources for the VM to meet the customer requirements from the options documented above in **Chapter 1 Introduction**. This example shows **Option 2** (3 disks C, D, E, on separate disks) documented above in **Chapter 1 Introduction**.

- **CPU** (1) take into account whether the HCP Gateway shares will be handling compression, encryption and deduplication.
- **Memory** (2) take into account whether the HCP Gateway shares will be handling compression, encryption and deduplication. Also take into account how many files will be handled by the Gateway, as the number of files increases, additional memory can be allocated to the MariaDB database.
- Hard disk 1 (3) must be at least 100GB and will be used by the Windows OS for the C: drive
- Hard disk 2 (Add a new Standard Hard Disk) (4) must be at least 100GB and will be used for the MariaDB database D: drive. The formula for determining the size of the D: drive is 4GB per 1 million files, so if the expectation is that the Gateway will handle 100 million files, the size of Hard Disk 2 should be set to at least 400GB
- Hard Disk 3 (Add a new Standard Hard Disk) (5) this is the cache drive and must be at least 100GB. Open Hard disk 3 (10) and after adding SCSI Controller 1, verify that this disk is using Controller location SCSI controller 1 (11) and SCSI (1:0) (12). This disk must be sized according to the amount of data the customer wants to

keep in the cache and the amount of data being written to and read from the HCP Gateway. The capacity will need to be increased if compression and encryption are used on the HCP Gateway shares to compress/encrypt and decompress/decrypt files.

- SCSI Controller 0 (6) accept the default, for this example, LSI Logic SAS.
- SCSI Controller 1 (7) accept the default, for this example, LSI Logic SAS.

#### NOTE:

It is required to add SCSI Controller 1 and save the VM configuration before adding any disks to SCSI Controller 1.

Network Adapter 1 (8) - select the appropriate network for the HCP Gateway and select Connected. Additional Network Adapters can be added to the HCP Gateway to meet customer requirements, for example, to separate the management network from the data network.

Note that if the ESXi host supports the VMXNET 3 adapter type, set the adapter type to VMXNET 3 and make sure VMWare Tools are installed after creating the VM.

• **CD/DVD Drive 1** (9) - unselect **Connect**, which will disconnect the CD/DVD drive. Note that if the CD/DVD drive is required, then leave it connected.

ustomize settings eady to complete	Virtual Hardware VM Options	]				
	🛄 Add hard disk 🛛 🛤 Add netwo	rk adapter 🛛 🚍 A	dd other device			
	• 🖬 CPU	16 ~	0 🚺			
	• 🛲 Memory	128	GB v	2		
	+ 🖾 Hard disk 1	100	GB 🗸	3		0
	• 🚍 New Hard disk	400	GB ~	4		0
	New Hard disk	1	тв ~	5		0
	SCSI Controller 0	LSI Logic	sas 🗸 🌀			0
	Kew SCSI Controller	LSI Logic	sas v 🕜			0
	SATA Controller 0					0
	USB controller 1	USB 3.1				0
	INN Network Adapter 1	VM Netwo	ork	8 ~	Connect	0
		Datastore	ISO file	9 ~	Connect	0
<b>m</b> ware <sup>.</sup>	Status	Connect	at power on			

1 Select creation type 2 Select a name and guest OS 3 Select storage	Customize settings Configure the virtual machine hardwa	are and virtual machine additional options				
4 Customize settings 5 Ready to complete	🔟 👻 🚍 New Hard disk	New Hard disk 1 TB V				
	Maximum Size	3.46 TB				
	Location	[datastore1] Test-HCPGW-ISO/ Browse				
	Disk Provisioning	<ul> <li>Thin provisioned</li> <li>Thick provisioned, lazily zeroed</li> <li>Thick provisioned, eagerly zeroed</li> </ul>				
	Shares	Normal V 1000 V				
	Limit - IOPs	Unlimited ~				
	Controller location	SCSI controller 1 (1) V SCSI (1:0) (12 V				
	Disk mode	Dependent ~				
<b>vm</b> ware	Sharing	None				

• Add other device - select Add other device (13) then select USB device (14)

<ul> <li>1 Select creation type</li> <li>2 Select a name and guest OS</li> <li>3 Select storage</li> </ul>	Customize settings Configure the virtual machine hard	ware and virtua	al machine additional options	
4 Customize settings 5 Ready to complete	Virtual Hardware VM Options		1.	
	📃 Add hard disk 🛛 🛤 Add net	work adapter	🚍 Add other device 🔞	
	► CPU	16	CD/DVD drive	
	Memory	128	Fioppy drive	-
	+ 🚍 Hard disk 1	100	Parallel port	0
	> 🖾 New Hard disk	400	USB controller	0
	New Hard disk	1	<ul> <li>Sound controller</li> </ul>	0
	SCSI Controller 0	LS	PCI device	0
	• K New SCSI Controller	LS	Dynamic PCI device	0
	SATA Controller 0		SCSI controller	0
	USB controller 1	US	NVMe controller	× ©

Select VM Options (1), open the Boot Options (2), select Firmware option EFI (3), select Force BIOS setup (4), select Next (5) to continue.

stomize settings ady to complete	Virtual Hardware VM Options	D
	VMware Remote Console Options	Lock the guest operating system when the last remote user disconnects
	VMware Tools	Expand for VMware Tools settings
	Power management	Expand for power management settings
	2 - Boot Options	
	Firmware	Choose which firmware should be used to boot the virtual machine:
	Enable UEFI secure boot	Whether or not to enable UEFI secure boot for this VM
	Boot Delay	Whenever the virtual machine is powered on or reset, delay boot by
	Force BIOS setup	The next time the virtual machine boots, force entry into the BIOS setup screen.
	Failed Boot Recovery	When the virtual machine fails to find a boot device, automatically retry boot after
		10 C seconds
	Advanced	Expand for advanced settings
mware	h Elber Channel NRM	Evened for fiber changel NPN/

Review the selections, select **Back** (1) to go back and make any modifications or select **Finish** (2) to create the VM.

lect creation type lect a name and guest OS lect storage	Ready to complete Review your settings selection before	e finishing the wizard
stomize settings	Name	Test-HCPGW-ISO
ady to complete	Datastore	datastore1
	Guest OS name	Microsoft Windows Server 2019 (64-bit)
	Compatibility	ESXi 7.0 U2 virtual machine
	vCPUs	16
	Memory	128 GB
	Network adapters	1
	Network adapter 1 network	HCP Private Network
	Network adapter 1 type	E1000e
	IDE controller 0	IDE 0
	IDE controller 1	IDE 1
	SCSI controller 0	LSI Logic SAS
	SCSI controller 1	LSI Logic SAS
<b>m</b> ware <sup>®</sup>	SATA controller 0	New SATA controller
	Hard disk 1	

After the VM is created, power on the VM and open a console window. In the **Boot Manager**, select **EFI USB Device** (1) and select the **Enter** key

EFI Network Enter setup Reset the system Shut down the system	ta (Ôx0

For this example, select the HCPG (3-disks) (C, D, E, on separate disks) (1) and select the Enter key



The installation process will begin. The Windows Operating system with HCP Gateway software will be installed to the VM. Screens like the one shown below will appear where a step may take a few minutes to complete.

Partclone	-
Partclone v0.3.17 http://partclone.org	
Starting to restore image (-) to device (/dev/sda4)	
Calculating hitman Please wait	
donal	
Eile sustem: NTES	
Pruise sizer 100 Z CD - 2005014Z Blocks	
Device Size: 106.7 GB = 26056447 Blocks	
Space In use: 17.3 GB = 4226766 BIOCKS	
Free Space: 89.4 GB = 21829681 Blocks	
Block size: 4096 Byte	
Elapsed: 00:00:44 Remaining: 00:04:16 Rate: 3.46GB/min	
Current Block: 703758 Total Block: 26056447	
Data Block Process:	
14.66%	5
Total Block Process:	
2.70%	5

After the installation is complete, the VM will shut down.

WARNING: It is required to disconnect the CD/DVD from the VM and do not connect it at power on before powering on the VM.

# **Chapter 5 Windows Configuration Tasks**

Power on the VM, wait for the Windows prompt to select the locale information for the HCP Gateway VM then select **Next** (1).

Hi there	
Let's get a few basic things out of the way.	
What's your home country/region?	
United States	~
What's your preferred app language?	
English (United States)	~
What keyboard layout would you like to use?	
US	~
Ģ	

If available, enter the customer's product key (1) and select Next (3), else, select Do this later (2).



On the **License terms** screen, accept the License terms. On the **Customize settings** screen, enter a password for the local Administrator account (1), confirm the password (2), select **Finish** (3) to complete the creation of the HCP Gateway VM. The installation script will log the user out.

User name	Administrator		
Password	1	 0	
Reenter password		 2	

Login to the Windows OS as the Administrator user with the password that was entered in the previous step.

**WARNING**: Once you log in, the system will perform several automatic actions (closing/opening command windows and screens). With the exception of the **Networks** prompt on the next page, wait for the system to reboot, **DO NOT INTERFERE WITH THIS CONFIGURATION PROCESSING!** 



After the system has completed all its automated steps. Do not enter anything in Server Manager. When you see the **Networks** prompt below, select **Yes**, unless you don't want the system to be discoverable by other PCs, then select **No**. **Wait for the system to reboot.** 



After the system comes back up, Login to the Windows OS as the Administrator user with the password that was entered earlier.

### **IMPORTANT NOTE:**

If using the browser on the HCP Gateway, Internet Explorer can't open the HCP Gateway UI because it doesn't support TLS v1.3. Open the Windows Start Menu and enter the URL <u>https://localhost:28443/hcpg</u> in the Firefox browser to access the HCP Gateway UI. Note that the Windows Service Wildfly is set to a Delayed Start, so it may take a few minutes before the HCP Gateway UI is available.

If it is required to run the SAM VFS service as a user-supplied domain service account, there is a **sam.account** parameter that needs to be updated in the **C:\SAM\etc\sam\sam.properties** file.

- The default setting is to use the local System account, sam.account=SYSTEM and verify that Local SYSTEM is the Log on As account for the SAM VFS service in Windows services.
- If there is a domain service account that has read/write access to all of the files on the Gateway, use that account for the sam.account parameter in the C:\SAM\etc\sam\sam.properties file and verify that it is the Log on As account for the SAM VFS service in Windows services.

### NOTE:

In Windows Server 2019, if you receive this error Unable to continue when setting the Time Zone

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Then open a Windows PowerShell running as Administrator and for this example, set the timezone to US Mountain Standard Time. In PowerShell, enter the command **Get-TimeZone -ListAvailable** | where StandardName -like "Mountain\*" (1). Locate the timezone Mountain Standard Time (2). Enter the command **Set-TimeZone -name** "Mountain Standard Time" (3). Verify the timezone was set correctly by entering the command **Get-TimeZone** (4).



If needed to set the HCP Gateway UI admin password, open a Windows PowerShell screen running as Administrator or use the one opened earlier, change directory to the C:\SAM\PS (1,2,3) directory and execute .\setRunOnce.ps1 (4)

Close the PowerShell screen and reboot the server. When the server reboots, wait for the dialog box, select OK (1) and follow the prompts to enter the new password for the HCP Gateway UI admin account.



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