



Installation

- [Installation Tasks Summary, on page 1](#)

Installation Tasks Summary

The following table summarizes the steps to complete Microsoft Hyper-V installation.

Task	Reference
Deploy HX Data Platform Installer	Step 1 - Deploying HX Data Platform Installer, on page 1
Configure Cisco UCS Manager (<i>using HX Data Platform Installer</i>)	Step 2 - Cisco UCS Manager Configuration, on page 9
Install Microsoft Windows Server	Step 3 - Microsoft OS Installation, on page 18
Hypervisor configuration, HX Data Platform and Cluster deployment	Step 4 - Hypervisor Configuration, HX Data Platform and Cluster Deployment , on page 29

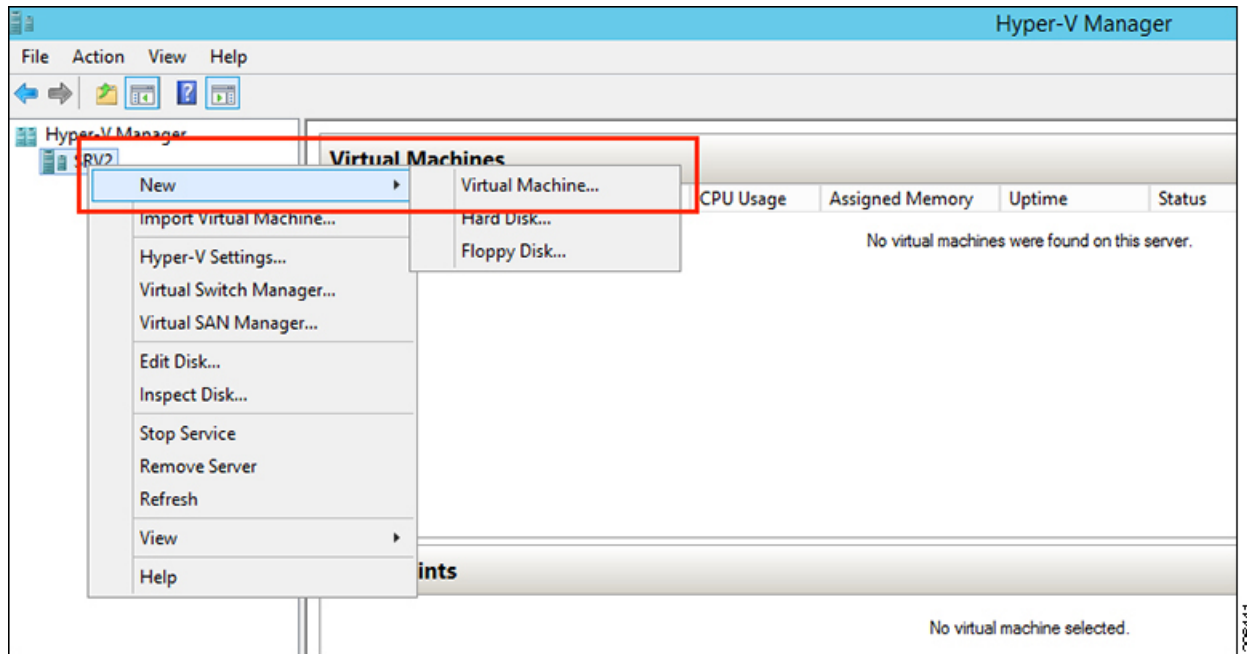
Step 1 - Deploying HX Data Platform Installer

Deploy HX Data Platform Installer using **Microsoft Hyper-V Manager** to create a HX Data Platform Installer virtual machine.

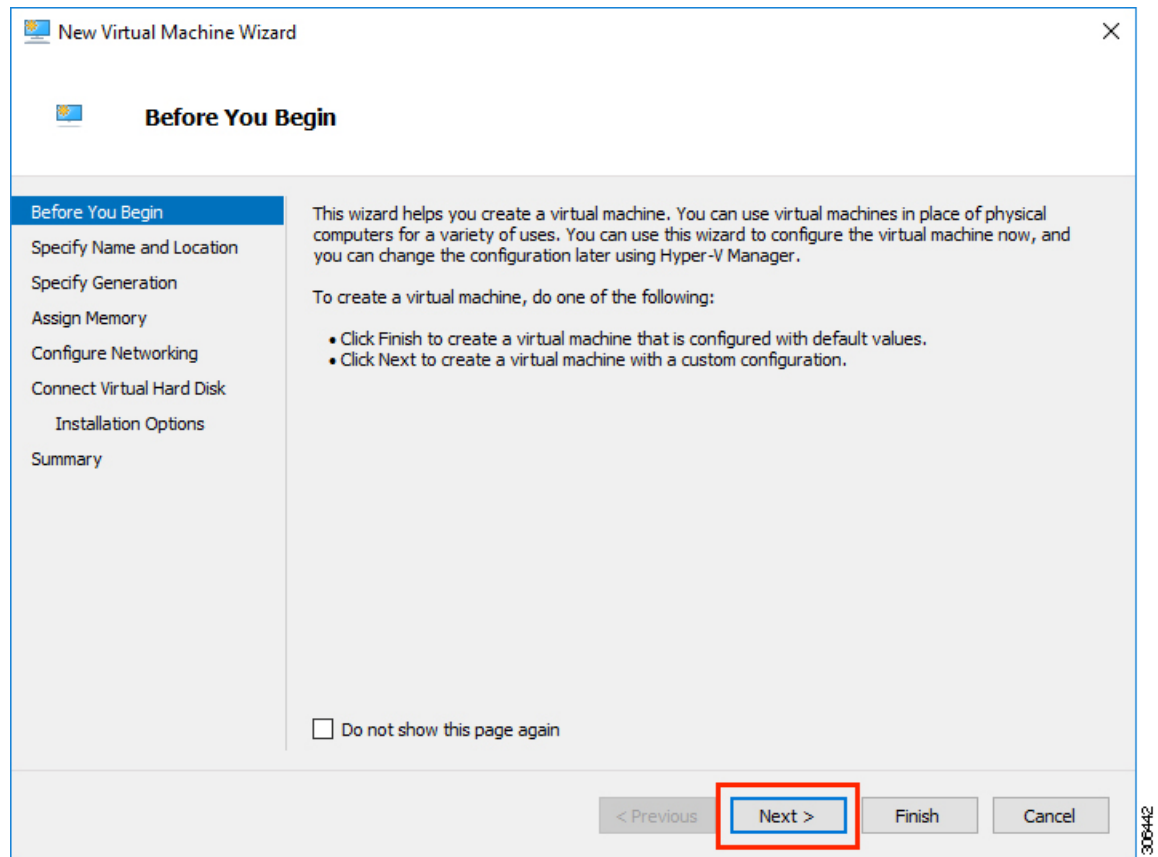
Procedure

- Step 1** Locate and download the HX Data Platform Installer .vhdx zipped file (for example, **Cisco-HX-Data-Platform-Installer-v3.0.1a-build-hyperv.vhdx**) from the Cisco Software Downloads site.
- Step 2** Extract the zipped folder to your local computer and copy the .vhdx file to the Hyper-V host where you want to host the HX Data Platform Installer. For example, \\hyp-v-host01\...\HX-Installer\Cisco-HX-Data-Platform-Installer-v3.0.1a-29499-hyperv.vhdx
- Step 3** In **Hyper-V Manager**, navigate to one of the Hyper-V servers.

Step 4 Select the Hyper-V server, and right click and select **New > Create a virtual machine**. The Hyper-V Manager New Virtual Machine Wizard displays.

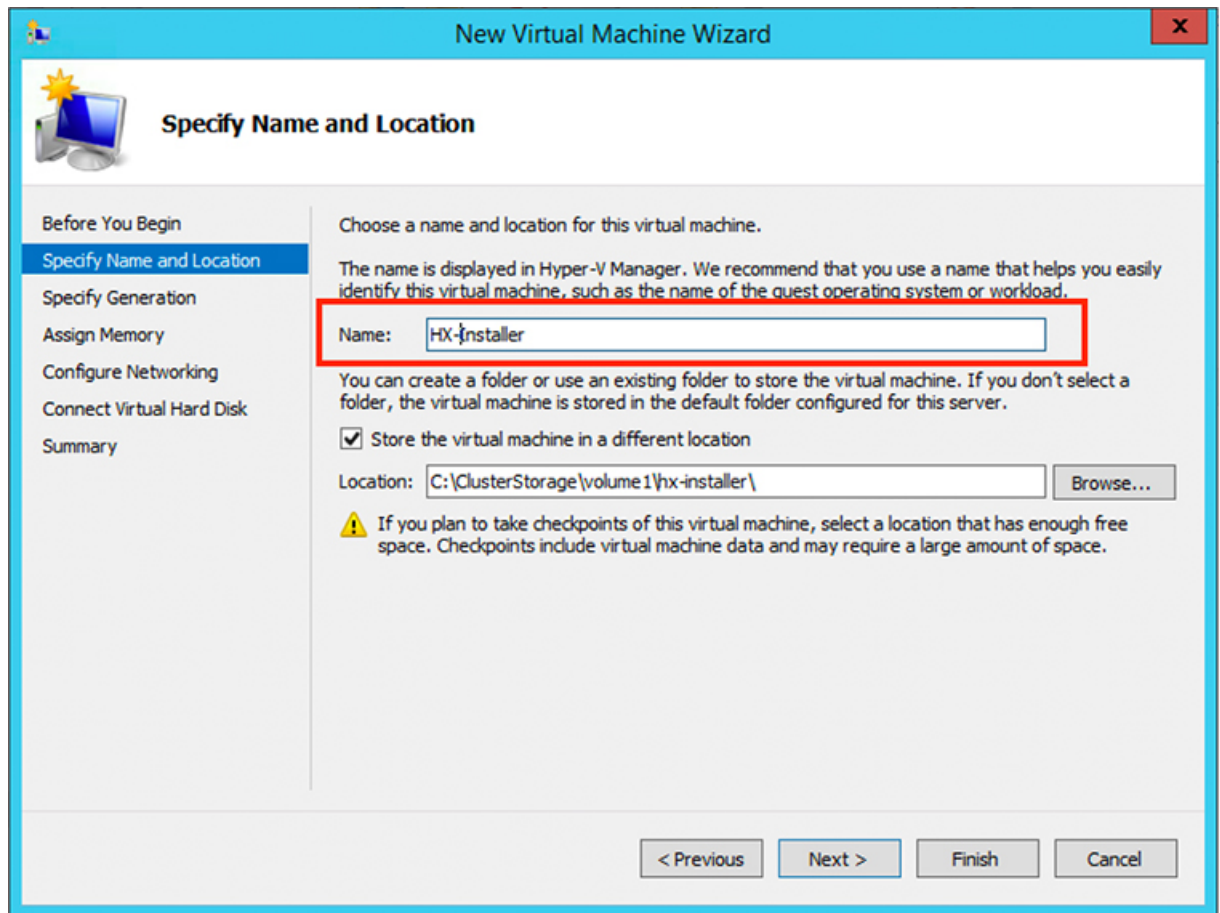


Step 5 In the **Before you Begin** page, click Next.

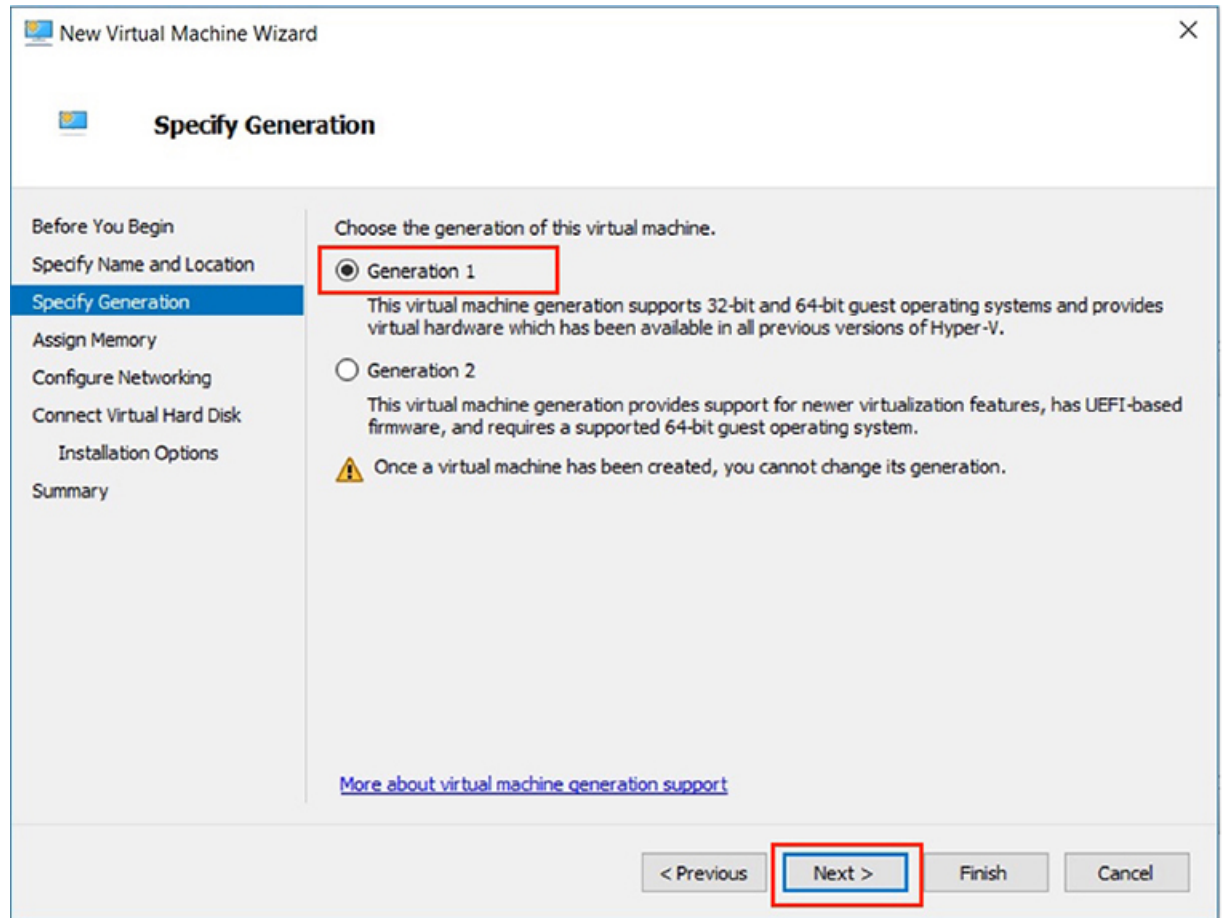
**Step 6**

In the **Specify Name and Location** page, enter a name and location for the virtual machine where the virtual machine configuration files will be stored. Click **Next**.

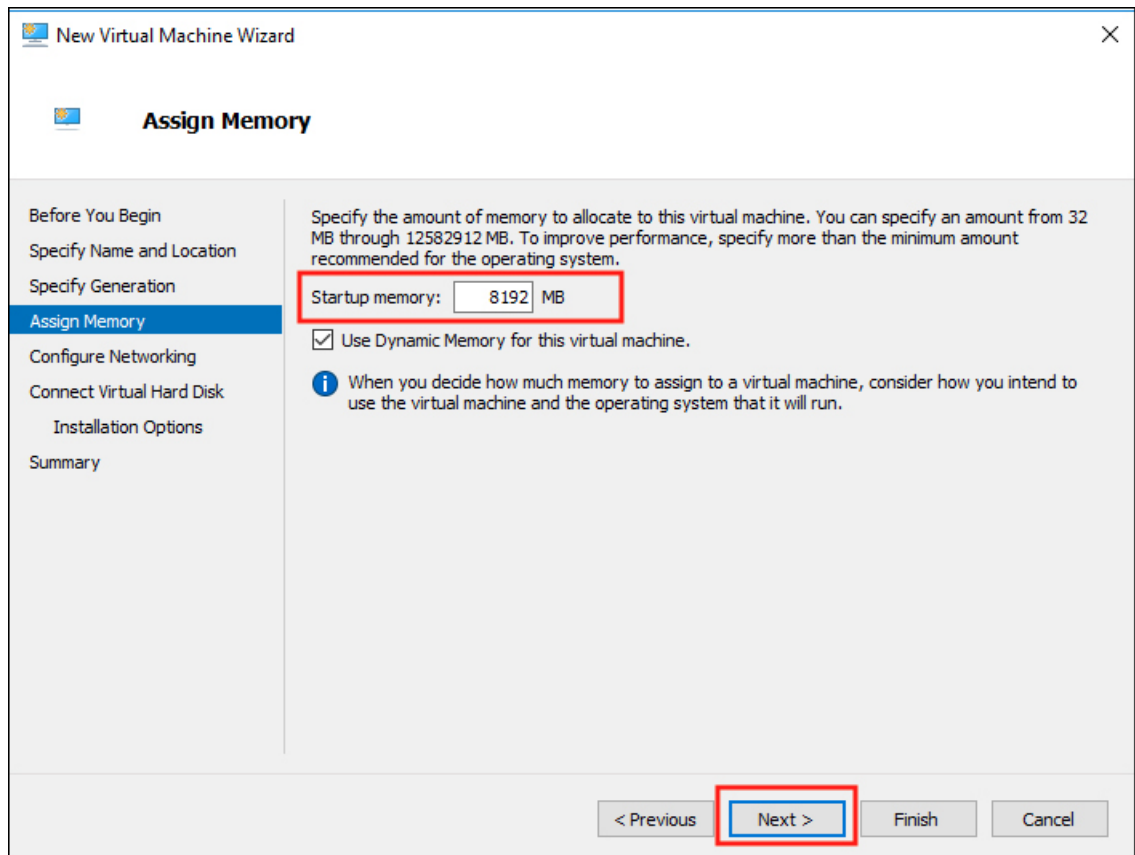
Note As a best practice, store the VM together with the `.vhdx` file.

**Step 7**

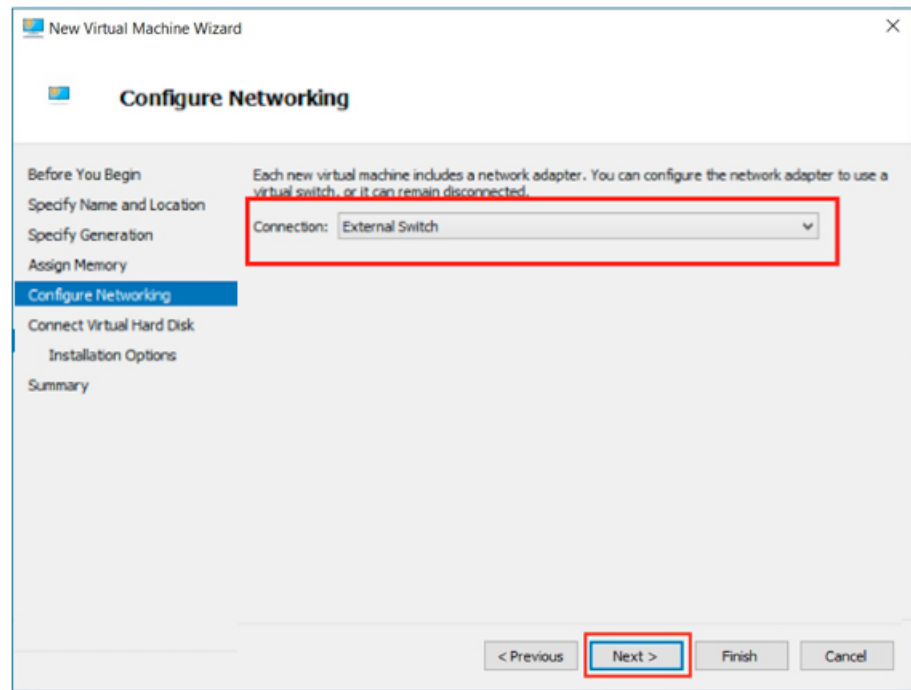
In the **Specify Generation** page, select **Generation 1**. Click **Next**. If you select Generation 2, the VM may not boot.



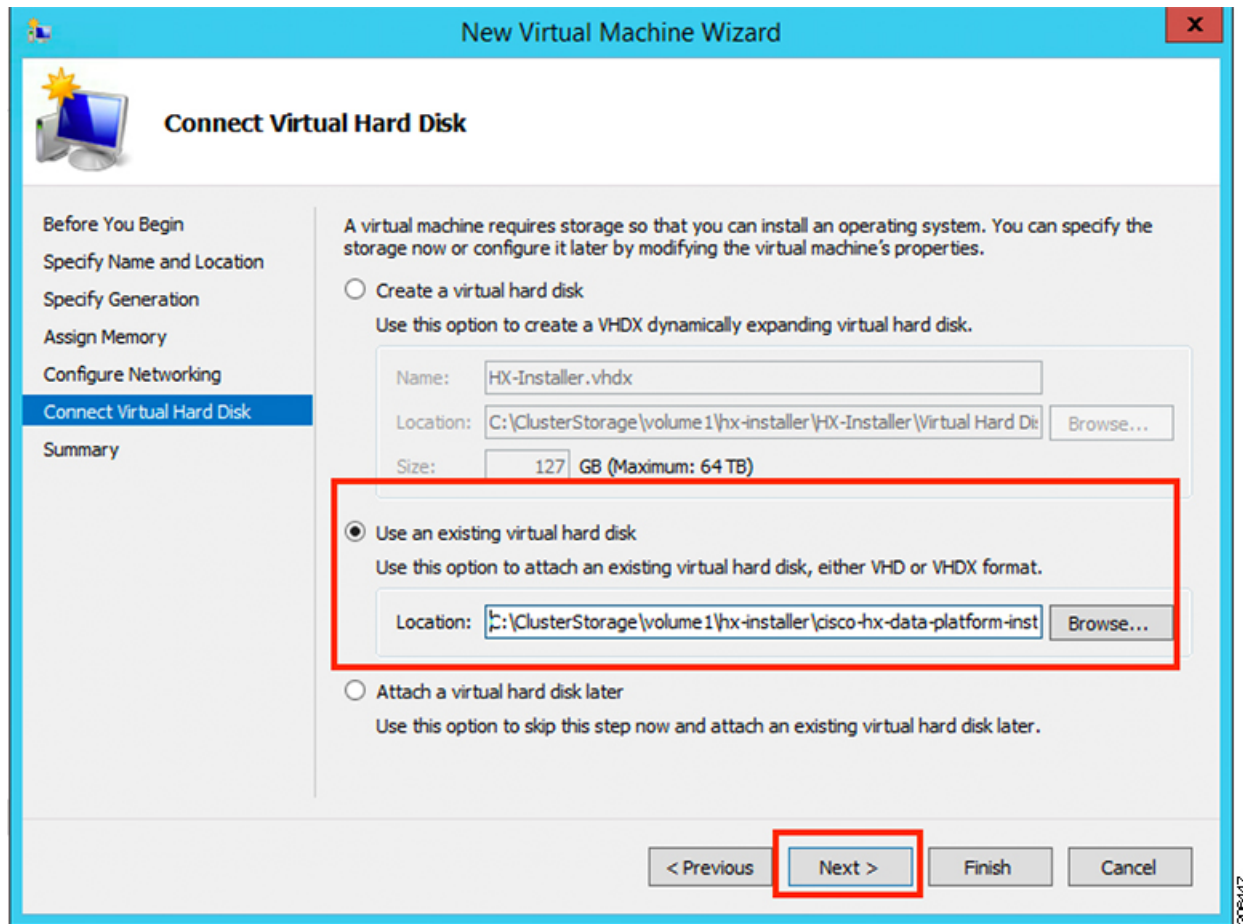
Step 8 In the **Assign Memory** page, set the start up memory value to **4096 MB**. Click **Next**.

**Step 9**

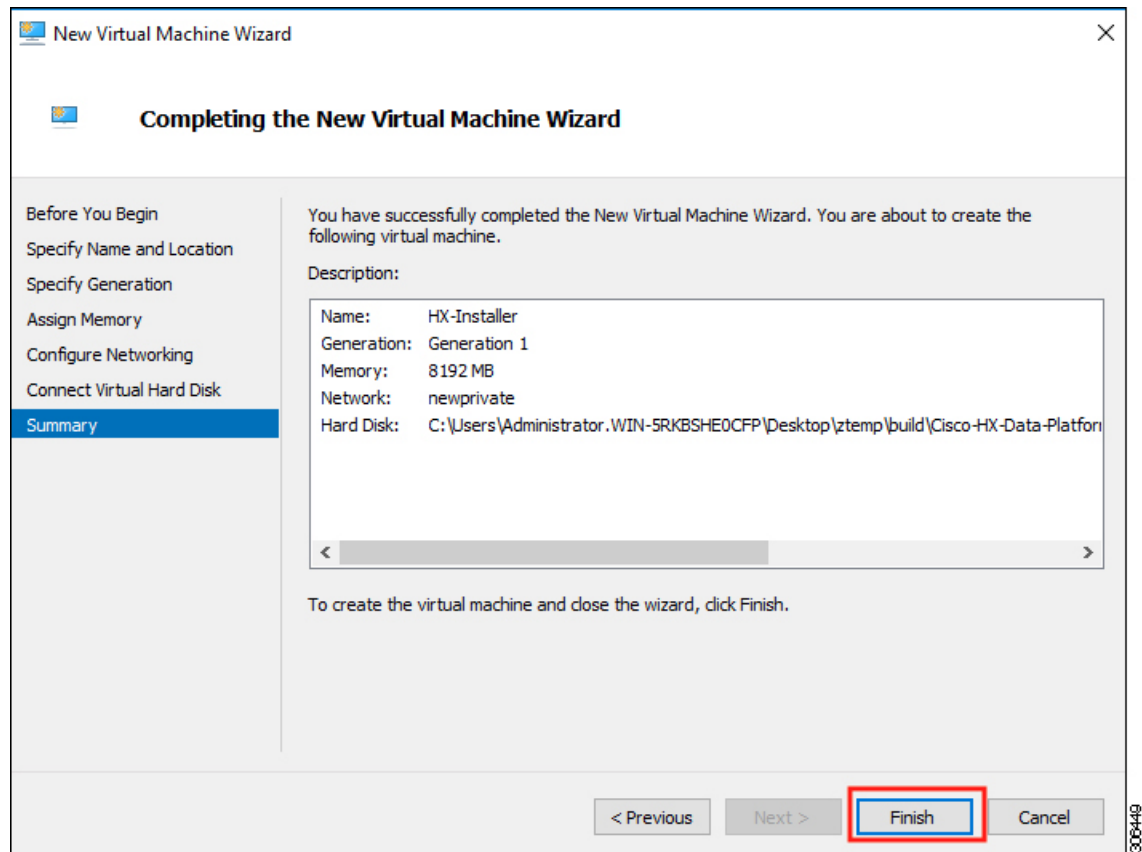
In the **Configure Networking** page, select a network connection for the virtual machine to use from a list of existing virtual switches. Click **Next**.



Step 10 In the **Connect Virtual Hard Disk** page, select **Use an existing virtual hard disk**, and browse to the folder on your Hyper-V host that contains the `.vhdx` file. Click **Next**.



Step 11 In the **Summary** page, verify that the list of options displayed are correct. Click **Finish**.



- Step 12** After the VM is created, power it ON, and launch the GUI.
- Right-click on the VM and choose **Connect**.
 - Choose **Action > Start (Ctrl+S)**.
 - When the VM is booted, make a note of the URL (IP address of the VM). You will need this information in the following steps in the installation.

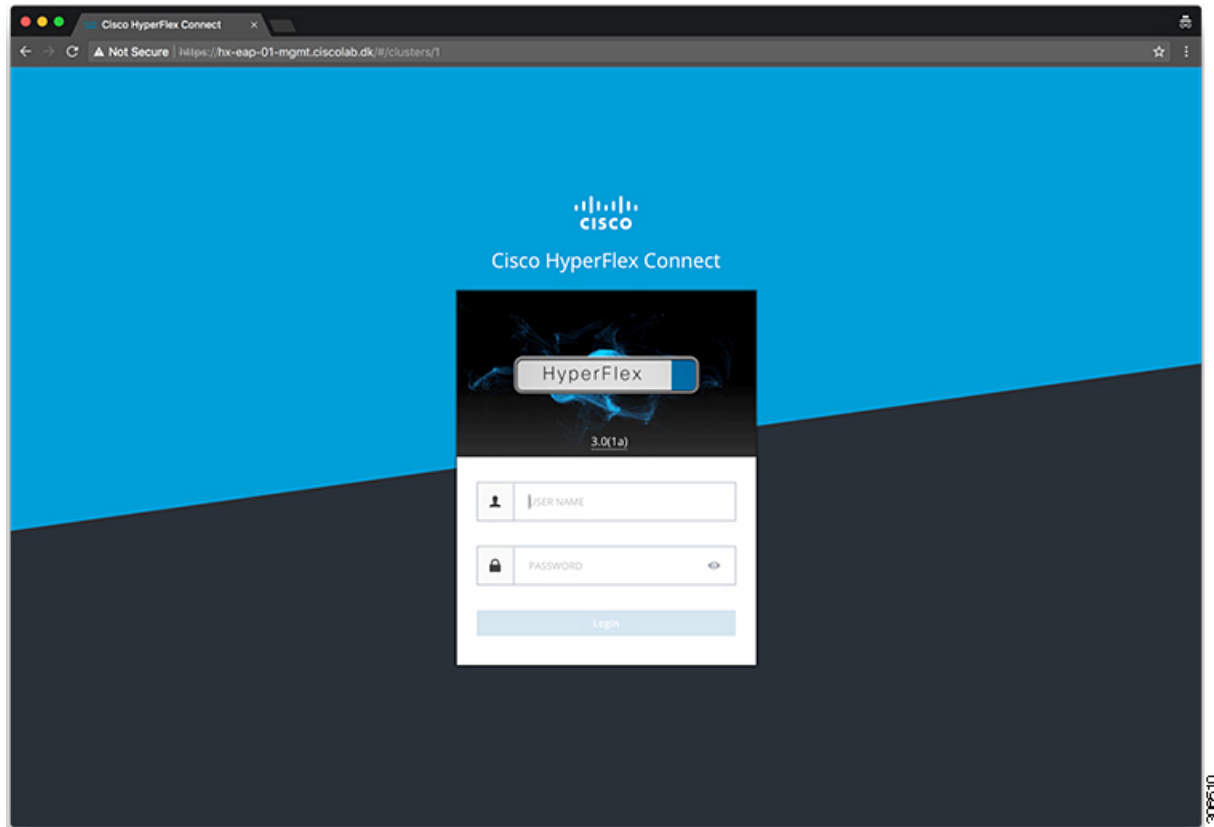
Step 2 - Cisco UCS Manager Configuration

The following procedure describes configuring Cisco UCS Manager using HX Installer.

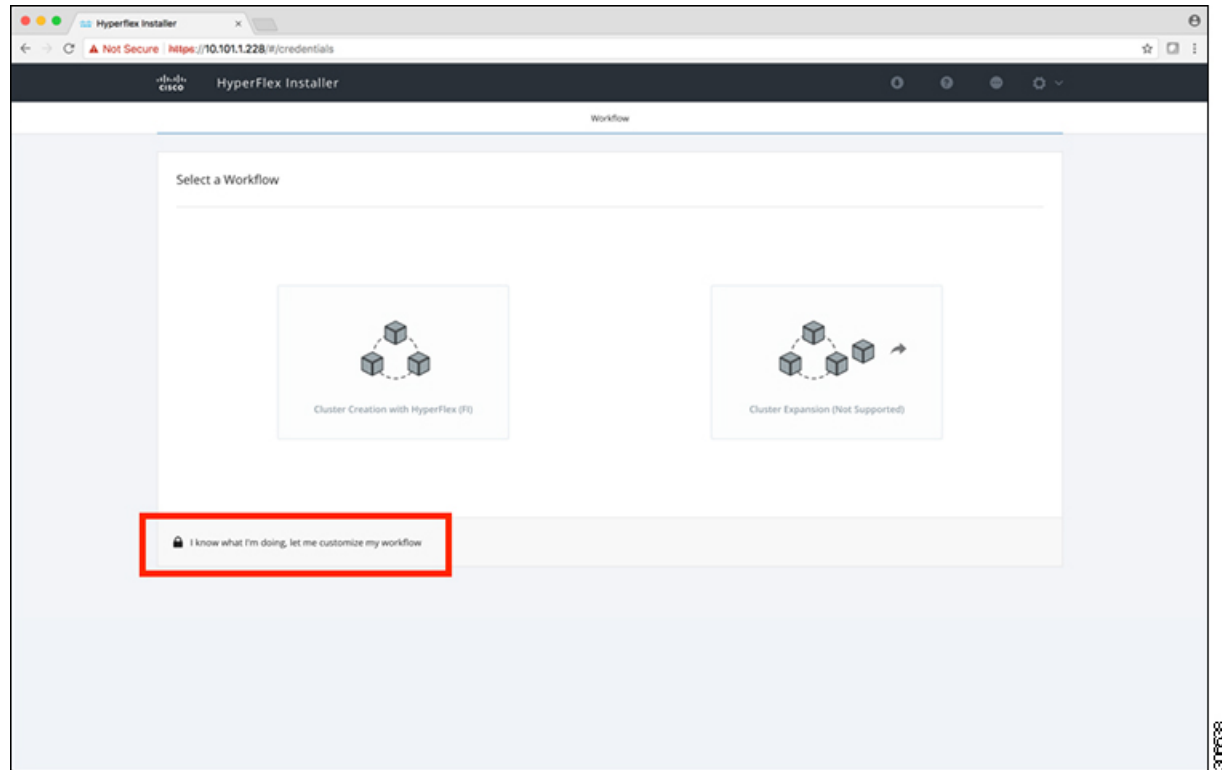
Procedure

- Step 1** Log into the HX Data Platform Installer using the following steps:
- In a browser, enter the URL for the VM where HX Data Platform Installer was installed. If you do not have the URL, go back to Step 13 in the earlier section on [Step 1 - Deploying HX Data Platform Installer](#).
 - Use the credentials: `username: root, password: Cisco123`
- Important** Systems ship with a default password of `Cisco123` that must be changed during installation. You cannot continue installation unless you specify a new user supplied password.

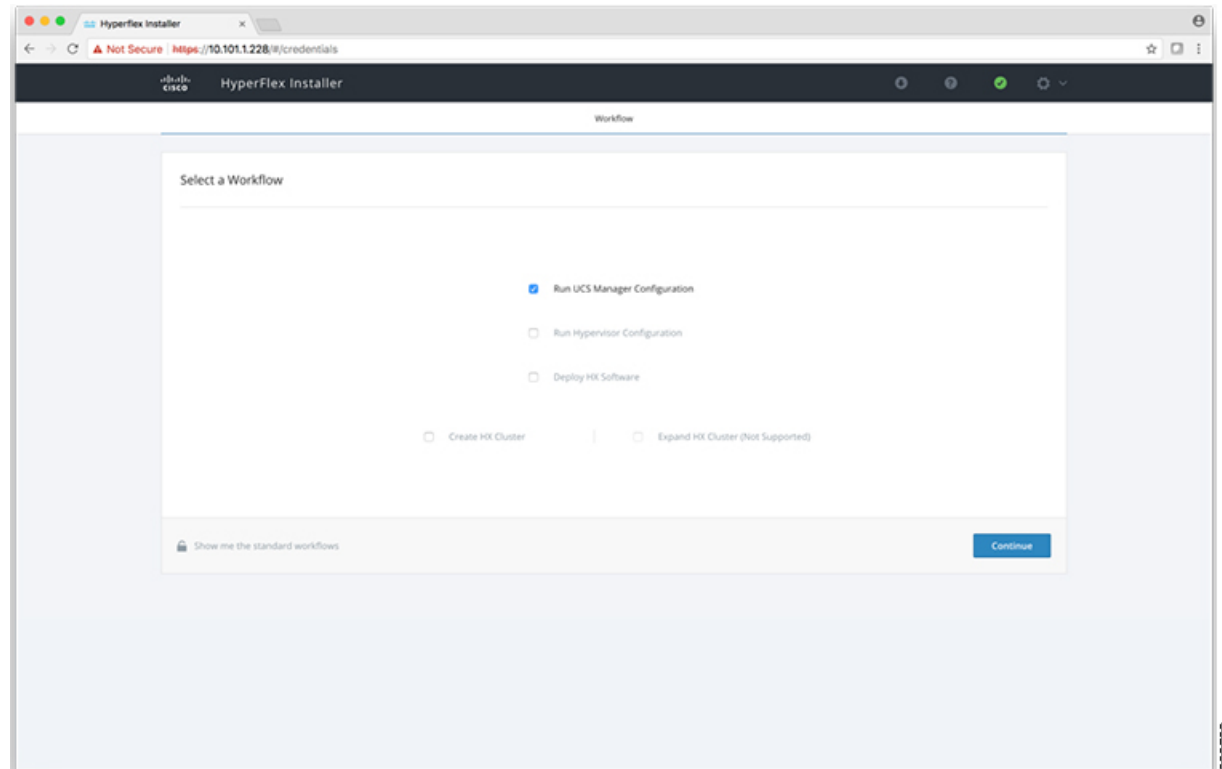
- c) Read the EULA. Click **I accept the terms and conditions**.
- d) Verify the product version listed in the lower right corner is correct. This version must be 3.0(1a) or later. Click **Login**.



Step 2 From the HX Data Platform Installer **Workflow** page, select **I know what I'm doing, let me customize my workflow**.

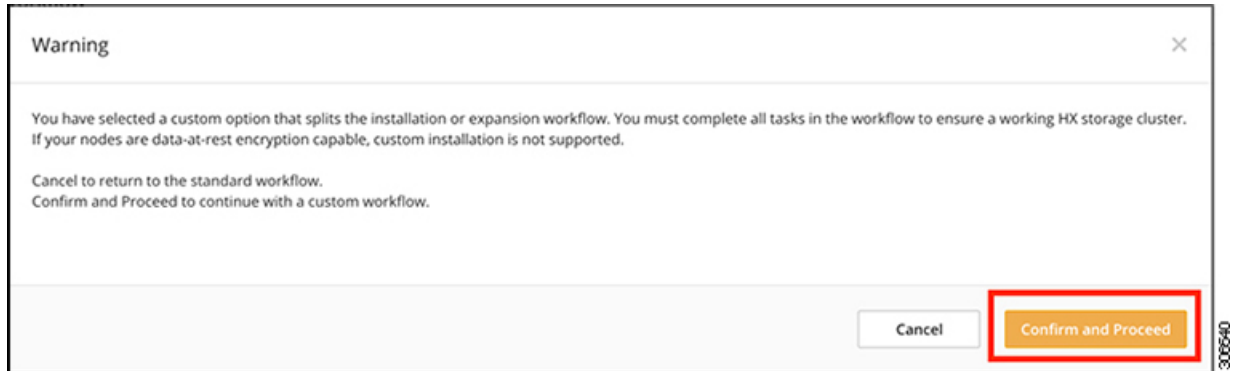


Step 3 On the next screen, click **Run UCS Manager Configuration** and then **Continue**.



Caution Do not choose any other workflow option at this point.

Step 4 Click **Confirm** in the pop-up that displays.

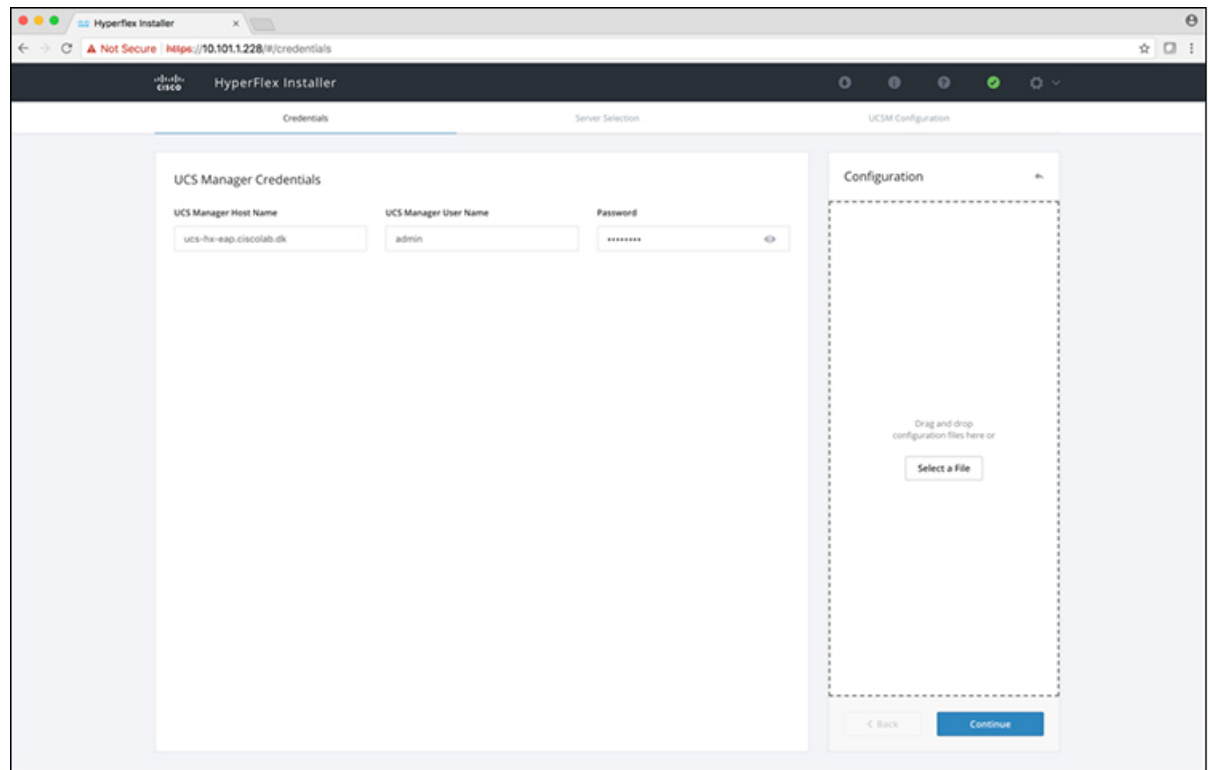


Step 5 **UCS Manager Credentials**

At this point the right side of the page is unused. Further in the setup process a configuration JSON is saved, so in subsequent installations the JSON file can be imported to add the data quickly.

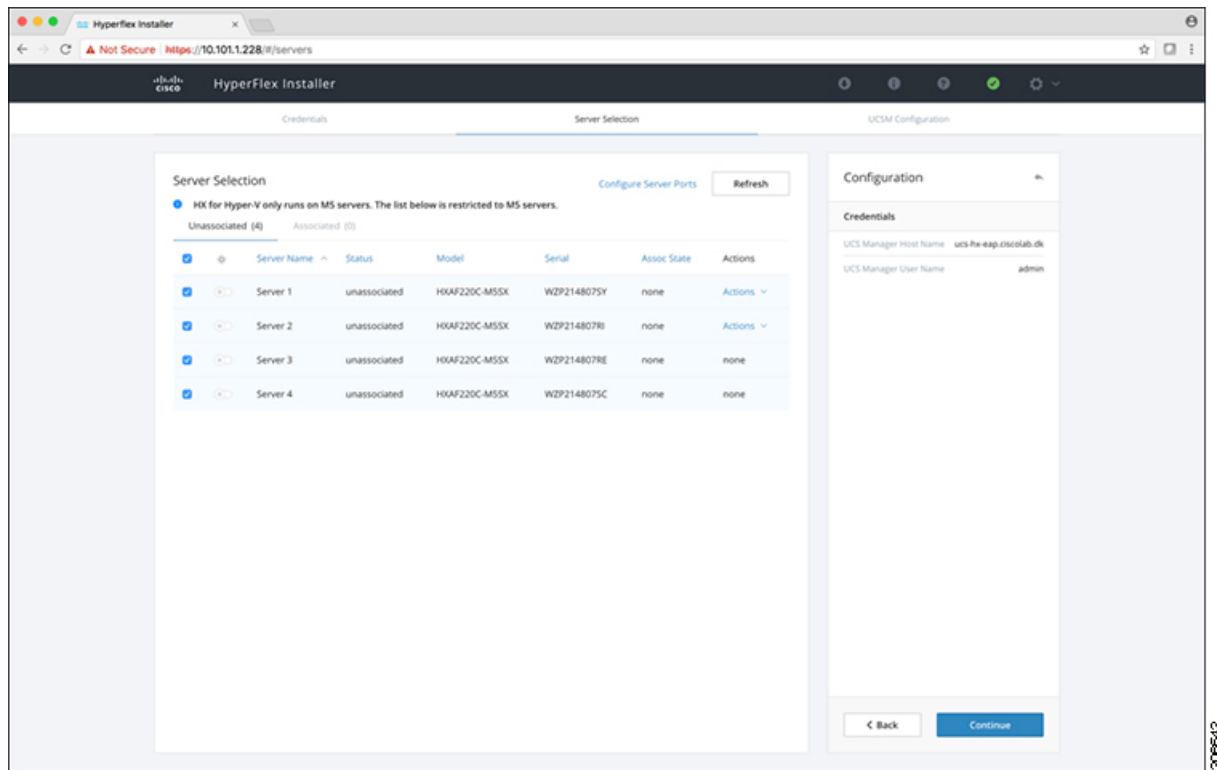
Complete the following fields for UCS Manager.

Field	Description
UCS Manager Host Name	FQDN or the VIP address of the UCSM.
UCS Manager User Name and Password	Administrator user and password or an user with UCSM admin rights.



Click **Continue** to proceed. The installer will now try to connect to the UCSM and query for available servers. The configuration pane will be populated as the installer progresses. You can at any time save the JSON file so you can re-use it for subsequent installations. This feature works on all the different workflows in the installer. After the query finishes then you will get a screen with the available servers

Choose all the servers that you want to install in the cluster and click **Continue**.



Note HyperFlex for Hyper-V does only support M5 Servers.

Step 6 VLAN Configuration

HyperFlex needs to have at least 4 VLANs to function, each needs to be on different IP subnets and extended from the fabric interconnects to the connecting uplink switches, to ensure that traffic can flow from the Primary Fabric Interconnect (Fabric A) to the Subordinate Fabric Interconnect (Fabric B).

Name	Usage	ID
hx-inband-mgmt	Hyper-V and Hyperflex VM mgmt..	10
hx-storage-data	HyperFlex storage traffic	20
hx-livemigrate	Hyper-V Live Migration network	30
vm-network	VM guest network	100,101

Use the following illustration as a reference for entering values in this screen.

VLAN Configuration

VLAN for Hypervisor and HyperFlex management		VLAN for HyperFlex storage traffic	
VLAN Name	VLAN ID	VLAN Name	VLAN ID
<input type="text" value="hx-inband-mgmt"/>	<input type="text"/>	<input type="text" value="hx-storage-data"/>	<input type="text"/>
VLAN for VM Live Migration		VLAN for VM Network	
VLAN Name	VLAN ID	VLAN Name	VLAN ID(s)
<input type="text" value="hx-livemigrate"/>	<input type="text"/>	<input type="text" value="vm-network"/>	<input type="text"/>

- Note**
- Do not use VLAN 1 as it is not best practice and can cause issues with disjoint layer 2.
 - vm-network can be multiple VLANs added as a comma separated list.

Caution Renaming the 4 core networks is not supported.

Step 7 Enter the remaining network configuration.

Field	Description	Value
MAC pool prefix	MAC address pool for the HX cluster, to be configured in UCSM by the installer. Ensure that the mac address pool isn't used anywhere else in your layer 2 environment.	00:25:b5:xx
IP blocks	The range of IP addresses that are used for Out-Of-Band management of the hyperflex nodes.	10.193.211.124-.127
Subnet Mask	The subnet mask for the Out-Of-Band network	255.255.0.0
Gateway	The gateway address for the Out-Of-Band network	10.193.0.1

- Note**
- The Out-Of-Band network needs to be on the same subnet as UCS Manager.
 - You can add multiple blocks of addresses as a comma separated line.

MAC Pool

MAC Pool Prefix

'hx-ext-mgmt' IP Pool for Out-of-band CIMC

IP Blocks Subnet Mask Gateway

iSCSI Storage and FC Storage are used for adding external storage to the HyperFlex cluster. This is currently not supported for the Hyper-V Edition.

Step 8 Advanced Section

Field	Description	Example Value
UCS Firmware Server Version	Choose the appropriate UCS Server Firmware version.	3.2(3a)
HyperFlex Cluster Name	This user defined name will be used as part of the service profile naming In UCSM for easier identification.	
Org Name	The org. name is used for isolating the HX environment from the rest of the UCS platform to ensure consistency.	HX-Cluster1
		HX-Cluster1

- Note**
- The UCS C and B bundles must exist on the Fabric interconnect otherwise the installation will fail. If the right version is not available in the drop-down list, then upload it to UCSM before proceeding with this procedure.
 - Currently supported version for HyperFlex Hyper-V is 3.2(3a).

VLAN Configuration

VLAN for Hypervisor and HyperFlex management

VLAN Name: VLAN ID:

VLAN for VM Live Migration

VLAN Name: VLAN ID:

VLAN for HyperFlex storage traffic

VLAN Name: VLAN ID:

VLAN for VM Network

VLAN Name: VLAN ID(s):

MAC Pool

MAC Pool Prefix:

'hx-ext-mgmt' IP Pool for Out-of-band CIMC

IP Blocks: Subnet Mask: Gateway:

> iSCSI Storage

> FC Storage

Advanced

UCS Server Firmware Version: HyperFlex Cluster Name: Org Name:

Configuration

Credentials

UCS Manager Host Name: ucs-hx-eap.ciscoelab.dk

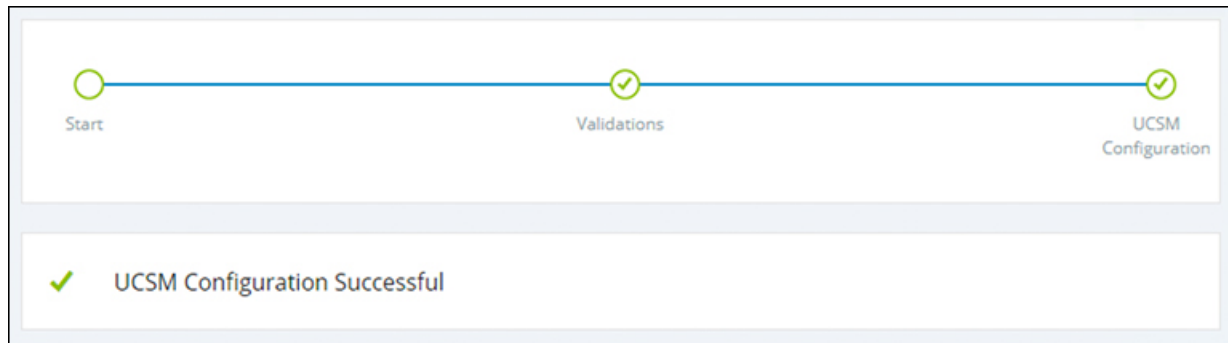
UCS Manager User Name: admin

Server Selection

Server 2	WZP214807RI / HXAF220C-MSSX
Server 3	WZP214807RE / HXAF220C-MSSX
Server 1	WZP214807SY / HXAF220C-MSSX
Server 4	WZP214807SC / HXAF220C-MSSX

Step 9
Step 10

When you click **Start**, the installer validates your input and then begins configuring the UCS Manager. When the HX Data Platform Installer is finished, then you are ready to proceed to next step, [Step 3 - Microsoft OS Installation](#), on page 18.



Step 3 - Microsoft OS Installation

For Microsoft OS installation, you will need to first configure a vMedia policy in Cisco UCS Manager to map the following two image files:

- Customer provided **Windows 2016 Datacenter edition ISO**, and
- Cisco provided **Cisco HyperFlex Driver image**.

These image files must be placed on a share that is reachable from Cisco UCS Manager and the Out-of-band subnet that was used in the previous installation step. If you do not have a location to serve the files from, then you can use the installer to host the files. Please see the section: [How to upload the ISO and img file to the installer VM using WinSCP](#).



Note Ensure network connectivity exists between the fileshare and all server management IP addresses.

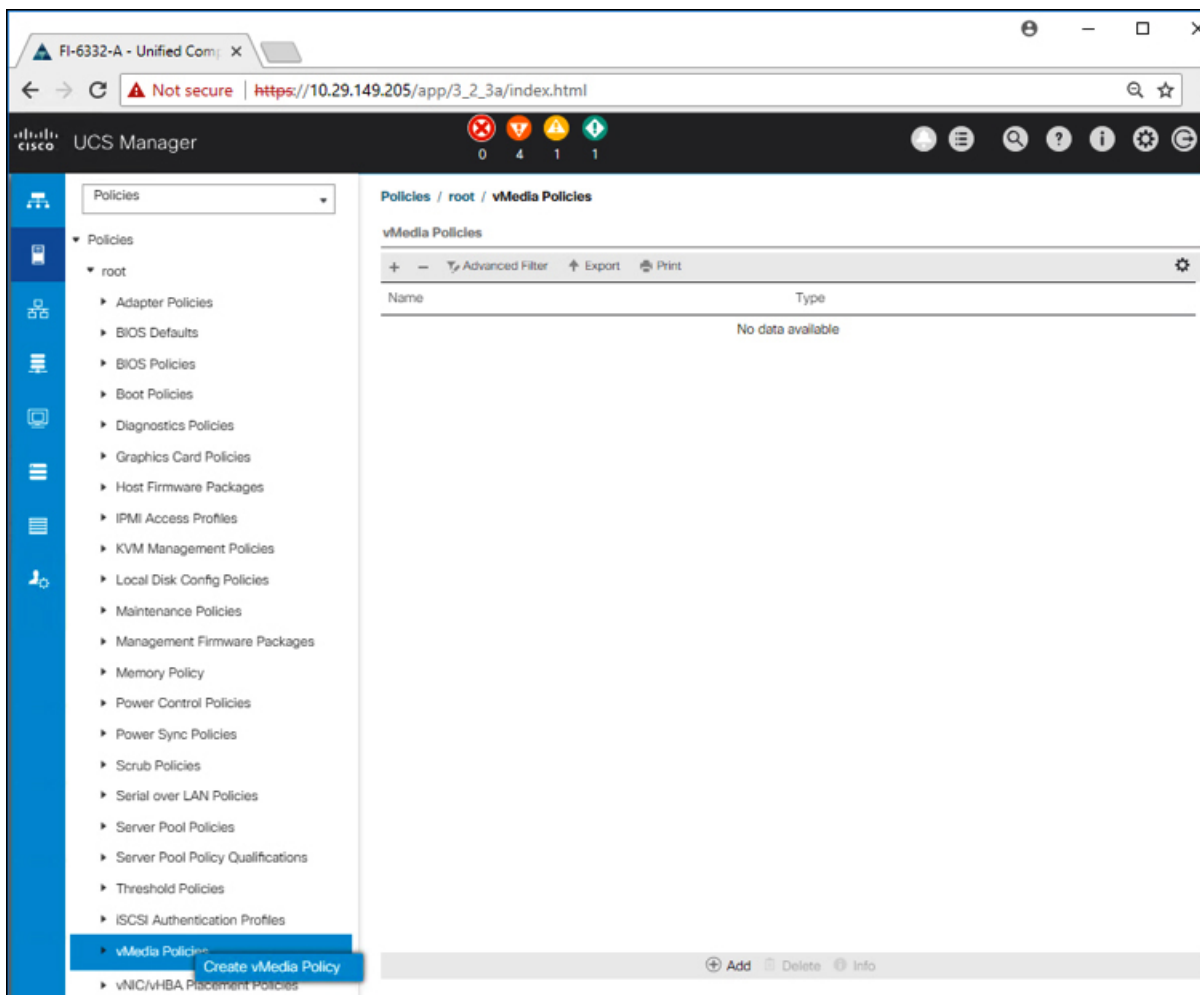
Procedure

Step 1 Launch Cisco UCS Manager::

- a) In your web browser, type the **Cisco UCS Manager** IP address.
- b) Click **Launch UCS Manager**.
- c) In the login screen, enter the with the username as **admin** and the password set in the beginning of the installation. Click **Log in**.

Step 2 Create a vMedia policy for the Windows OS and Cisco driver images:

- a) In the Navigation pane, click **Servers**.
- b) Expand **Servers** > **Policies** > **root** > **Sub-Organizations** > *hx-cluster_name* > **vMedia Policies**
- c) Right-click **vMedia Policies** and select **Create vMedia Policy HyperFlex**.

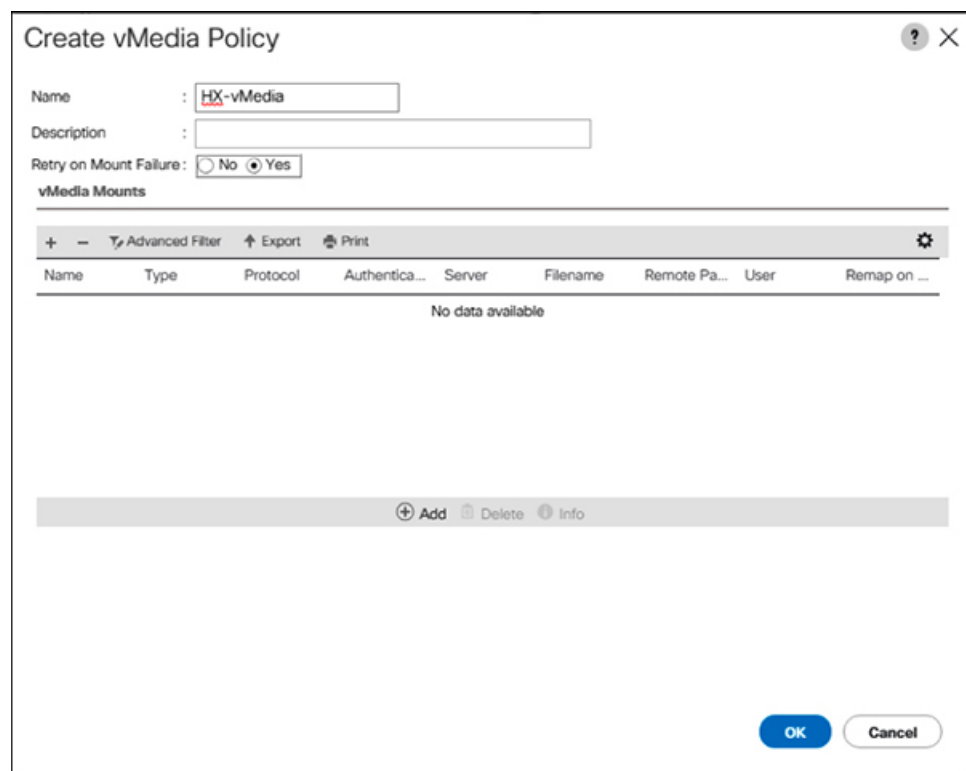


d) In the **Create vMedia Policy** dialog box, complete the following fields:

Field Name	Description
Name	The name of the vMedia policy. For example, <i>HX-vMedia</i> . This name can be between 1 and 16 alphanumeric characters. You cannot use spaces or any special characters other than - (hyphen), _ (underscore), : (colon), and . (period), and you cannot change this name after the object is saved.
Description	A description of the policy. We recommend including information about where and when the policy should be used. Maximum 115 characters.

Field Name	Description
Retry on Mount Failure	<p>Designates if the vMedia will continue mounting when a mount failure occurs. This can be:</p> <ul style="list-style-type: none"> • Yes • No <p>Note The default setting is Yes. When Yes is selected the remote server will continue to try to mount the vMedia mount process until it is successful or you disable this option. If you select No, a warning message will appear indicating retry on mount failure will not work in case of mount failure.</p>

Refer to the following screenshot as an example:

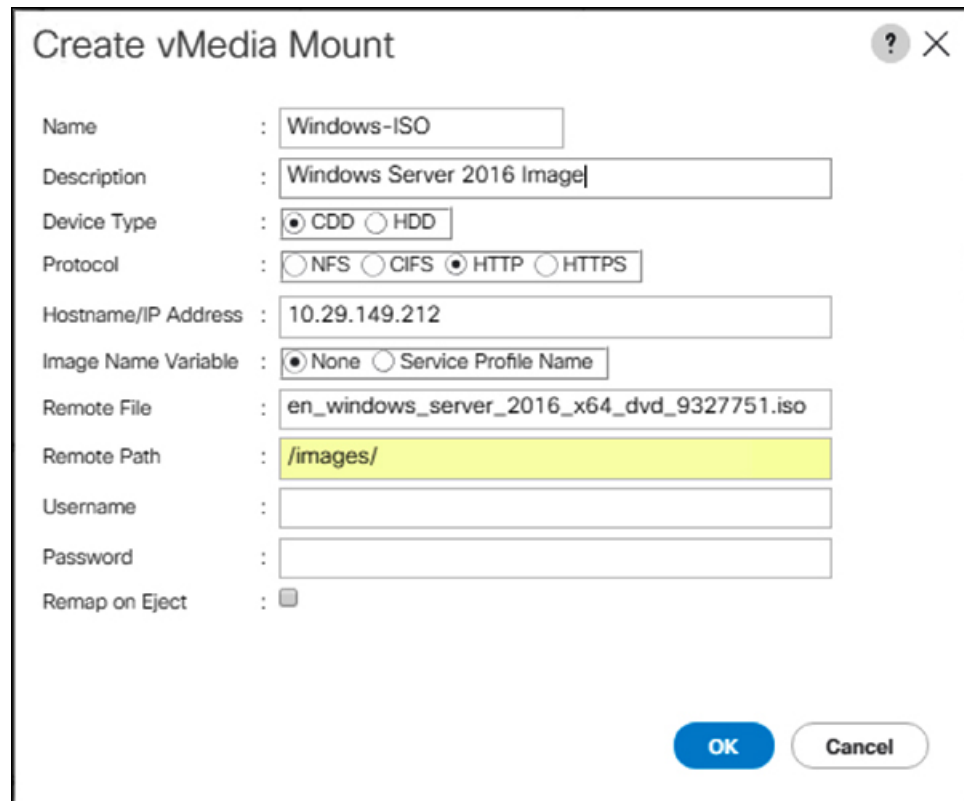


- e) On the icon bar under the **vMedia Mounts** pane, click + **Add**. In the **Create vMedia Mount** dialog box, complete the following fields:

Field Name	Description	Example Value
Name	Name for the mount point.	Windows-ISO
Description	Can be used for more information.	Windows Server 2016 image

Field Name	Description	Example Value
Device Type	Type of image that you want to mount. This can be: <ul style="list-style-type: none"> • CDD—Scriptable vMedia CD. • HDD—Scriptable vMedia HDD. 	CDD
Protocol	The protocol used for accessing the share where the ISO files are located.	HTTP
Hostname/IP Address	IP address or FQDN of the server hosting the images.	10.101.1.92
Image Name Variable	This value is not used in HyperFlex installation.	None
Remote File	The filename of the ISO file that you want to mount.	
Remote Path	The path on the remote server to where the file resides	
Username	If you use CIFS or NFS a username might be necessary	
Password	If you use CIFS or NFS a password might be necessary	

Refer to the screenshot below as an example:



Create vMedia Mount

Name : Windows-ISO

Description : Windows Server 2016 Image

Device Type : CDD HDD

Protocol : NFS CIFS HTTP HTTPS

Hostname/IP Address : 10.29.149.212

Image Name Variable : None Service Profile Name

Remote File : en_windows_server_2016_x64_dvd_9327751.iso

Remote Path : /images/

Username :

Password :

Remap on Eject :

OK **Cancel**

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- f) Click **OK**. When you click **OK**, you will now be returned to the **vMedia Policies** screen, and you should see the information that you just submitted.

Create vMedia Policy

Name : HX-vMedia

Description :

Retry on Mount Failure: No Yes

vMedia Mounts

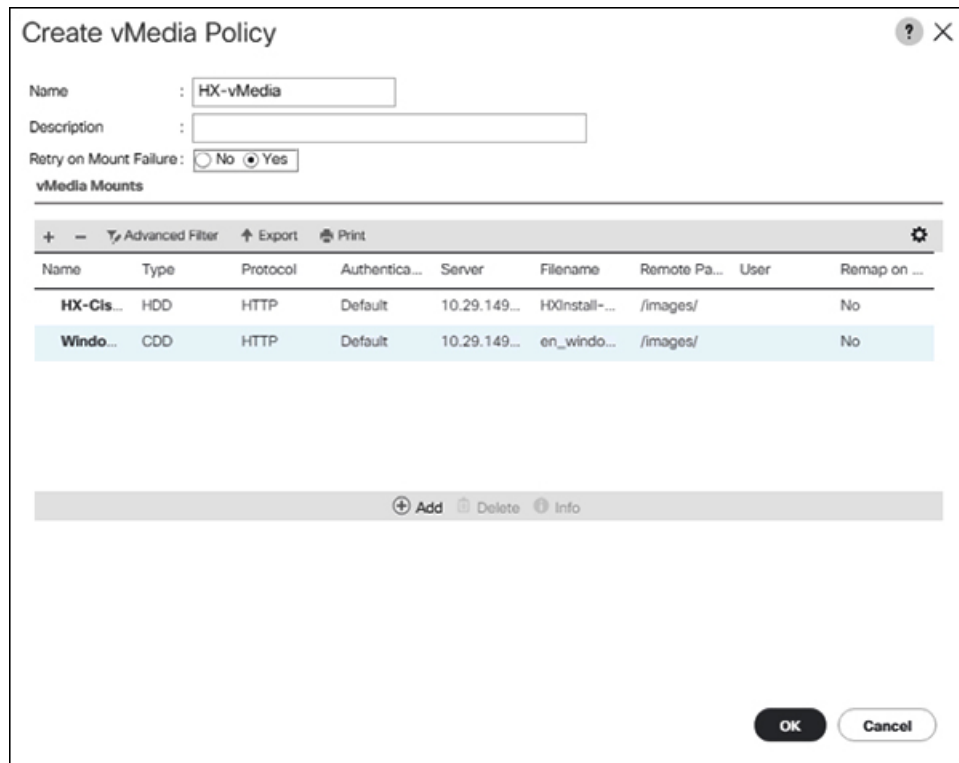
Name	Type	Protocol	Authentica...	Server	Filename	Remote Pa...	User	Remap on ...
Windo...	CDD	HTTP	Default	10.29.149...	en_windo...	/images/		No

+ - Advanced Filter Export Print

+ Add - Delete Info

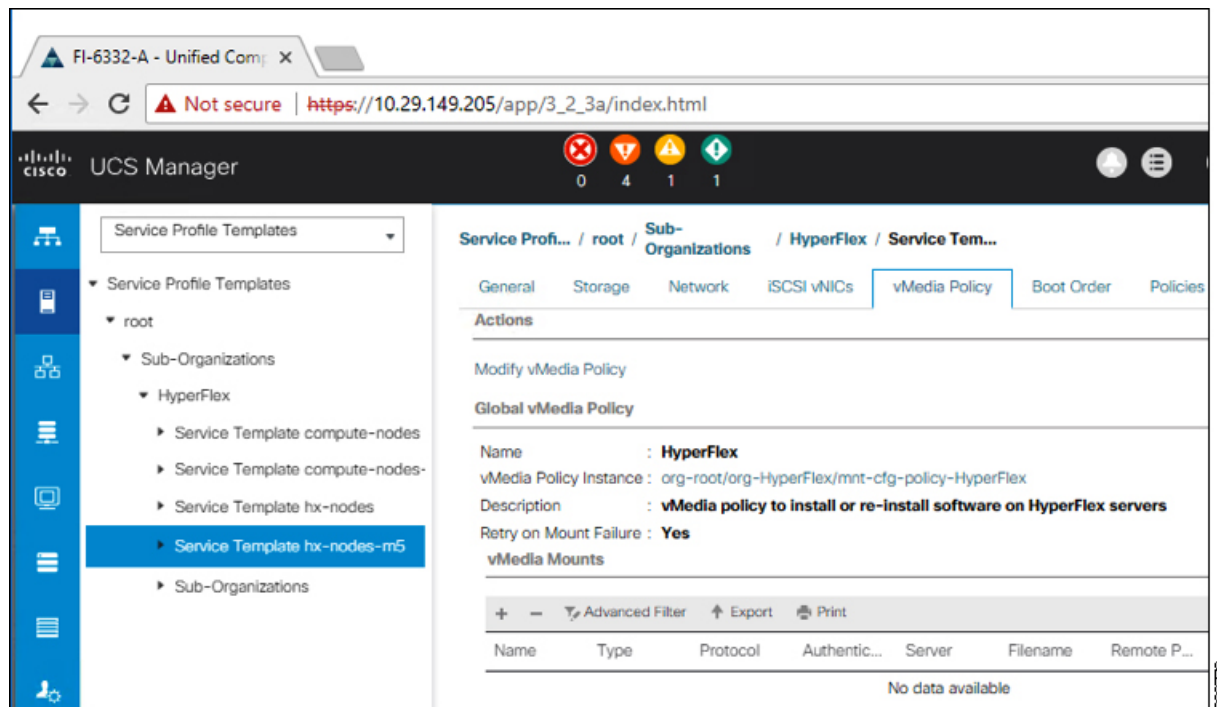
OK Cancel

- g) Repeat **Steps 2e and 2f**, however, change the type to **HDD** and the remote file name to the **Cisco HyperFlex driver image**.
- h) At the end of this step, the two vMedia mounts will be listed in the Create vMedia Policy screen as shown in the following screenshot:

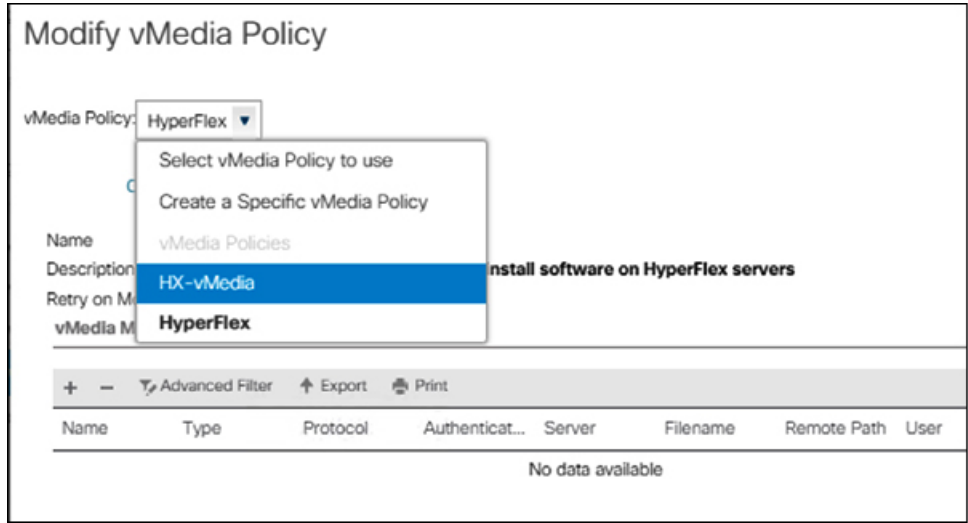


Step 3 Associate the vMedia Policy to a Service Profile:

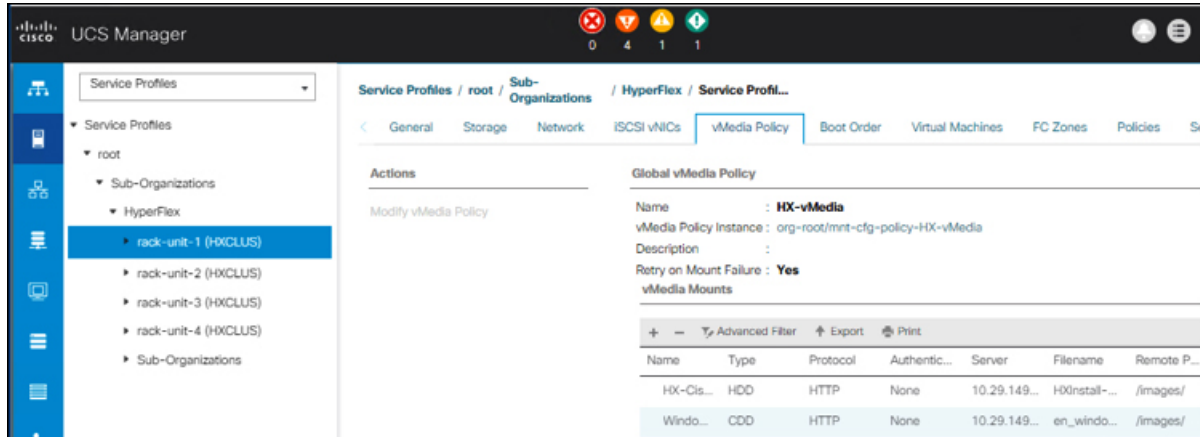
- a) In the Navigation pane, select **Servers > Service Profile Templates > root > Sub-Organizations > hx-cluster_name > Service Template hx-nodes_name (example:hx-nodes-m5)**



- b) Click the **vMedia Policy** tab. Then, click **Modify vMedia Policy**
- c) Choose the **vMedia Policy** that you created earlier from the drop-down selection, and click **OK** twice.

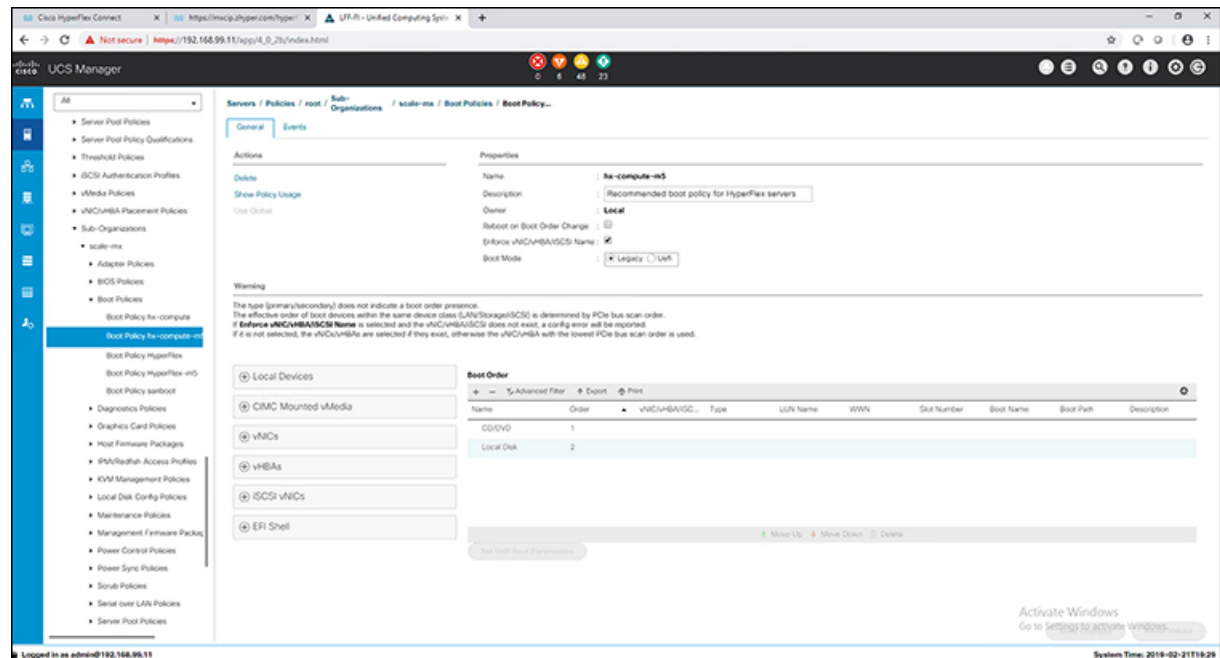


- d) Under the **General** tab, verify that the vMedia policy is added to the Service Profile.



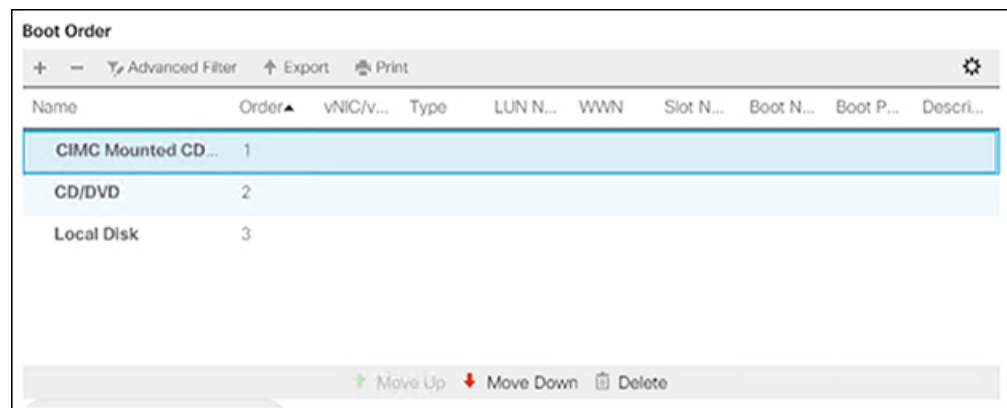
Step 4 Modify Boot Policy and set the boot order to have CIMC CD/DVD to the list:

- a) In the Navigation pane, click the **Servers** tab.
- b) Expand **Servers > Policies > root > > Boot Policies > Boot Policy HyperFlex-m5**



- c) In the **Boot Order** configuration pane, click **CIMC Mounted CD/DVD**. Then, click **Add CIMC Mounted CD/DVD** to add this to the boot order. Move it to the top of the boot order using the **Move up** button.

Important As shown in the screenshot below, the **CIMC Mounted CD/DVD** option must be highest in the boot order preceding the other options, **Embedded Local Disk** and **CD/DVD**.



- d) Click **Save Changes**, and click **OK** in the **Success** dialog box. The modified boot policy is saved.

Step 5

Verify successful vMedia mounting:

- On the **Equipment** tab, select one of the servers.
- Click **Inventory > CIMC**, scroll down and ensure for mount entry #1(OS image) and mount entry #2 (Cisco HyperFlex driver image) you see status as **Mounted** and there are no failures.

The screenshot shows the UCS Manager interface. The breadcrumb navigation is 'Equipment / Rack-Mounts / Servers / Server 1'. The 'Inventory' tab is active, showing details for the CMC. The firmware information is as follows:

- Boot-loader Version: **3.1(3a)**
- Running Version: **3.1(3a)**
- Package Version: **3.2(3a)C**
- Backup Version: **3.1(2d)**
- Update Status: **Ready**
- Startup Version: **3.1(3a)**
- Activate Status: **Ready**

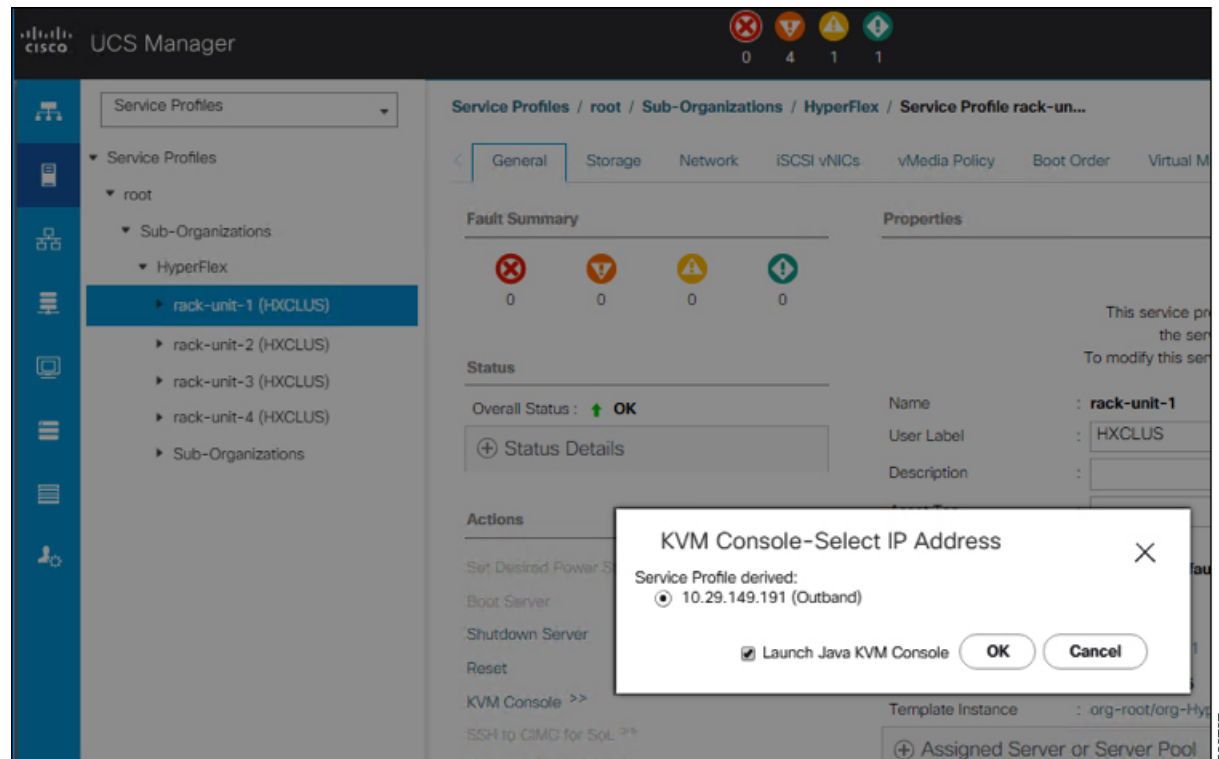
Under 'Actual vMedia Mounts', there are two entries:

Actual Mount Entry 1			
Mapping Name	: Windows-ISO	Type	: CDD
Protocol	: HTTP	Server	: 10.29.149.212
Port	: 80	Filename	: en_windows_server_2016_x64_dvd_932771
Remote Path	: /images/	User	:
Status	: Mounted	Mount Failure Reason	: None
Authentication Protocol	: None	Remap on Eject	: No

Actual Mount Entry 2			
Mapping Name	: HD-Cisco-Driver	Type	: HDD
Protocol	: HTTP	Server	: 10.29.149.212
Port	: 80	Filename	: HDInstall-HyperV-DatcenterCore-v3.0.1b-29665.img
Remote Path	: /images/	User	:
Status	: Mounted	Mount Failure Reason	: None
Authentication Protocol	: None	Remap on Eject	: No

- c) In the menu bar, click **Servers** and choose the first HyperFlex service profile.
- d) Click the **General tab** and choose **Actions > KVM Console>>**.

Note The KVM console will try to open in a new browser. Be aware of any pop-up blockers. Allow the pop-ups and re-open the KVM



- e) Reboot the host, launch the KVM Console, and power on the server to monitor the progress of the Windows installation. You should see the **Loading Files** screen appear. Windows should install automatically without user intervention. You should see a blue screen and within a few moments you should see the **Setup is starting** message. If automated installation does not begin, double-check that both images are mounted to the server.
- f) Once Windows installation completes, a command prompt will show up. Wait for the installation to complete. The host will then reboot a few times. The installation is complete when you get a clear command prompt at `c:\users\administrator>`

Note Ignore the prompt with the **The system cannot find the file specified** message.

Important Ensure that you have completed **Steps e and f**, on ALL servers that will be part of the HX cluster.

- g) Login to each server, enter the command `C>Users>Administrator>Get-ScheduledTask` and verify that the HX Install Bootstrap Launcher task is running.

Step 6 Remove the vMedia policy from the service profile:

- a) To un-map the vMedia policy from the service profile, go to **Servers > Service Profile Templates > root > Sub-Organizations > hx-cluster_name > Service Template hx-nodes_name (example:hx-nodes-m5)**. Then, click on **Modify vMedia Policy**.
- b) Under the vMedia Policy drop-down selection, deselect the vMedia policy (*HX-vMedia*) previously used to map the two images.

Step 7 Restore the boot order to the one before installation:

- a) In the Navigation pane, click the **Servers** tab.
- b) Expand **Servers > Policies > root > > Boot Policies > Boot Policy HyperFlex-m5**

- c) In the **Boot Order** configuration pane, use the **Move Down** button to move **CIMC Mounted CD/DVD** option to the bottom of the list.

Step 4 - Hypervisor Configuration, HX Data Platform and Cluster Deployment

After the installation of the OS is completed, perform the following steps to configure the hypervisor, install the HX Data Platform Software and configure the cluster.

Procedure

Step 1 Hypervisor configuration

- Re-open the HX Data Platform Installer and log in.
- You might need to “start over” because the previous workflow was finished. Click on the gear icon in the top right corner and select **Start Over**.
- In the main menu, select **I know what I'm doing, let me customize my workflow**. In the **Warning** dialog box, click **Confirm and Proceed**.
- Complete information for the UCS Manager, Domain Information and Hypervisor Credentials.

Field	Description	Default Value
UCS Manager Host Name	FQDN or the VIP address of the UCSM	
UCS Manager User Name	Admin user or an user with UCSM admin rights	Admin
Password	Password for the UCS Manager User Name	
Domain Name	Active Directory domain name that the HyperFlex cluster is going to be a member off.	
Local Administrator User Name	Local Administrative username on the Hyper-V Hosts	Administrator
Local Administrator Password	Password for the local administrative user on the Hyper-V hosts	Cisco 123

Note If you haven't changed the Administrator password for the Windows Hyper-V in the previous step the default value is as shown above.

The HX Data Platform Installer now connects to UCS Manager and lists the relevant servers for the HX Cluster. The HX Data Platform Installer now validates UCS Firmware etc.

- Validate the selected servers and click **Continue**.
- Complete the network information as you have done in the chapter: **Cisco UCS Manager Configuration using HX Data Platform Installer** and ensure the data is the same. Click **Continue** to proceed to next screen.
- Configure Hypervisor Settings. Input the values for the Hypervisor configuration as show below

Field	Description	Example Value
Configure common Hypervisor Settings		
Subnet Mask	Subnet mask for the hypervisor hosts management network	255.255.255.0
Gateway	Default gateway for the hypervisor hosts management network	10.101.251.1
DNS Servers	Comma separated list for the DNS Servers in the AD that the hypervisor hosts are going to be member of.	10.99.2.200,10.992.201
Hypervisor Settings		
Static IP address	Management IP address for each host	10.101.251.41
Hostname	Hostname for each host	HX-Hypv-01

Note If you leave the checkbox **Make IP Addresses and Hostnames Sequential** as checked then the installer will automatically fill the rest of the servers sequential from the first.

Click **Start** to begin the Hypervisor Configuration.

The installation now continues and configures the Hypervisor hosts.

Important Be aware that even if the steps are completed as shown above, the Hypervisor configuration is not completed. The servers are working in the background until the installer reports an overall completion.

Step 2 HX Data Platform Deployment

- You may need to start over because the previous workflow was completed. In the top right corner of the install, select **Start Over**, confirm that you wish to start over.
- In the HX Data Platform Installer **Workflow** page, select **I know what I'm doing, let me customize my workflow**.
- Check the **Deploy HX Software** and **Create HX Cluster** and click **Continue**.
- In the warning message, click **Confirm and Proceed**.
- Domain information, Constrained Delegation, Hypervisor Credentials**. Use the following table to complete the fields in this page.

Field	Description	Example Value
Domain Information		
Domain Name	Active Directory Domain that the cluster will be a part of.	contoso.com

Field	Description	Example Value
HX Service Account	The HX service account that was created in the preinstallation phase. Important Verify that the Active Directory policies allow HX service account to have effective permissions to “ Write servicePrincipalName ” on the computer object created for smb namespace.	hxadmin
Password	Password for the HX service account.	
Constrained Delegation		
HX Service Account and Password	Required for Constrained Delegation.	
Use HX Service Account	Uses the HX service account for Constrained Delegation. The user must be a domain administrator.	Click checkbox if HX service account is provided.
Configure Constrained Delegation now (recommended) or Configure Constrained Delegation later	Select one of the checkboxes. Constrained Delegation is required for VM Live Migration. To configure Constrained Delegation later, use the procedure described in Configuring a Static IP Address for Live Migration and VM Network .	
Advanced Attributes (optional)		
Domain Controller	FQDN for the Domain Controller that you want to use specifically for the installation.	dc.contoso.com
Organization Unit	The OU created during the preinstallation phase can be used here Then, the OU will be the home for the HX nodes in the Active Directory.	OU=HyperFlex, DC=contoso, DC=com
Hypervisor Credentials		

Field	Description	Example Value
Hypervisor Local Administrator User Name	Local administrator username on the Hyper-V hosts	Default username/password: administrator/Cisco123 Important Systems ship with a default password of Cisco123 that must be changed during installation. You cannot continue installation unless you specify a new user supplied password.

Click **Continue**.

- f) **IP Addresses.** Click **Add Server** to add the servers you need for the cluster.

Complete the hostnames for the Hyper-V hosts and the Storage Controllers running on the Hyper-V hosts. These hostnames must be added to forward and reverse look up prior to this step. Remember that only Windows AD Integrated DNS is supported.

Complete the data IP addresses for both the Hyper-V hosts and controller VMs.

Note The management VLAN uses the addresses and Data VLAN does not.

Use the following table to complete the fields in this page.

Field	Description	Example Value
Management		
Cluster Address	Hostname for the HX Connect UI	HX-EAP-01-MGMT
Subnet Mask	Subnet mask for the management VLAN	255.255.255.0
Gateway	Gateway address for the Management VLAN	10.101.251.1
Data		
Cluster Address	IP address for the HX cluster on the Data VLAN	10.101.252.50
Subnet Mask	Subnet mask for the management VLAN	255.255.255.0
Gateway	Gateway address for the management VLAN.	10.101.252.1

Click **Continue**.

Step 3 Cluster Configuration

a) **Cisco HX Cluster Configuration.**

Use the table below to complete the fields in this page.

Field	Description	Example Value
Cisco HX Cluster		
Cluster Name (SMB Access Point)	The cluster name to be used as the FQDN for the datastores.	HX-EAP-01
Replication Factor	Select the number of redundant data replicas across the HX storage cluster. Options are 2 or 3. This cannot be changed after the cluster is created. 3 is recommended for production workloads.	3 (Default Value)
Failover Cluster Name	The name used for the Windows Failover Cluster.	
Controller VM		
Create Admin Password		
Confirm Administrator Password		
System Services		
DNS Servers	Comma separated lists of DNS Servers.	10.99.2.200, 10.99.2.201
NTP Servers	The controller VMs needs must be in sync with Windows Active Directory, therefore you must point to your AD domain controllers for time synchronization.	dc1.contoso.com, dc2.contoso.com
DNS Domain Name	The domain name for the Active Directory.	contoso.com
Timezone	The timezone that you want the HX controllers to report in.	
Auto Support		
Enable Connected Services	Auto Support to ship telemetry data of the HX cluster to Cisco Support.	
Send Service ticket to	Email address or alias to receive a copy of the ticket sent to Cisco.	<i>email_address</i>

Field	Description	Example Value
Advance Networking		
Management VLAN tag	VLAN used for the Management Network. This must be the same as used earlier in the installation process for the management network.	
Data VLAN tag	VLAN used for the Management network. This must be the same as used earlier in the installation process for the data network.	
Advanced Configuration		
Enable Jumbo Frames on Data network	Sets the MTU size for the storage data network on the host vSwitches and vNICs, and each storage controller VM. The default value is 9000. To set your MTU size to a value other than 9000, contact Cisco TAC. Ensure that jumbo frames run on the links connected to the storage VMs.	
Disk Partitions	Removes all existing data and partitions from all nodes added to the storage cluster. You must backup any data that should be retained. Select this option to delete existing data and partitions. This is for manually prepared servers. Do not select this option for factory prepared systems. The disk partitions on factory prepared systems are properly configured.	
VDI	Configures for VDI only environments. To change the VDI settings after the storage cluster is created, shutdown or move the resources, make changes, and restart the cluster.	
Hypervisor Settings		
Primary DNS suffix	Completed in earlier steps in the installation.	

Field	Description	Example Value
Additional DNS suffixes	Complete this field if you need more suffixes appended on your Hyper-V hosts.	

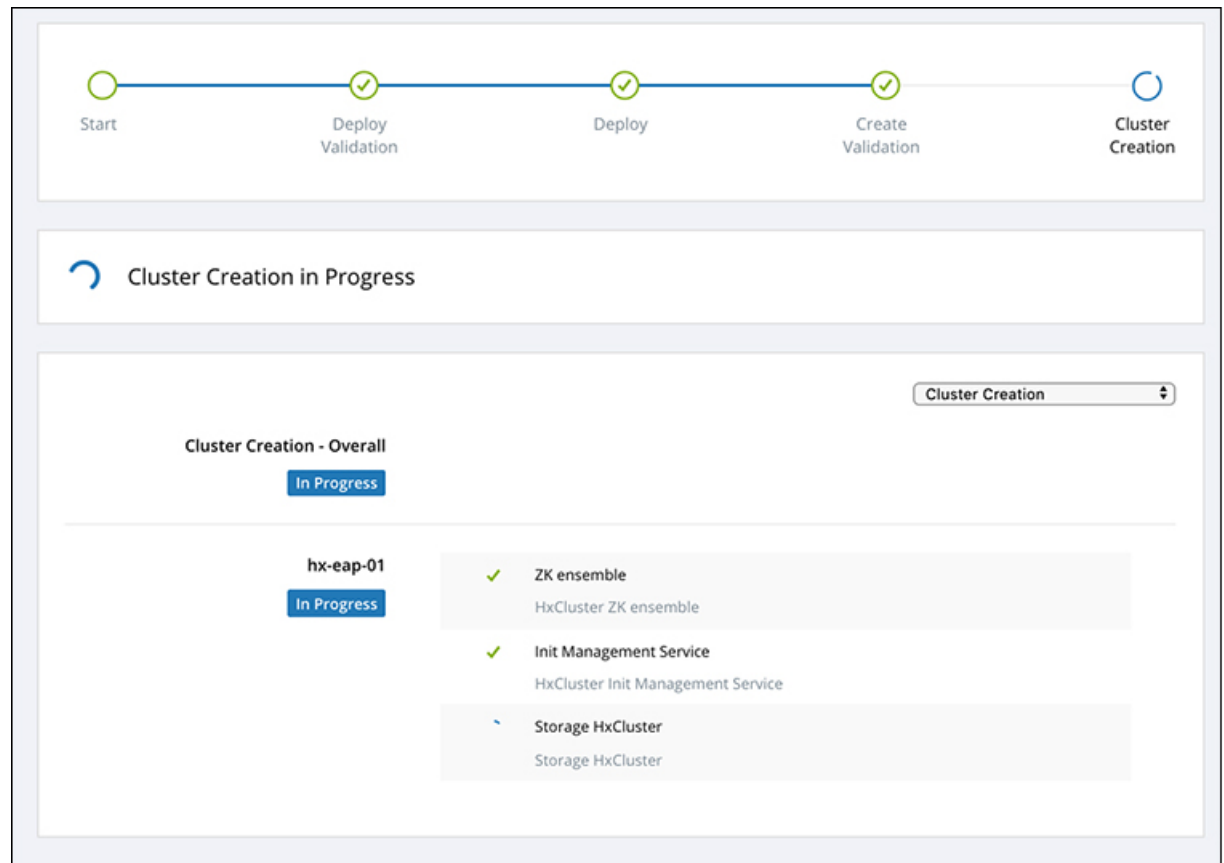
Refer to the illustration below as a sample entries for the various fields in this page.

The screenshot displays the 'Cisco HX Cluster' configuration interface. It is organized into several sections:

- Cluster Name (SMB Access Point):** hx-eap-01
- Replication Factor:** 3
- Fallover Cluster Name:** HX-EAP-CLU01
- Controller VM:** Includes fields for 'Create Admin Password' and 'Confirm Admin Password'.
- System Services:**
 - DNS Server(s):** 10.99.2.200, 10.99.2.201
 - NTP Server(s):** Cicolab.dk
 - DNS Domain Name:** cicolab.dk
 - Time Zone:** (UTC+01:00) Brussels, Copenhagen, Madrid, Paris
- Auto Support:**
 - Auto Support:** Enable Connected Services (Recommended)
 - Send service ticket notifications to:** lagranbe@cisco.com
- Advanced Networking:**
 - Management VLAN Tag:** 2996
 - Management vSwitch:** vswitch-hx-inband-mgmt
 - Data VLAN Tag:** 2997
 - Data vSwitch:** vswitch-hx-storage-data
- Advanced Configuration:**
 - Jumbo Frames:** Enable Jumbo Frames on Data Network
 - Disk Partitions:** Clean up disk partitions
 - Virtual Desktop (VDI):** Optimize for VDI only deployment

On the right side, there is a 'Configuration' sidebar with a 'Start' button at the bottom.

- b) Click **Start** to begin the deployment. The **Progress** page displays the progress of the configuration tasks: Start, Deploy Validation, Deploy, Create Validation, Cluster Creation.



Caution Do not skip validation warnings.
See the **Warnings** section for more details.

c) When the following screen is displayed, the installation process is completed.

Cluster Name **hx-eap-01** ONLINE HEALTHY

Version	3.0.1a-29499	Domain Name	Ciscolab.dk
Cluster Management IP Address	HX-EAP-01-MGMT.Ciscolab.dk	Failover cluster Name	HX-EAP-CLU01
Cluster Data IP Address	10.101.252.50	DNS Server(s)	10.99.2.200, 10.99.2.201
Replication Factor	Three copies	NTP Server(s)	Ciscolab.dk
Available Capacity	6.4 TB		

Servers

Model	Serial Number	Management Hypervisor	Management Storage Controller	Data Network Hypervisor	Data Network Storage Controller
HXAF220C-MSSX	WZP214807SY	10.101.251.41	10.101.251.51	10.101.251.41	10.101.252.51
HXAF220C-MSSX	WZP214807SC	10.101.251.44	10.101.251.54	10.101.251.44	10.101.252.54
HXAF220C-MSSX	WZP214807RI	10.101.251.42	10.101.251.52	10.101.251.42	10.101.252.52
HXAF220C-MSSX	WZP214807RE	10.101.251.43	10.101.251.53	10.101.251.43	10.101.252.53

[Back to Workflow Selection](#)
[Launch HyperFlex Connect](#)

Configuring a Static IP Address on HX Data Platform Installer

During a default installation of the VM, the HX Installer will try and automatically obtain an IP address using DHCP. To ensure that you have the same IP address at every boot, you can assign a static IP address on the VM

Use the following commands to configure your network interface (/etc/network/interfaces) with a static IP address. Make sure you change the relevant settings to suit your network.

Procedure

	Command or Action	Purpose
Step 1	Run the following command: ifdown eth0.	Warning This step ensures that the interface is down before performing the static IP configuration. Failure to do so could lead to issues during the installation process that may require TAC support.
Step 2	Using your favorite editor, edit the /etc/network/eth0.interface file to match your environment. For example, add the following lines in the file:	<pre> auto eth0 # eth0 interface iface eth0 inet static # configures static IP for the eth0 interface metric 100 address XX.XX.XX.XX # Static IP address fr the installer VM netmask 255.255.0.0 # netmask for the </pre>

	Command or Action	Purpose
		Static IP addresss gateway XX.XX.X.X # gateway for the Static IP addresss dns-nameservers XX.XX.X.XXX #DNS name servers used by the HX installer dns-search <DNS_Search_Name>.local # DNS search domain name used by the installer
Step 3	Save the file so that the changes take effect.	
Step 4	Run the following command: ifup eth0	
Step 5	Reboot the installer VM.	