# ESXi upgrade to 7.0 U2 via HX Connect or Intersight fails with "CPU\_SUPPORT WARNING"

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## Introduction

This document describes the process to upgrade ESXi to 7.0 U2 which can fail on servers running older generation Central Processing Units (CPU).

## **Background Information**

The upgrade initiated through HX Connect or through Intersight displays the failure message: "Failed to apply profile HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5" or "CPU\_SUPPORT WARNING: The CPU in this host may not be supported in future ESXi releases. Please plan accordingly" .

The Hyperflex Data Platform (HXDP) versions required to hit this issue are:

HXDP 4.5(2a)

HXDP 4.5(1a)

HXDP 4.0(2f) and below that support ESXi 7.0 U2

## Problem

Upgrade attempt to ESXi 7.0 U2 via HX Connect or Intersight on servers running older generation CPUs, notably the Sandy Bridge-EP (E5-2600), Ivy Bridge-EP (E5-2600v2), and Haswell EP (E5-2600v3) CPU families. See VMware KB for full details on the processors impacted by this compatibility check: <u>VMware knowledge base</u>.

Image: Image	$\leftarrow \rightarrow C$ A Not s	<pre>acure /#/clusters/1/upgrade?upgradeType=CLUSTER_UPGRADE_HXDP_AND_HYPERVISOR</pre>		Q	☆	*	-	:
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Cluster Time : 07/08/2021 12:44:11 AM PD

### HX connect error message

=	cisco Intersight	Requests > Upgrade HyperFlex Cluster > Update node	ucs54 ▲ 36 ⊡ @ @	
<u>080</u>	MONITOR	Details	Execution Flow	
ø	OPERATE ^	Status E Falled	🖸 ucs 🚛 Update Host OS	
	Servers	Name Update node ucs	Node upgrade failand: Failed task - Failed to Upgrade Hypervisor: Failure reason – Failed to Upgrade Hypervisor (Fairdware/Eroph Hairdware precheck of 7 002-71872357-100-20 zutann 7-2.0.5 failed with warnings. cPUF_SUPPORT WARHING: The OPU in this host may not be supported in future ESX release accordingly-in n Apply –no-hardware-warning option to ignore the warnings and proceed with the transaction.n Piease refer to the log file for more details	profile HX-ESX)- es. Please plan L.
	Chassis Fabric Interconnects	Target Type HyperFlex Cluster Node	⊘ ucs : I: Update Vibs	
	HyperFlex Clusters	Target Name UCS Source Type HyperFlex Cluster Profile	Sucs- 1: Enter Host Maintenance Mode Ju	
×	CONFIGURE ^	Source Name ucs _cluster	⊘ ucs Validate DRS is Enabled and Fully Automated Ju	
	Profiles	Initiator Start Time Jul 13, 2021 11:09 PM	Sucs 1: Run Post Node Relinquish Task	
	Templates	End Time Jul 13, 2021 11:35 PM	⊘ ucs-III: Upgrade HXDP Ju	
	Policies	Duration 26 m 11 s	Sucs- 1: Enter HODP Maintenance Mode	
ē	ADMIN ^	Organizations default	ucs I: Collect Preconditions for Upgrade	
	Targets			
	Software Repository			

## Solution

### Scenario A. HXDP + ESXi Combined Upgrade From HX Connect User Interface

For this scenario, you upgrade HXDP to 4.5(2a) and ESXi to 7.0 U2 Build 17867351.

Step 1. Upgrade HXDP Only first.

Step 1.1. Download HXDP package via <u>https://software.cisco.com/download/home/286305544/type/286305994/release/4.5(2a)</u> as shown in the image:

← → C							
Downloads Home / Hyperconverged Infrastru	cture / HyperFlex HX Data Platform / HyperFlex HX Data Platform- 4.5	(2a)					
Q     Search       Expand All     Collapse All       Suggested Release     V	HyperFlex HX Data Platform Release 4.5(2a) My Notifications	Related Links Recommended So Release Note for 4	and Documentation ftware Releases .5(2a)				
4.0(2f) 😪							
Latest Release V	Cisco strongly recommends following the Cisco HyperFlex R	Recommended Softwa	re Release Page to select the be				
4.5(2a)	version for your mx-series system.						
4.0(2f) 😒	File Information	Release Date	Size				
3.5(2i)	Cisco HyperFlex Data Platform Installer for VMware ESXi Cisco-HX-Data-Platform-Installer-v4.5.2a-39429-esx.ova	30-Jun-2021	3528.53 MB				
2.6(1e)	Advisories 📑						

Step 1.2. Open the HX-Connect, choose **Upgrade**, check the **HX Data Platform** checkbox, upload the package, enter the **Username** and **Admin Password** for **vCenter Credentials** and click **Upgrade** as shown in the image:

$\leftarrow \  \  \rightarrow \  \  C$	A https://10         .98/#/clusters/1/upgrade?upgradeType=CLUSTER_UPGRADE_HXDP	67% 🖒	
≡ esco HyperFlex Connect	UC -CL	Q1   ∰   @1   ⊘	0
Dashboard     MONITOR     Alarms	CLUSTER UPGRADE ELIGIBILITY No Results	Test Upgrade Eligibility	
순 Events	Select Upgrade Type	Progress	
ANALYZE	UCS Server Firmware ()		
PROTECT PROTECT PROJECTION MANAGE System Information	storfs-packages-4.5.2a-39429 file is uploaded  Current NODP version: Version(4.5.2a-39429) Current Guater details Current Robalds Current Catalog version: 1 Current Catalog version: 1 Current Catalog version: 1	Version(4.5.2-39429) Current catallig details Bundle version: 4.5.2a	+39429
Datastores  ISCSI  Virtual Machines  Upgrade	ESXI Secure Boot mode ©		
>_ Web CLI  Kubernetes	vCenter Credentials     Admin password       Username     Admin password       administrasor@vsphere.local     Image: Control of the second secon		

HX connect upgrade HXDP

Once the upgrade is complete, proceed to Step 2.

Step 2. Open the HX Connect, choose **System information > Nodes**, choose the node which you want to upgrade Esxi on and click **Enter HX Maintenance Mode** as shown in the images.

← → C /	Not secur	re   10							९ 🖈 🛔 😩 :
= the Hyperflex Connect				UC 4	α				
Deshooerd	System Overview	Nodes Disks							Last refreshed at 07:08:2021 12:46:59 RV
MONITOR	© Enter HX Main	tenance Mode 😔 Exit HX Maintenance	Mode						₫ ~ Filter
Alarms	Node	<ul> <li>Hypervisor Address</li> </ul>	Hypervisor Status	Controller Address	Controller Status	Model	Version	Disks	Command Line Mode
∯ bers	219	10 64	Online	10 168	Online	H0220C-M45	4.5(28)	1	Root shell ①
E sand	220	10. 65	Online	10 169	Online	H0220C-M45	4.5(2#)		Root shell ①
La Performance	221	10 66	Online	10 70	Online	H0220C-M45	4.5(2a)		Root shell ①
PROTECT	1 - 3 of 3								
MANAGE									
System Information									
E Decessores									
63 BCH									
U Virtual Machines									
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### HX connect nodes

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= -de-the HyperFlex Connect			UC -CL			
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Alarms	Node ^ Hypervisor Address	Hypervisor Status	Co (1) atus	Model	Version	Disks
Activity	-219 10 1.64 -220 10 65	Online	10 HX Maintenance Mode ensures that the entire hyperconverged node, including the host, enters	HX220C-M45	4.5(2a) 4.5(2a)	8 8
ANALYZE	221 10. ).66	Online	maintenance. A host in Maintenance Mode is enabled but does not perform any function on virtual machines, including	H0220C-M45	4.5(2a)	8
PROTECT	1 - 3 of 3		verbal mechine provisioning. Virtual mechines running on the host entering Maintenance Mode may need to be powered off or migrated manually to different hosts. The Enter HX Maintenance mode task different hosts.			
MANUACE           System Information           Destectores           GCSI           Virtual Machines           Virtual Machines           Virtual Machines           Virtual Machines           Upgrade           Luberneties			over inocomplete, provide all of monthly sinual in advinus powers of AT on program. Do you want to put the selected host in HX Maintenance Mode? Concel Enter HX Maintenance Mode			

HX connect maintenance mode popup

You can see the activity complete under the **Activity** tab as shown in the image:

← → C 🚺	Not secure   10. 98/#/clusters/1/activity			Q	$\dot{\mathbf{x}}$	*	
= the Hyperflex Connect		uc -a.		0 🔺 1		001	0
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MONITOR Alerms	Activity @Montor progress of recent tasks on the HK storage duster.			Lettrafte	ened at 010	08/2021 12:4	8-20 911
☆ Events	<ul> <li>Colapse All</li> </ul>						
Activity	Validate enter maintenance mode for node >219						
ANALYZE	Sanut Success 07/08/0021 12:48:45 PM	Recalled savids check	Dream mainteenance mode sask is not running for other nodes and for other site nodes in strench cluster				
🕼 Performance		vCenter availability check	<ul> <li>Cluster should be registered with sCenter</li> </ul>				
PROTECT		vCenter reachability check	✓ = vCenter is reachable from vCenter				
Replication		Maintenance mode state theck	<ul> <li>Check the node is not in maintenance mode</li> </ul>				
MANAGE		Wit Migration check	<ul> <li>Check VM Migration is enabled in all nodes</li> </ul>				
System Information		Ousser health check	<ul> <li>Allow maintenance mode only for healthy duster</li> </ul>				
E Detastores		Nodes availability check	Check number of nodes available to subrate this node into maintenance mode				
E) (6CS)							
Virtual Machines	<ul> <li>Enter maintenance mode for node -219</li> <li>Status: Success</li> </ul>						-
T Upgrøde	07/08/2021 12:48:45 PM	Eren warrenande wope	<ul> <li>Validare enter maintenance mode for node uct-219</li> <li>Parallel lasks check: Driver maintenance mode lask is not numling for other nodes and for other site nodes in stretch cluster</li> </ul>				
>_ Web CU			<ul> <li>VCenter availability check. Outlan should be registered with vCenter</li> <li>vCenter reachability check. vCenter is reachable from vCenter</li> </ul>				
Kubernetes			<ul> <li>Maintenance mode state check; Check the node is not in maintenance mode</li> </ul>				
			<ul> <li>Vitil tinguation check: Check Vitil tinguation is enabled in all notes</li> <li>Cluster health check. Allow maintenance mode only fair healthy cluster</li> </ul>				
			<ul> <li>Nodes availability sheck. Check number of nodes available to sulerate this node into maintenance mode</li> </ul>				
		Enter vCenter Mantenance mode	Initiate the enter maintenance mode in vCenter				
		was to sM registion to be completed	Whengration will take time based on number of user VMs				
		terriquish the rode	Shutting down storts pracefully				
		Power of controller VM	<ul> <li>Powering off the controller VM</li> </ul>				
		vCenter mantenance mode Leok	<ul> <li>Waiting for maintenance mode task to be completed in vCenter</li> </ul>				

HX connect Activity tab

Step 3. Secure Shell (SSHI) into the ESXi host placed into Maintenance Mode as root.

Step 4. Create a folder and upload ESXi package into it.

Step 4.1. Run the command: mkdir /hxpatch

Step 4.2. Create a ramdisk to store package with the command: **esxcli system visorfs ramdisk** add -m 500 -M 500 -n hxpatch -t /hxpatch -p 0755.

Step 5. Download ESXi-7.2.0.5 package from cisco downloads to a local repo with the link <u>https://software.cisco.com/download/home/286305544/type/286305994/release/4.5(2a)</u> as shown in the image:



Step 5.1. Copy package from the local repo to */hxpatch* folder. The example below uses WinSCP:

Local Mark Files Commands Session Options Rem	ote Help							
🕀 🔀 🔯 Synchronize 🛛 🐺 💽 🛞 📦 Queue	<ul> <li>Transfer</li> </ul>	Settings Default	• <i>ฮ</i> •					
🖵 root@1( 65 × 🔛 New Session								
🖹 My documents 🔹 🚰 • 🕎 •  🖬 🕥 🏠 🎜 🍡	$\left[ \left\langle \varphi \right\rangle + \left\langle \varphi \right\rangle \right\rangle$			📕 hxpatch 🔹 🚰 • 🛐	- 🖬 🗖	🏠 🎜 🖻 🕅 Find Files	<b>→</b> • • •	
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C:\Users\admin\Documents\				/hxpatch/				
Name Image: MobaXterm MobaXterm HX-ESXI-7.0U2-17867351-Cisco-Custom-7.2.0.5-up	Size 2 KB 13 KB 12 KB 382,244 KB 6 KB 1 KB 59 KB	Type Parent directory File folder Windows Power Text Document Compressed (zi PY File TGZ File	Changed 7/7/2021 12:10:48 PM 7/7/2021 7:29:03 PM 12/10/2020 11:49:46 PM Uploading File: HX-ESXI-7.0U2 Target: /hxpatch/ Time left: Calcu Bytes transferred: 13	Name Name Reference Name Reference R	Size	Changed 7/8/2021 1:19:04 PM	Rights rwxr-xr-x	Owner root

Step 6. SSH back into the host in maintenance mode.

Step 7. Run this command in order to view the package profile details: **esxcli software sources profile list --depot=/hxpatch/HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5-upgrade-bundle.zip** as shown in the image:

[root@220:/hxpatch] esxcli software sour	ces prof	ile listdepot=/	hxpatch/HX-ESXi-7.0U2	-17867351-Cisco
Name	Vendor	Acceptance Level	Creation Time	Modification T
ime				
HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5	Cisco	PartnerSupported	2021-04-29T18:21:43	2021-04-29T18:
21:43 [root@220:/hxpatch]				

Step 8. Run this command to upgrade ESXi package to 7.0 U2:

```
esxcli software profile update --allow-downgrades -d /hxpatch/HX-ESXi-7.0U2-17867351-Cisco-
Custom-7.2.0.5-upgrade-bundle.zip -p HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5 --no-hardware-
warning
```

Step 9. Reboot the host.

Step 10. SSH into the host and verify the version with the command: vmware -v.



Step 11. Exit the node from maintenance mode and wait for the cluster to become healthy.

Step 11.1. Open the HX-Connect, choose **System Information> Nodes**, choose the node in maintenance mode and click **Exit HX Maintenance Mode** as shown in the images:



HX connect Nodes

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= text Hyperflex Connect			UC 4	α				₽ <b>▲</b> 1   🕅   ⊗   ⊙   .
Deshooerd	System Overview Nodes Disks							Last vehicles at 61/08/2021 1246/59 RV
Alarms	O Enter HX Maintenance Mode     O Exit HX Maintenance Mode     Node     Node     Hypervisor Address	Hypervisor Status	Controller Address	Controller Status	Model	Version	Disks	Command Line Mode
☆ Evens	219 10 64	Online	10 60	Online	H0220C4M45	4.5(28)		Root shell ①
ANALYZI	220 10. 65	Online	10 169	Online	H0220C-M45	4.5(2#)	8	Root shell ①
	1-3of3							
VILLE System Information Statestres Control Ville Vil								

### HX connect Exit MM

Step 11.2. The HX Connect Dashboard shows you the Operational Status, it must be **Online**, and the Resiliency Health must be **Healthy**.

≡ <sup>altala</sup> HyperFlex Connect		and and a second s	4 💷 菌 💷 O &
Dashboard	OPERATIONAL STATUS Online ©	① Clus	ster License not registered
Alarms	RESILIENCY HEALTH Healthy ①	✓ 1 N	ode failure can be tolerated
録 Events	CAPACITY 6 TB	1.2%         STORAG           71.2 GB Used         6 TB Free         OPTIMU	E Compression 77%

Step 12. Repeat steps 2-11 on all nodes which are part of the cluster, one at a time.

Once the ESXi upgrade is complete, you can see the version details on the Keyboard, Video, Mouse (KVM) console of the HX Server as shown in the image:

CISCO. UCS KVM	
KVM Console Properties	
	VNware ESXi 7.0.2 (VNKernel Release Build 17067351)
	Cisco Systems Inc 100200C+MIS
	2 x Intel(R) Xeon(R) CPU E5-2600 v3 0 2.50GHz 303.9 GiB Memory

You can also verify within HX Connect that the new ESXi version is present on the **System Information** tab as shown in the image:

$\leftarrow$	$\rightarrow$ (	C	0 8	https://10.98////clusters/1	/servers?tab={"id":"Server","	index":0}			☆		$\bigtriangledown$	=
=	.1 1.1 1. CISCO	HyperFlex Connect			UC	-CL		₽ ▲1	Ê	۲	0	ھ
0	Dashb	ooard	î	Hyperconverged Nodes			Disk Viev	v Options ~	Dis	k View Le	gend	
MON	UTOP			Node	Hypervisor	HyperFlex Controller	Disk Overview (8 in t	ise ) 8				
0	Alassa	-		-219	🥝 Online	Online						
4	Alarm	5		HX220C-M4S	10. 64	10	o /					
ជ	Events	s			6.7.0.17499825	4.5.2a-39429		_				
Û	Activit	У										
				Node	Hypervisor	HyperFlex Controller	Disk Overview (8 in t	ise )				
ANA	LYZE			-220	🥝 Online	🥝 Online						
Lala	Perfor	mance		HX220C-M4S	10. 65	1069						
PRO	TECT				7.0.2-17867351	4.5.2a-39429	0 /	_				
ſ	Replic	ation										
				Node	Hypervisor	HyperFlex Controller	Disk Overview (8 in t	ise)				
MAN	AGE			-221	🕗 Online	🥝 Online						
E	Syster	n Information		HX220C-M4S	1066	10						
	Datast	tores	~		6.7.0-17499825	4.5.2a-39429	• •					

HX connect updated Esxi

### Scenario B. HXDP + ESXi Combined Upgrade From Intersight

For this scenario, you upgrade HXDP to 4.5(2a) and ESXi to 7.0 U2 Build 17867351 from Intersight.

Step 1. If one of the HX servers is in maintenance mode, then reboot this server through vCenter or ucs KVM console.

✓ ① 221_dc	C Deploy OVF Template	Adapter
✓ [[] 221_cl	⊘ New Resource Pool	el: USB Storage Controller
-219.eng.storvisor.com	P+	♦ vmhba32
-220.eng.storvisor.com	Bå New VApp	el: Wellsburg AHCI Controller
-221.eng.storvisor.com (Maintenance Mode)	Import VMs	⟨→ vmhba0
∯ stCtIVM- ∰ stCtIVM-	Maintenance Mode	¢ vmhba1
☐ stCtIVM-	Connection •	
di -clone1	Power	Power On
Cone10	Certificates	Enter Standby Mode
-clone3	Storage	• 🕃 Shut Down
-clone4	🔮 Add Networking	🖉 Reboot
-clone6	Host Profiles	
Cone7	Export System Logs	-
ciones	Reconfigure for vSphere HA	
-∨M	🖎 Assign License	

Step 2. Once the Server has been rebooted, exit HX Maintenance Mode from the HX Connect UI. Open the HX-Connect, select **System Information > Nodes**, choose the node in maintenance mode and click **Exit HX Maintenance Mode**.

Step 3. Allow a few minutes for the Hyperflex Cluster to complete healing. The HX Connect **Dashboard** shows you the Operational Status, it must be **Online**, and the Resiliency Health must show **Healthy**.

≡ <sup>allate</sup> HyperFlex Connect		and the second s	0 🗊 🛍 💷 O 🖉
Dashboard	OPERATIONAL STATUS Online ©	© Clu	uster License not registered
Alarms	Healthy ©	✓ 1 N	lode failure can be tolerated
Activity	CAPACITY 6 TB	1.2%         STORA           71.2 GB Used         6 TB Free         OPTIM	GE Compression 77% IZATION Deduplication 0%

Step 4. Open Intersight, choose **Upgrade**, click **Expert Mode > Upgrade HyperFlex Data Platform** as shown in the images:

≡	cisco Intersight	OPERATE > HyperFlex Clusters Q 🖬 53 🔺 35 🕞 Q	<b>0</b> 0
ele	MONITOR	Clusters Backups	
Ŷ	OPERATE ^		
	Servers	× All Chasters ⊚ +	
	Chassis	···· Ø 4. Add Hitter	Nage [C] [ ] of
	Fabric Interconnects	Health Connection Storage Utilization Capacity Runway Types	HyperFlex Version
	HyperFlex Clusters	UNCOR EX. 1 UNCOR EX. 1 1 + Hybrid T	· · · ·
×	CONFIGURE ^		
	Profiles	Name : Health : Type : Hyper_ : Storage Cap_ Stora_ : Storage Utilization Trend () :	Capacity_ () :
	Templates	chust © Healthy HyperFlex_ 4.0(2f) 6.0 - 1.0% 0.0	Unknown
	Policies	···· 🖉 Selected 1 of 1 Show Selected Unselect All	K < <u>1</u> of
	Pools	Upgrade	
æ	ADMIN ^	Run Health Check	
	Targets		
	Software Repository		



<u>01</u> 0	MONITOR	⊡ Progress	Step 2	
θ	OPERATE ^		Compatibility Check	
	Servers	Version Selection	Ensure all clusters meet the upgrade requirement If any cluster does not meet the pre-upgrade	B.
	Chassis	Computibility Check	requirements, unselect the cluster and continue w the upgrade.	ith
	Fabric Interconnects	Summary		
	HyperFlex Clusters		All clusters meet upgrade requirements	
×	CONFIGURE ^			
	Profiles		1 items found 10 v per page 1 of 1	
	Templates		Q.         Add Filter	
	Policies		Name HyperFlex Data Platf Hypervisor	
	Pools		cluster 4.0.2f-35930 🛞 VM/ware ESXi 6.7.0 U3 (17	499825)
Ð	ADMIN ^		Selected 1 of 1 Show Selected Unselect All K C 1	of1 2 2
	Targets			
	Software Repository			



Step 3 Summary

Target Version		
HyperFlex Data Platform Version 4.5(2a)-39429		
Clusters to be upgraded 1		
	Upgrade (1 HyperFlex Cluster)	
	Upgrade starts immediately on all selected clusters. When the data path	
	two node clusters, the migration of VMs will be attempted automatically. For three node or larger clusters, enable and set DRS to fully automatic	
_cluster	mode. If DRS is not available, manually migrate the VMs when prompted, to ensure that the upgrade can continue.	ire ESXi 6.7.0 U3 (17499825)
	Canad	

Step 5. You can observe the Upgrade start and then finish:

=	cisco Intersight	Requests > Upgrade HyperFlex Cluster	¢ ■ x ▲ x   B   4,   Ø   C	
th	MONITOR	Details	Execution Flow	
θ	OPERATE ^	Status © Success	😔 🚾 220: Cleanup tasks after upgrade Jul 1	
	Servers Chassis	Name Upgrade HyperFlex Cluster ID 60er36d8696/6e2d3071e9db	O 217: Cleanup tasks after upgrade Jul 1	
	Fabric Interconnects	Target Type HyperFlex Cluster	O 221: Cleanup Laska after upgrade Jul 1	
	HyperFlex Clusters	Target Name	Running Cluster Post-Upgrade Hooks     Jul 1	
×	CONFIGURE ^	220 Source Type HyperFlex Cluster Profile	C 220. Update node View Execution Row Jul 1	
	Profiles	Source Namechuster	S 21% Update node View Execution Row Jul 1	
	Templates	Initiator Start Time Jul 14, 2021 12:11 PM	S 221: Update node View Execution Flow Jul 14	
	Policies	End Time Jul 14, 2021 2:10 PM Duration 1 h 59 m 25 s	S 220: Run Node Level Validations for Upgrade Jul 14	
æ	ADMIN ^		- O 219: Run Node Level Validations for Upgrade Jul 14	
	Targets	Organizations default	221: Run Node Level Validations for Upgrade Jul 14	
	Software Repository		Run Validations for Upgrade     Jul 14	

Step 6. Start the ESXi upgrade for each server. Copy the ESXi 7.0 U2 upgrade bundle to the ESXi hosts.

Step 6.1. Download the ESXi 7.0U2 upgrade bundle from cisco downloads with the link: <u>https://software.cisco.com/download/home/286305544/type/286305994/release/4.5(2a):</u>

CISCO HX Custom Image for ESXi 7.0 U2a Offline Bundle for	30-Jun-2021	373.28 MB	± 👾 🖿
Upgrading from prior ESXi versions			- ··· <b>-</b>
HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5-upgrade-bundle.zip			
Advisories 📑			

Step 6.2. On each ESXi host, copy the ESXi 7.0U2 upgrade bundle into an available datastore directory (use methods such as scp, wget). Once complete, you must see:

```
[root@ucs-221:/vmfs/volumes] pwd
/vmfs/volumes
[root@ucs-221:/vmfs/volumes] ls
                                                           60ee5dfc-6f05dc8b-05cf-0025b5b1a116
MyDataStore
60ef8a79-63aadd3f-ee0d-0025b5b1a116
                                                          BOOTBANK2
SpringpathDS-FCH2008V1M1
. .
[root@ucs-221:/vmfs/volumes] cd MyDataStore /
[root@ucs-221:/vmfs/volumes/ac08f584-9a2f8a67] ls -al
total 0

      drwx-----
      1 root
      root
      686 Jul 14 05:19 .

      drwxr-xr-x
      1 root
      root
      512 Jul 15 01:21 ..

      -rw-r--r--
      1 root
      root
      391417386 Jul 15 00:55 HX-ESXi-7.0U2-17867351-Cisco-Custom-

7.2.0.5-upgrade-bundle.zip
drwxr-xr-x 1 root root
                                                  2793 Jul 14 20:03 ucs221-VM
```

[root@ucs-221:/vmfs/volumes/ac08f584-9a2f8a67] pwd

/vmfs/volumes/ MyDataStore

Step 7. Open the HX-Connect, choose **System information > Nodes**, choose the node which you want to upgrade Esxi on and click **Enter HX Maintenance Mode** as shown in the images:

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= the Hyperflex Connect				UC -	α				Q 🔺 1	<b>n</b>	0 0	a
Deshboard	System Overview	w Nodes Disks							Last refreshed at 0	1 (08-2021 I	246 59 91/	
MONITOR	⊙ Enter HX Main	ntenance Mode G Exit HX Maintenance	Mode						œ⊻ R	ber		
Q. Alerms	Node	^ Hypervisor Address	Hypervisor Status	Controller Address	Controller Status	Model	Version	Disks	Command Line Mode			
12 Diens	219	10 64	Online	10 68	Online	H0220C-M45	4.5(2a)		Root shell ①			
ANALYZÍ	220	10. 65	Onine	10 169	Online	HX220C4M45	4.5(2a)		Root shell ①			
a Performance	221	10 66	Online	10 70	Online	H0220C-M45	4.5(2a)		Root shell ①			
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MANAGE												
System Information												
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#### HX connect Nodes



You can see the activity complete under the Activity tab as shown in the image:

← → C /	Not secure   10. 98/#/clusters/1/activity			Q	☆	*	
= text Hyperflex Connect		UC -CL		0 🔺 1		801	0
O Deshboard	Filter Filter Isted tasks						
MONITOR Q Alerms	Activity @Monitor progress of recent tasks on the HK storage cluster.			Lastrates	res es 014	28-2021 12-4	8 20 PH
☆ Events	~ Collepse All						
Activity	Validate enter maintenance mode for node >219						
ANALYZE	Status: Success	Parallel sails check	Onser maintenance mode task is not numring for other nodes and for other site nodes in strench cluster				
a Performance	000000001120000000	vCenter availability check	Charaer should be regionred with of senser				
PROTECT		vCenter reachability check	✓ «Center is reachable fram «Center				
Replication		Maintenance mode state check	Check the node is not in maintenance mode				
MANAGE		VM Mgration check	<ul> <li>Check VM Migration is enabled in all nodes.</li> </ul>				
System Information		Ouster health check	<ul> <li>Allow maintenance mode only for healthy duster</li> </ul>				
E Detastores		Nodes availability check	Oteck number of nodes available to tolerate this node into maintenance mode				
E) (6CS)							
Virtual Machines	<ul> <li>A Enter maintenance mode for node -219</li> <li>Strand Success</li> </ul>						
1 Upgrade	07/08/2021 12:48:45 PM	Ercer Maintenance Wode	<ul> <li>Validate enter maintenance mode for node ucs 219</li> <li>Peruted sails check finite maintenance mode seal is not surviva for other nodes and for other site nodes in scretch choicer</li> </ul>				
> Web CU			<ul> <li>vCenter availability check: Outlan should be registered with vCenter</li> </ul>				
Kubernetes			<ul> <li>Verman neurbability check, vCentar II insubable trum vCentar</li> <li>Maintenance mode state check, Check the node is not in maintenance mode</li> </ul>				
-			<ul> <li>VM Migration check: Check VM Migration is enabled in all nodes</li> <li>Custer health check: Allow maintenance mode only for healthy cluster</li> </ul>				
			<ul> <li>Nodes availability check. Check number of nodes available to talerate this node into maintenance mode</li> </ul>				
		Enter «Center Maintenance mode	<ul> <li>Initiate the enter maintenance mode in vCenter</li> </ul>				
		Wait for VM erigration to be completed	<ul> <li>With migration will take time based on number of user VMs</li> </ul>				
		Belinquich the node	<ul> <li>Shutting down stoch, gracefully</li> </ul>				
		Power off controller VM	<ul> <li>Powering off the controller VM</li> </ul>				
		oCenter mantenance mode task	<ul> <li>Waiting for maintenance mode task to be completed in ofercer</li> </ul>				

Step 8. SSH into the ESXi host which is in HX Maintenance Mode.

Step 8.1. Find the upgrade bundle profile name:

```
[root@abcd-221:/vmfs/volumes/ac08f584-9a2f8a67] esxcli software sources profile list --
depot=/vmfs/volumes/0714051143/HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5-upgrade-bundle.zip
Name Vendor Acceptance Level Creation Time
Modification Time
HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5 Cisco PartnerSupported 2021-04-29T18:21:43
2021-04-29T18:21:43
```

Step 8.2. Execute the upgrade command with the **no-hardware-warning** parameter specified:

```
[root@abcd-221:/vmfs/volumes/ac08f584-9a2f8a67] esxcli software profile update --
depot=/vmfs/volumes/0714051143/HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5-upgrade-bundle.zip --
profile HX-ESXi-7.0U2-17867351-Cisco-Custom-7.2.0.5 --no-hardware-warning
```

#### Step 8.3. You see a success message once the upgrade completes:

Update Result Message: The update completed successfully, but the system needs to be rebooted for the changes to be effective. Reboot Required: true Step 9. Reboot the host.

Step 10. Log in into the ESXi host and verify the new version with the command: vmware -v.

The time and date of this login have been sent to the system logs. WARNING: All commands run on the ESXi shell are logged and may be included in support bundles. Do not provide passwords directly on the command line. Most tools can prompt for secrets or accept them from standard input. VMware offers supported, powerful system administration tools. Please see www.vmware.com/go/sysadmintools for details. The ESXi Shell can be disabled by an administrative user. See the vSphere Security documentation for more information. [root@ -220:~] vmware -v VMware ESXi 7.0.2 build-17867351 [root@ -220:~]

Step 11. Once the Server has been rebooted, exit **HX Maintenance Mode** from the HX Connect UI. Open the HX-Connect, choose **System Information > Nodes**, choose the node in maintenance mode and click **Exit HX Maintenance Mode** as shown in the images:





Image: Properties Concret         Im	
O         Destroard         System Overview Notes         Data         Converview of CP02211/12/13/13/13/13/13/13/13/13/13/13/13/13/13/	s
NONTOR         © Enter HK Mattemanie Mode         © Enter HK Matteman	
Atoms         Node         Hypervisor Address         Hypervisor Status         Controller Address         Controller Address         Controller Address         Model         Vertion         Disks         Command Line Mode           ©         Levins         219         10         64         Online         10         60         Model         4202         4508         8         Accessed           Aktivitie         220         10         65         Online         10         60         Model         4020C4MS         4508         8         Accessed         Accessed         Accessed         5000 Pell         50	
①         Dents         219         10         64         Online         10         66         Online         H0220CM45         4.52e)         B         Root shell ①           AxXVII         220         10         65         Online         10         60         H0220CM45         4.52e)         B         Root shell ①	
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#### HX connect exit MM

Step 12. Allow a few minutes for the Hyperflex Cluster to complete healing. The HX Connect **Dashboard** shows you the Operational Status, it must be **Online**, and the Resiliency Health must show **Healthy**.

≡ <sup>editale</sup> HyperFlex Connect		Reveal of	Q 💼 🗎 💷 O 🛇 &
Dashboard	OPERATIONAL STATUS Online ©	<ul> <li>Cluster</li> </ul>	License not registered
Alarms	RESILIENCY HEALTH	✓ 1 Node	failure can be tolerated
유 Events	Сарасіту 6 тв	1.2%         STORAGE           71.2 GB Used         6 TB Free         OPTIMIZATI	ION (77.0%) Compression 77% Deduplication 0%
ANALVIE			

Step 13. Repeat Steps 6.-12. for each ESXi host 1 at a time. Ensure that the cluster state shows **Healthy** before you move on to the next node.