# **Configure Data Protection in Hyperflex**

## Contents

Introduction
Prerequisites
Requirements
Components Used
Background Information
Additional Background Information
Procedure
Protection Group Considerations
Troubleshoot
Verify VM Protection Configuration
Monitor Replication Activities
Common Issues
Pair Issues
Connectivity Issues
Protection Issues
Related Information

## Introduction

This document describes how to configure replication in Hyperflex.

## Prerequisites

#### Requirements

Cisco recommends that you have knowledge of these topics:

- Unified Computing System Manager (UCSM)
- HyperFlex
- vCenter
- Networking
- DNS

#### **Components Used**

The information in this document is based on these software and hardware versions:

- HyperFlex Connect 5.0.2d
- Hyperflex Stretch Cluster
- Hyperflex Standard Cluster
- UCSM 4.2(11)
- vCenter 7.0 U3



**Note**: For the Data protection is required to have the same Hyperflex Data Platform version in both clusters, cluster can be different in size and type.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

## **Background Information**

Hyperflex Data Protection provides you with a disaster recovery plan. It allows you to have automatic snapshots that are replicated to remote cluster. Snapshots for the protected virtual machines are sent to the remote cluster depending on the frequency configured in the cluster. Nevertheless, only most recently taken snapshot remains on the destination cluster.

#### **Additional Background Information**

- It is a best practice when configuring IP range, to allocate more IPs than nodes present in the cluster in case that an expansion is planned for the future.
- MTU must be the same in both ends.

• Replication network must use the same IP subnet in both clusters along the same VLAN.

## Procedure

Step 1. Log into the Hyperflex system and go to the **Replication** option in the left action pane:

≡ <sup>-doulo</sup> HyperFlex Connect		3 🛆	Â	<b>₽</b> 2 (	⊚   (	୭ାଛ
② Dashboard	REPLICATION CONFIGURATION + Configure Network					
MONITOR Q Alarms	CLUSTER PAIRING Pair Cluster					
습 Events						
ANALYZE						
PROTECT						
MANAGE						
System Information Datastores						
<ul> <li>ISCSI</li> <li>Virtual Machines</li> </ul>						
✓ Upgrade ✓ Web CLI						
Kubernetes						



Step 2. Click on the **Configure Network** option, and fill the information for each of the fields and click **Next**:

② Dashboard	REPLICATION CONFIGURATION    Configure Network	Configure Replication Network		08	Actions	~
MONITOR Q Alarms	CLUSTER PAIRING Pair Cluster	VLAN Configuration	IP & Bandwidth Configuration Test Config	uration		
순 Events Activity		Select an existing VLAN     Create a new VLAN				
ANALYZE		VLAN ID VLAN Name				
PROTECT Replication		UCS Manager host IP or FQDN				
MANAGE  System Information		User name Password		0		
Datastores			Cancel	Next		
↓ Virtual Machines     ↓     ✓     ↓     ✓     ↓     ✓     ↓     Upgrade						
Web CLI     Kubernetes						

Configure Replication Network

Step 3. Set the IP information for the replication network, adding the subnet, gateway and IP range. Once the IP range is assigned, click on **Add IP Range**, then click **Configure**.

≡ dode HyperFlex Connect							û <b>▲</b> 3 👔	,≣ ² 💮	0 2
Oashboard	REPLICATION CONFIGURATION	Configure Replication Network			(	08			
MONITOR Q Alarms	CLUSTER PAIRING Pair Cluster	VLAN Configuration	IP & Bandwidth Configu	ration	Test Configuration				
슈 Events		Subnet	p.q.r.s/ <number bits<="" of="" td=""><td>&gt;</td><td></td><td></td><td></td><td></td><td></td></number>	>					
ANALYZE		Gateway	IPv4 address in the form	nat, 192.169.0.10	Add IP Rat	nze			
Lan Performance		n reinge	No records found						
PROTECT Replication									
MANAGE System Information		Set replication bandwidth limit			м	/bit/s			
Datastores		Set non default MTU ()							
S ISCSI					Back Config	gure			
🕆 Upgrade									
Web CLI     Kubernetes									

Configure Replication Network



② Dashboard	REPLICATION CONFIGURATION	Configure Replication	Netwo	ork		08			
Alarms	CLUSTER PAIRING Pair Cluster	VLAN Configuratio	n	IP & Bandwidth Configuration	Test Configuration	n			
Events     Activity		Creating DR Network Status: Success 01/30/2024 7:48:59 PN	1						
ANALYZE									
an Performance		[100]	1	Starting Configuration - Succeeded					
PROTECT		[101]	1	Configure Replication Vlan - Succeeded					
Replication		[103]	1	Validate Cluster State - Succeeded					
MANAGE		[104]	1	Configure vlan for Controller Succeeded					
System Information		[105]		Configure vian for Controller Succeeded					
Datastores		[106]	7	Configure vian for Controller					
🗟 ISCSI				P. 111 ( 3) 3		loca			
Virtual Machines			_			lose			
'Ţ Upgrade									
>_ Web CLI									
Kubernetes									

Step 5. Configure the network in the other cluster. For this example the second cluster is stretch, hence both UCSM credentials are required. Fill the information as applicable and click **Next**:

DR Network Configuration

≡ dudu. HyperFlex Connect				
O Dashboard	REPLICATION CONFIGURATION Configure Network	Configure Replication Network		
Alarms	CLUSTER PAIRING Pair Cluster	VLAN Configuration	& Bandwidth Configuration	Test Configuration
☆ Events		UCS Manager Credentials for Si	ite A	
Activity Analyze		UCS Manager host IP or FQDN		
lin Performance		User name	admin	0
PROTECT				
Replication		UCS Manager Credentials for Si	ite B	
MANAGE		UCS Manager host IP or FQDN		
E System Information		User name	admin	
E Datastores		Password		٥
Urtual Machines				Cancel Next
T Upgrade				cancer
>_ Web CLI				

Second Cluster Network Configuration

Step 6. Set the IP information for the replication network on the second cluster, adding the same subnet, gateway and IP range. Once the IP range is assign, click on **Add IP Range**, then click **Configure**:

= deade HyperFlex Connect									
O Dashboard	REPLICATION CONFIGURATION Configure Network	Configure Replication Network			08				
MONITOR Q Alarms	CLUSTER PARING Pair Cluster	VLAN Configuration	IP & Bandwidth Config	uration Test	Configuration				
습 Events 面 Activity		Subnet							
ANALYZE		Gateway	From	To	Add IP Range				
PROTECT					0				
Replication									
System Information		Set replication bandwidth limit			Mbit/s				
E Datastores		Set non default MTU ()							
Virtual Machines  Upgrade				Bac	k Configure				
>_ Web CLI									

Configuring Network Second Cluster

Step 7. Once the configuration is completed a success status appears, then click **Close**:

= -dudu HyperFlex Connect				
⑦ Dashboard	REPLICATION CONFIGURATION Configure Network	Configure Replication Net	work	08
MONITOR Q Alarms	CLUSTER PAIRING Pair Cluster	VLAN Configuration	IP & Bandwidth Configuration	Test Configuration
순 Events		Creating DR Network Status: Success 01/30/2024 4:57:42 PM		
ANALYZE		[root]	Starting Configuration - Succeeded	
PROTECT		[101]	Configure Replication Vlan - Succeeded	
MANAGE		[103]	Validate Cluster State - Succeeded	
System Information Datastores		[105]	Configure vian for Controller Succeeded	
Upgrade				Close
>_ Web CLI				

DR Network Configuration Second Cluster



**Note**: Once the network is configured, it is a best practice to do a network test between the two clusters to confirm they are able to reach each other. Use ping to test the IPs reachability between

Step 7. Creating the replication pair, click **Replication** and the click on **Pair Cluster** in the **Cluster Pairing** option. Assign a name for the **Replication Pair Name** and click Next:

= dudu HyperFlex Connect					Ê   ⟨	9 0 4
O Dashboard	REPLICATION CONFIGURATION Network Configured	Create New Replication	Pair	00	Actions	
Alarms	CLUSTER PAIRING	Name	Remote Connection	Run Test		
Events     Activity		Replication Pair Name	ReplicationDemo			
ANALYZE						
Performance PROTECT						
Replication						
MANAGE System Information				Cancel Next		
Datastores				Cancer		
Virtual Machines						
>_ Web CLI						
Kubernetes						

Replication Pair

Step 8. Provide the cluster **Management IP** or **FQDN** for the cluster to be the replication pair and then click **Pair**:

= dude HyperFlex Connect						Â	© 0	
⑦ Dashboard	REPLICATION CONFIGURATION Network Configured	Create New Replication Pair	_	08		Actions		
MONITOR Q Alarms	CLUSTER PAIRING → Pair Cluster	Name Re	emote Connection	Run Test				
순 Events		Establish a connection to a remote cluster Management IP or FQDN						
ANALYZE		User Name	admin					
Performance PROTECT		Password	for remote cluster	0				
Replication		Concertaingle agreen or exact or exercised						
MANAGE System Information				_				
Datastores				Back Pair	]			
Virtual Machines								
'↑' Upgrade >_ Web CLI								
Kubernetes								



m

Step 8. Once the clusters are paired, everything is set to start the datastore mapping between the two clusters, within the same replication page. The **Map Datastore** option appears, click on it:

= -dudu HyperFlex Connect						Ê	Q 2	٢	0	ھ
Dashboard     MONITOR	REPLICATION CONFIGURATION Network Configured	BANDWIDTH UMIT Unlimited					Actions		×	
Q Alarms ☆ Events	Cluster Pairing ReplicationDemo	DATASTORE MAPPED Map Datastores					Actions		×	
Activity	OUTGOING REPLICATION	∨мs 0 ⊡ тор	rotect virtual machines, go to the Virtual Machines page, sel	ect one or more virtual mac	hines and click Protect	Protection G	roups			
ANALYZE	INCOMING REPLICATION Active	VMs O				Protection G	roups			
PROTECT	Local VMs Remote VMs Replication Activi	y Replication Pairs				Last refreshed	at: 01/30/20	24 5:44:56 1	M O	
C Replication	Protection Group   All Protected VMs   Standalone	Protected VMs								
MANAGE	✓ Edit Schedule	to Group X Unprotect		Pa	ause					
System Information	Virtual Machine Name	<ul> <li>Protection Status</li> </ul>	Last Protection Time	Direction	Protection Group		Inter	val		
Datastores			No records found							
େ ISCSI										
Virtual Machines										
"↑" Upgrade										
>_ Web CLI										
Kubernetes										

Mapping Datastore

Step 9. In the pop up window the **Datastore Mapping** appears, showing the available datastores in the cluster in the left, and a drop down menu with the available datastores in the paired cluster where the VMs are attempted to be protected:

= dude HyperFlex Connect						î (	■1   (	9   6	) <u>a</u>
Dashboard  MONITOR	REPLICATION CONFIGURATION Network Configured	Datastore Mapping		08			Actions		
Q Alarms	Cluster Pairing ReplicationDemo	Create datastore pairs by mapping datastores or remote cluster. Ensure you have sufficient space	in this cluster with appropriate e on the datastores.	datastores on the			Actions		
Events     Activity	OUTGOING REPLICATION	Local Datastore	Remote Datastore		or more virtual machines and click Protect	Protection Gr	oups		
ANALYZE	INCOMING REPLICATION Active	Replication Demo 10 GIB	Replication Demo	Space: 1 GiB) 🗸		Protection Gr	oups		
PROTECT	Local VMs Remote VMs Replication Activ					Last refreshed a	nt: 01/31/2024 1	24.03 PM	
C Replication	Protection Group   All Protected VMs   Standalor								
MANAGE	✓ Edit Schedule — Remove from Group + Add —		Cancel	Map Datastores	Pause				
System Information	Virtual Machine Name				ction Protection Group		Interval		
Datastores			No records found						
🗟 ISCSI									
💭 Virtual Machines									
↑ Upgrade									
>_ Web CLI									
Kubernetes									

Mapping Datastores



**Note**: Mapping datastores can be done from both sites to each other, for example, Cluster1 can Map datastores to cluster2 and Cluster2 can map datastores to cluster1 without any additional configuration.

Step 10. Once the datastores are mapped, define the protection group, specify a name and select a time period to protect the virtual machines to be associated to it. Finally, specify the time when the protection group starts, then click **Create Protection Group**.

🕑 Dashboard		Create Protection Group		08				
MONITOR	REPLICATION CONFIGURATION Network Configured	Protection Group Name	Demo				Actions	
순 Events	Cluster Pairing ReplicationDemo	Protect virtual machines in this group every	1 hour	¥			Actions	
ANALYZE	OUTGOING REPLICATION	Start protecting the virtual machines immediately     Start protecting the virtual machines at	1:00 am		or more virtual machines an	d click Protect	Protection Groups © 0	
PROTECT	INCOMING REPLICATION Active	Cluster time zone Current time on cluster	(UTC -06:00 CST) 5:05:49 AM				Protection Groups	
MANAGE	Local VMs Remote VMs Replication Acti						Last refreshed at: 01/31/2024 10:09:30	орм 🔿
System Information	Protection Group   <u>All Protected VMs</u>   <u>Standalos</u> Protection Groups	Use VMware Tools to quiesce the virtual machine			P	ause		
iscsi	+ Create Group 🕢 🔋 💦		Cancel	Create Protection Group	Direction	Protection	Group Interval	
Upgrade				No records found				
Web CLI     Kubernetes								

Protection Group Creation

#### **Protection Group Considerations**

- The protection group defines how the data protection behaves.
- It allows you to specify the frequency to protect the virtual machine.
- It can go from 5 minutes to 24 hours, also the time when the protection starts.
- It can have an immediate or specific time.
- VMware tools can be enabled to quiet the virtual machine.

A success message appears indicating that the **Protection Group** was created and it appears listed in the protection group area:

Replication	Local VMs Remote VMs Rep	plication Activity Replication	on Pairs				Last refreshed at: 01/3	1/2024 10:57:59 PM O			
MANAGE	Protection Group   All Protected VM	tection Group   All Protected VMs   Standalone Protected VMs									
	Protection Groups  ✓ Edit Schedule — Remove from Group + Add to Group × Unprotect						Pause				
S ISCSI	+ Create Group 🖌 🔒	Virtual Machine	Name ^	Protection Status	Last Protection Time	Direction	Protection Group	Interval			
Virtual Machines	Demo (0 VM)				No records found						
↑ Upgrade	Active O 5 minutes										
>_ Web CLI											
Kubernetes											

Protection Group Created

Step 11. With the protection group created, the final step is to assign it to the virtual machines that are to be protected. Navigate to the **Virtual Machines** tab, select the virtual machine to be protected and then click on **Protect**:

습 Events	Virtu	irtual Machines									2024 12:03:44 AM O
ANALYZE	🗇 Ready Clones @ Snapshot Now @ Schedule Snapshot @ Protect @ Power On 🔢 Suspend @ Power Off								🖾 🛩 🛛 Filter		
Lin Performance		Name	Status	IP Address	Guest OS	Host Name	Protection Status	Snapshots	Snapshot Schedule	Storage Provisioned	Storage Used
PROTECT		Cisco-HX-Data-Platform-Installer- v5.0.2e-42642-esx	Powered On		Ubuntu Linux (64- bit)		Unprotected			24 GIB	24 GiB
MANAGE		Installer 4.5	Powered On	-	Ubuntu Linux (64- bit)		Unprotected	1		27.6 GIB	7.5 GIB
E System Information											
Datastores											
🗟 iscsi	1 iter	m selected									
Virtual Machines	1 - 3 of	3									
↑ Upgrade											

Virtual Machine Protection

A pop up window appears to attach the Protection Group created, select it, and click on **Protect Virtual Machine**:

Protect Virtual Machine		$\odot \otimes$
Add to an existing protection group	Demo	~
O Protect this virtual machine independently		
Protect this virtual machine every	1 hour	
Start protecting the virtual machines immediate	ely	
<ul> <li>Start protecting the virtual machines at</li> </ul>	1:00 am	e
Cluster time zone	(UTC -06:00 CST)	
Current time on cluster	6:35:47 AM	
Use VMware Tools to quiesce the virtual machin	ne	
	Cancel Protect Virtual	Machine

Selecting the Protection Group

Once protected, the VM displays as protected for the Protection Group.

슈 Events											
Activity	Virtu	Virtual Machines									11/2024 12:11:22 AM
ANALYZE	TReady Clones @ Snapshot Now @ Schedule Snapshot @ Protect @ Power On III Suspend @ Power Off								€ × Filt	or .	
An Performance		Name ^	Status	IP Address	Guest OS	Host Name	Protection Status	Snapshots	Snapshot Schedule	Storage Provisioned	Storage Used
PROTECT		Cisco-HX-Data-Platform-Installer- v5.0.2e-42642-esx	Powered On		Ubuntu Linux (64- bit)		Unprotected			24 GIB	24 G/B
MANAGE		Installer 4.5	Powered On		Ubuntu Linux (64- bit)		Protected (Demo)	•		27.6 GIB	7.5 GIB
System Information											
📄 Datastores											
G ISCSI	1 ite	m selected									
Virtual Machines	1 - 3 of	1+3 of 3									
>_ Web CLI											
Kubernetes											





**Note**: Ensure that the protected VM belongs to a datastore being mapped, otherwise the protection fails.

## Troubleshoot

#### **Verify VM Protection Configuration**

It is a best practice to monitor the VM protection under the **Replication** tab:

MONITOR Q Alarms	REPLICATION CONFIGURATION Network Configured	BANDWIDTH UMIT Unlimited			)	Actions $\vee$		
会 Events 自 Activity	Cluster Pairing ReplicationDemo	DATASTORE MAPPED		RECOVERY SETTINGS Configure		Actions ~		
ANALYZE	OUTGOING REPLICATION Active	VMs Protected 1 ✓ 1	Exceeds Interval ③ 0	Current Replication Failures <b>O</b>		Protection Group 意 1		
PROTECT	INCOMING REPLICATION Active	VMs 0				Protection Groups		
C Replication	Local VMs Remote VMs Replication Activity R	eplication Pairs				Last refreshed at: 02/01/2024 12:25:35 AM		
MANAGE	Protection Group   All Protected VMs   Standalone Protect	ed VMs						
System Information	✓ Édit Schedule — Remove from Group - + Add to Grou	p X Unprotect			Pause	🗈 🖌 Filter		
Datastores     ISCSI	Virtual Machine Name	Protection Status	Last Protection Time	Direction	Protection Group	Interval		
Virtual Machines	Installer 4.5	Protected	02/01/2024 6:50:46 AM	Outgoing	Demo	Every 5 minutes		
>_ Web CLI	1 - 1 of 1							
Kubernetes								

Monitoring Protected VMs

### **Monitor Replication Activities**

Replication activities can be monitored by clicking in the **Replication Activity** tab:

MONITOR Alarms	REPLICATION CONFIGURATION Network Configured		BANDWIDTH UMIT Unlimited				)			Actions	×
습 Events ① Activity	Cluster Pairing ReplicationDemo		DATASTORE MAPPED			RE → Co	COVERY SETTINGS Infigure			Actions	÷
ANALYZE	OUTGOING REPLICATION Active		VMs 1	Protected Ex	ceeds Inten	val C	urrent Replication Failures		Protection (	îroup	
PROTECT	INCOMING REPLICATION Active		VMs O						Protection G	iroups	
C Replication	Local VMs Remote VMs	Replication Activity Rep	plication Pairs						Last refreshed	at: 02/01/2024 12:29:29/	AM O
MANAGE System Information									<b>€</b> ~	Filter	
E Datastores	Virtual Machine	Remote Cluster	Status	Start Time	~	End Time	Protection Group	Direction	Dat	a Transferred	
iscsi	Installer 4.5	Tokio	Completed	02/01/2024 6:54:49 AM		02/01/2024 6:54:49 AM	Demo	Outgoing	464	KIB	
💭 Virtual Machines	Installer 4.5	Tokio	Completed	02/01/2024 6:50:46 AM		02/01/2024 6:50:47 AM	Demo	Outgoing	692	KIB	
'↑' Upgrade	Installer 4.5	Tokio	Completed	02/01/2024 6:46:43 AM		02/01/2024 6:46:44 AM	Demo	Outgoing	520	KIB	
>_ Web CLI	Installer 4.5	Tokio	Completed	02/01/2024 6:42:40 AM		02/01/2024 6:42:40 AM	Demo	Outgoing	724	KiB	
Kubernetes	Installer 4.5	Tokio	Completed	02/01/2024 6:38:35 AM		02/01/2024 6:38:49 AM	Demo	Outgoing	5.8	GiB	
	1 - 5 of 5										

**Replication Activities** 

## **Common Issues**

#### **Pair Issues**

Pairing issues can appear:

Create New Replication Pair		$@\otimes$
Name Re	emote Connection Ru	un Test
Unable to fetch the DR network configuration validating DR network configuration in remo	ation from remote Cluster. Please retry the ote Cluster.	e operation aft <b>er</b>
Establish a connection to a remote cluster		
Management IP or FQDN		
User Name	admin	
Password		ø
① Enter single sign-on or cluster credentials	for remote cluster	
	В	ack Pair

Pairing issues

- Ensure the replication network is configured in both clusters.
- Ensure clusters are reachable from each other.

#### **Connectivity Issues**

- Verify the eth2 is present. Use the ifconfig command on each of the storage Controller Virtual Machines to confirm the eth2 is properly configured on them.
- Use ping to test connectivity between the eth2 interfaces.
- Ensure the Replication VLAN in both clusters match.
- Ensure the replication VLAN is properly configured in all the paths between the clusters.

eth2 Link encap:Ethernet HWaddr	eth2 Link encap:Ethernet HWaddr
inet addr:172 3 Bcast:172255 Mask:255.255.0	inet addr:172 .9 Bcast:172 .255 Mask:255.255.255.0
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1	UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:797975 errors:0 dropped:0 overruns:0 frame:0	RX packets:30774 errors:0 dropped:29 overruns:0 frame:0
TX packets:799505 errors:0 dropped:0 overruns:0 carrier:0	TX packets:32960 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueulen:1000	collisions:0 txqueuelen:1000
RX bytes:74023721 (74.0 MB) TX bytes:74168965 (74.1 MB)	RX bytes:2893235 (2.8 MB) TX bytes:3141789 (3.1 MB)
eth2:0 Link encap:Ethernet HWaddr	eth2:0 Link encap:Ethernet HWaddr
inet addr:172 .2 Bcast:172 .255 Mask:255.255.0	inet addr:172 .7 Bcast:172 .255 Mask:255.255.255.0
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1	UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
eth0:mgmtip Link encap:Ethernet HWaddr	eth0:mgmtip Link encap:Ethernet HWaddr
inet addr: Bcast:10.31.123.255 Mask:255.255.255.0	inet addr: Bcast Mask:255.255.255.0
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1	UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
<pre>lo Link encap:Local Loopback</pre>	<pre>lo Link encap:Local Loopback</pre>
inet addr:127.0.0.1 Mask:255.0.0.0	inet addr:127.0.0.1 Mask:255.0.0.0
UP LOOPBACK RUNNING MTU:65536 Metric:1	UP LOOPBACK RUNNING MTU:05536 Metric:1
RX packets:15509057612 errors:0 dropped:0 overruns:0 frame:0	RX packets:12876504/225 errors:0 dropped:0 overruns:0 frame:0
TX packets:15509057612 errors:0 dropped:0 overruns:0 carrier:0	TX packets:12876504/225 errors:0 dropped:0 overruns:0 carrier:0
collision:0 txqueulen:1000	collisions:0 txqueuelen:1000
RX bytes:3349146489309 (3.3 TB) TX bytes:3349146489309 (3.3 TB)	RX bytes:2722351786798 (2.7 TB) TX bytes:2722351786798 (2.7 TB)
[hxshell:-\$ ping 172       .9         PING 172       .9 (172       .9) 56(84) bytes of data.         64 bytes from 172       .9: icmp_seq=1 ttl=64 time=0.332 ms         64 bytes from 172       .9: icmp_seq=2 ttl=64 time=0.119 ms         64 bytes from 172       .9: icmp_seq=3 ttl=64 time=0.127 ms         64 bytes from 172       .9: icmp_seq=3 ttl=64 time=0.107 ms         64 bytes from 172       .9: icmp_seq=5 ttl=64 time=0.107 ms         64 bytes from 172       .9: icmp_seq=5 ttl=64 time=0.132 ms         64 bytes from 172       .9: icmp_seq=3 ttl=64 time=0.132 ms         64 bytes from 172       .9: icmp_seq=3 ttl=64 time=0.124 ms         64 bytes from 172       .9: icmp_seq=2 ttl=64 time=0.144 ms         64 bytes from 172       .9: icmp_seq=3 ttl=64 time=0.144 ms         64 bytes from 172       .9: icmp_seq=9 ttl=64 time=0.144 ms         ^C           70           172	hxshell:~\$ ping 172       .3         PING 172       .3 (172       .3) 56(84) bytes of data.         64 bytes from 172       .3: icmp_seq=1 ttl=64 time=0.158 ms         64 bytes from 172       .3: icmp_seq=2 ttl=64 time=0.158 ms         64 bytes from 172       .3: icmp_seq=2 ttl=64 time=0.137 ms         64 bytes from 172       .3: icmp_seq=3 ttl=64 time=0.143 ms         64 bytes from 172       .3: icmp_seq=4 ttl=64 time=0.143 ms         64 bytes from 172       .3: icmp_seq=5 ttl=64 time=0.185 ms         64 bytes from 172       .3: icmp_seq=5 ttl=64 time=0.143 ms         64 bytes from 172       .3: icmp_seq=7 ttl=64 time=0.143 ms         64 bytes from 172       .3: icmp_seq=7 ttl=64 time=0.140 ms         64 bytes from 172       .3: icmp_seq=7 ttl=64 time=0.140 ms         64 bytes from 172       .3: icmp_seq=9 ttl=64 time=0.145 ms         64 bytes from 172       .3: icmp_seq=9 ttl=64 time=0.145 ms         64 bytes from 172       .3: icmp_seq=9 ttl=64 time=0.145 ms         7C       .3 ping statistics
9 packets transmitted, 9 received. 0% packet loss, time 8194ms	9 packets transmitted, 9 received. 0% packet loss, time 8199ms
rtt min/avg/max/mdev = 069 ms	rtt min/avg/max/mdev = 019 ms
hxshell:-\$ []	hxshell:~\$

Ping Test

## **Protection Issues**

#### **Protect Virtual Machine**

Sisco-HX-Data-Platform-Installer-v5.0.2e-42642-es ) are not paired.	sx : Unable to protect th	ne VM, some datastores 🗙
Add to an existing protection group	Demo	~
O Protect this virtual machine independently		
Protect this virtual machine every	1 hour	
Start protecting the virtual machines immediate	ely	
O Start protecting the virtual machines at	1:00 am	G
Cluster time zone	(UTC -06:00 CST)	
Current time on cluster	3:45:32 AM	
Use VMware Tools to quiesce the virtual machin	ne	
	Cancel	Protect Virtual Machine

#### Protection Issues

- Ensure that the VM to be protected belongs to a mapped datastore.
- Ensure datastores are properly mapped.



**Note**: Some fixes require Technical Assistance Center (TAC ) intervention. Open a case with TAC, if necessary.

## **Related Information**

- <u>Cisco HyperFlex Data Platform Administration Guide, Release 5.0</u>
- <u>Cisco Technical Support & Downloads</u>