Clear Data Protection Network Configuration in Hyperflex

Contents

Introduction

This document describes how to clear the replication in Hyperflex.

Prerequisites

Requirements

Cisco recommends knowledge in 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(1l)
- vCenter 7.0 U3

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

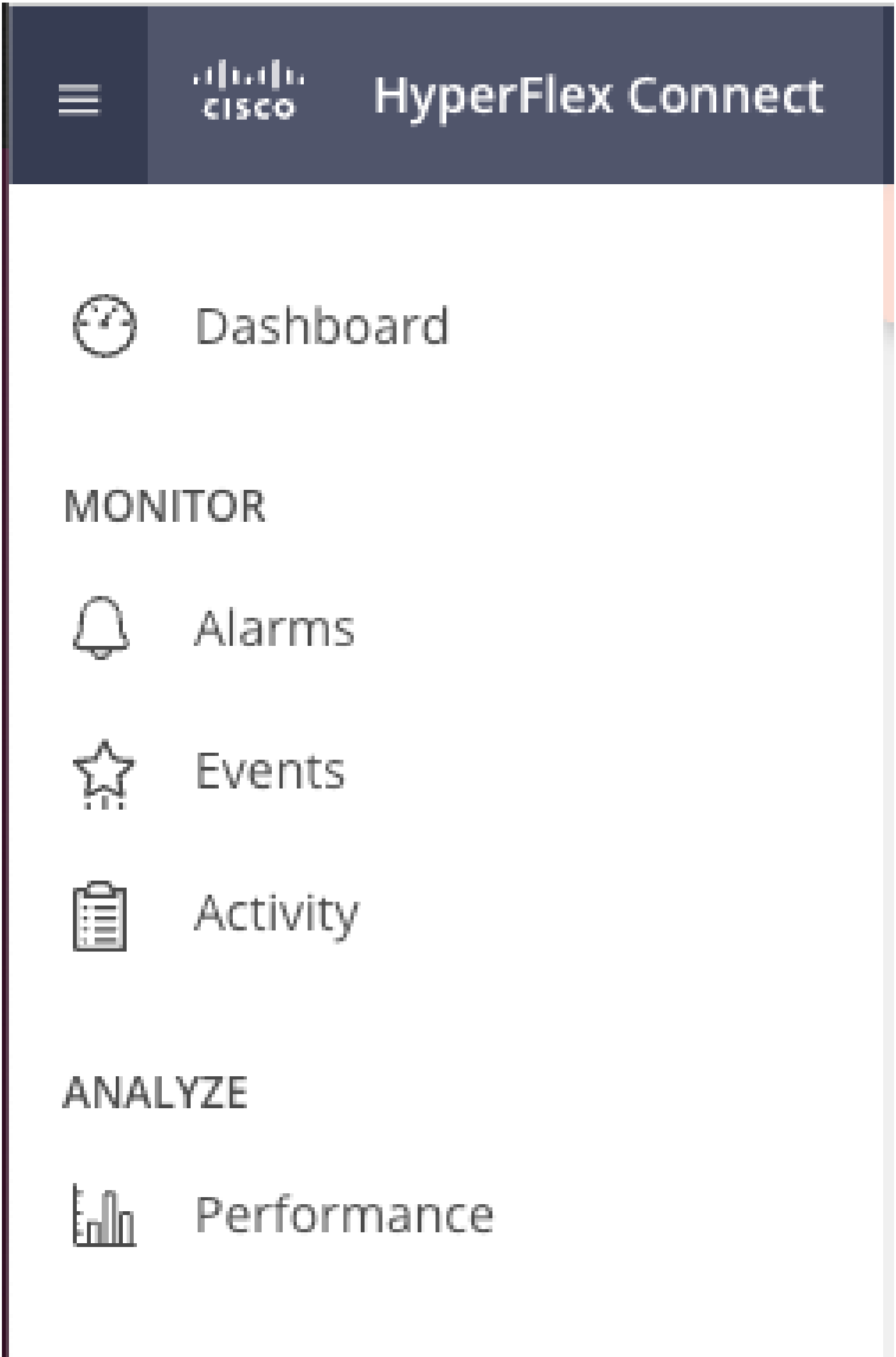
Replication configuration can be cleared if necessary, clusters can be paired with new targets, to do that, the current replication configuration needs to be cleared from the cluster.

Additional Background Information

- For clearing the data protection, you must unprotect all the VMs. Then, remove them from the protection groups.
- Protection Groups can remain on the cluster if no VMs belong to them.
- Ensure dependencies from replication pairs are removed in both types of clusters, local and remote.
- Administrator access for both clusters is required for this operation.

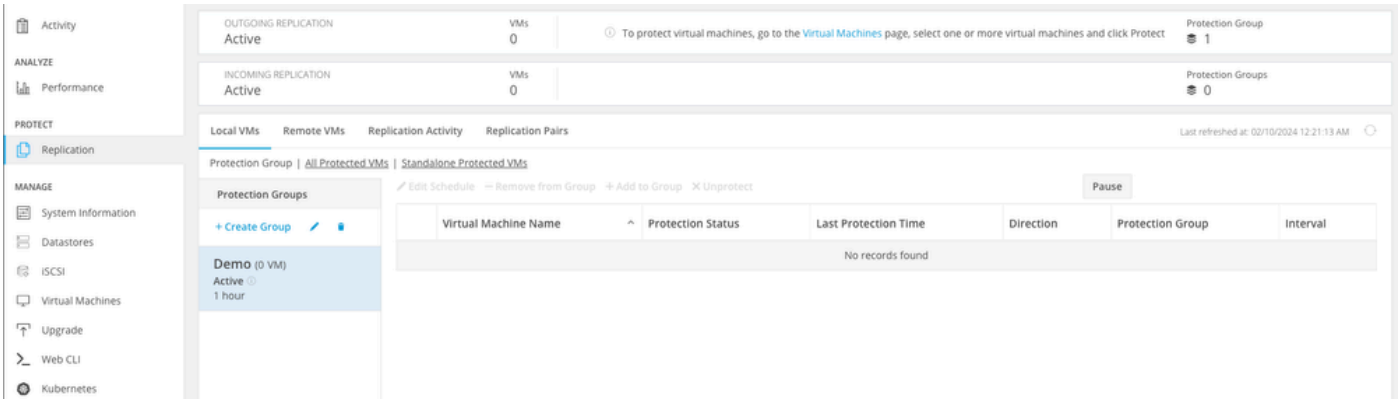
Procedure

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


HyperFlex Connect
Dashboard
MONITOR
Alarms
Events
Activity
ANALYZE
Performance

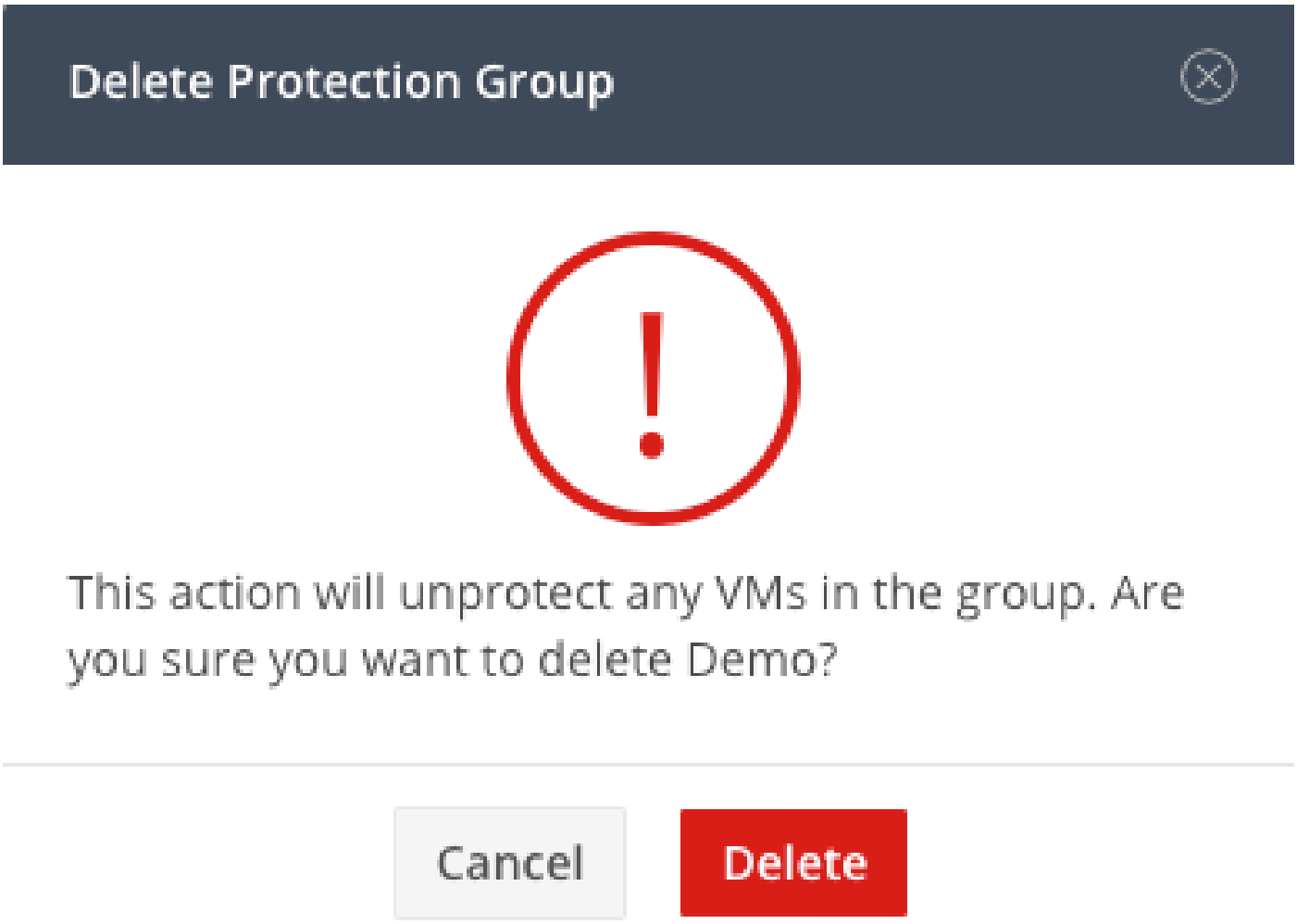
- When the VM is not removed from the protection, use ping to test connectivity, and check if the eth2 is running. If there is no connectivity and the eth2is not running,open a case with TAC.

It is a best practice to delete the protection groups if no VMs belong to them. This is not required.



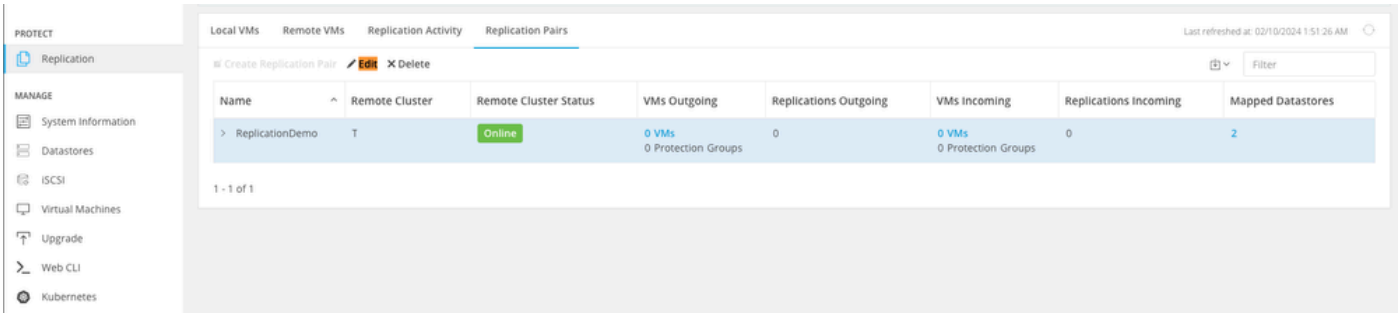
Delete Protection Groups

A prompt ask you if you want to delete the protection group. Click **Delete**:



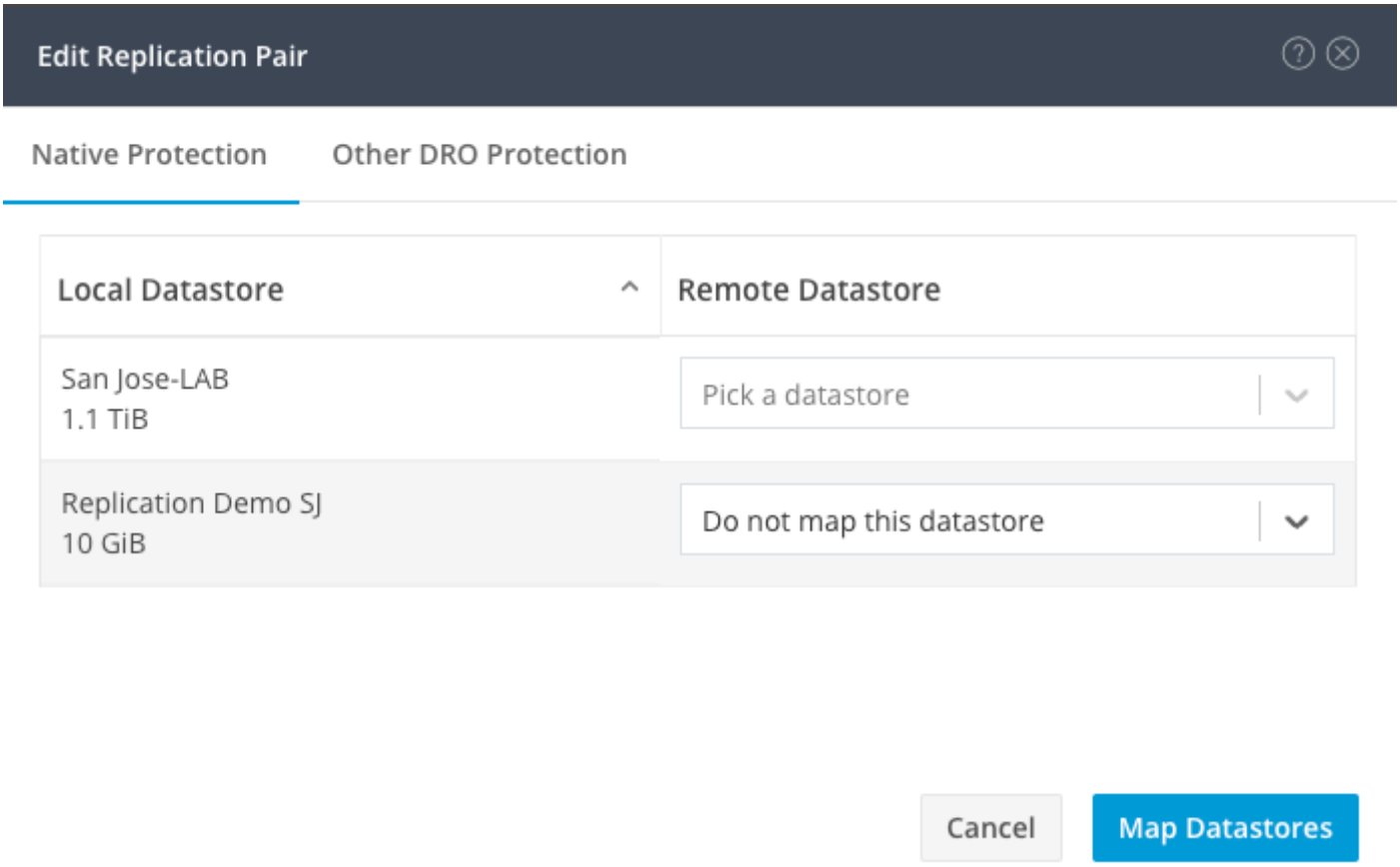
Protection Group Deletion Confirmation

Step 4. Remove datastore mapping and select **Replication> Replication Pairs>Edit**.

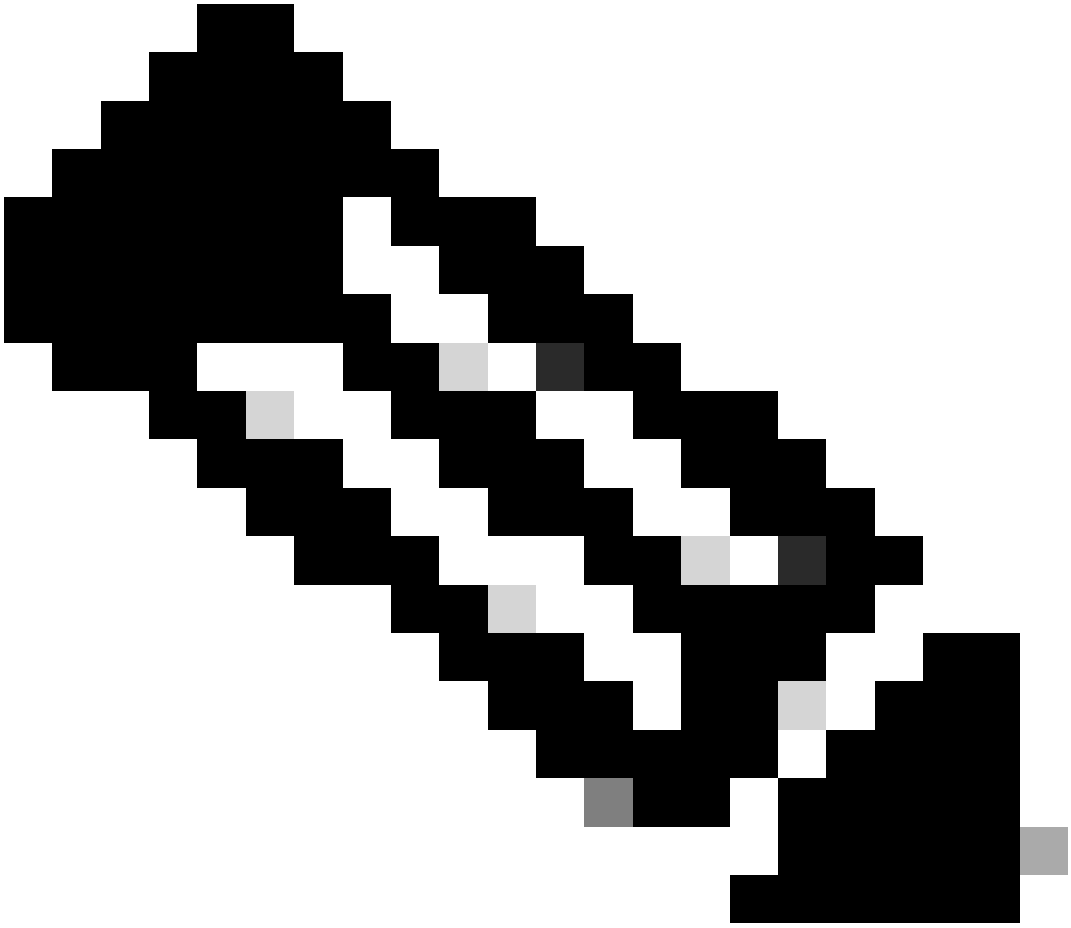


Remove Datastore Dependencies

You are prompted to select which datastores to unmapped. Select the remote and choose the **Do not map this datastore** option for each of the mapped datastores. Then click on **Map Datastore**.

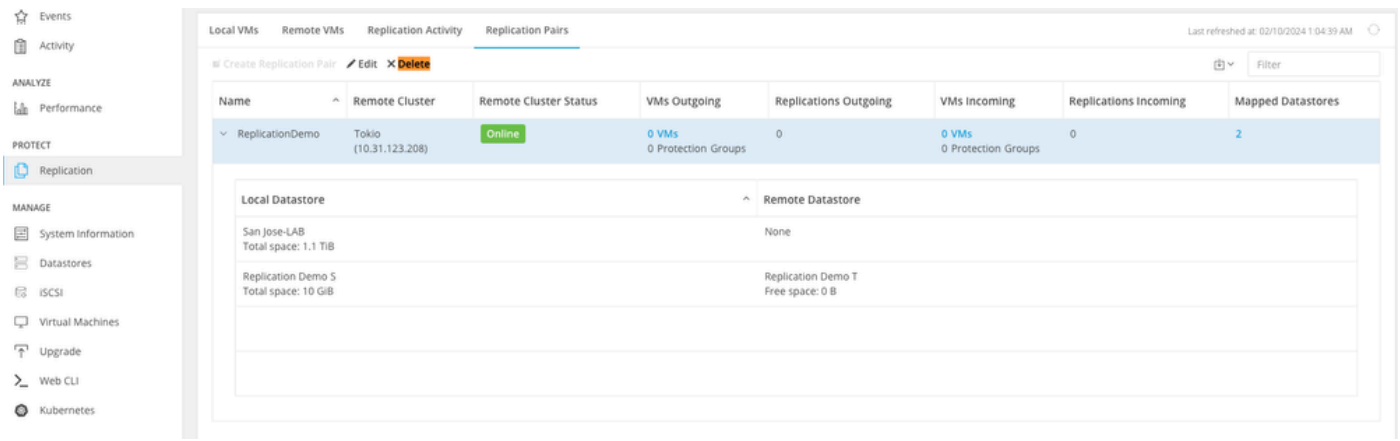


Unmap Datastores



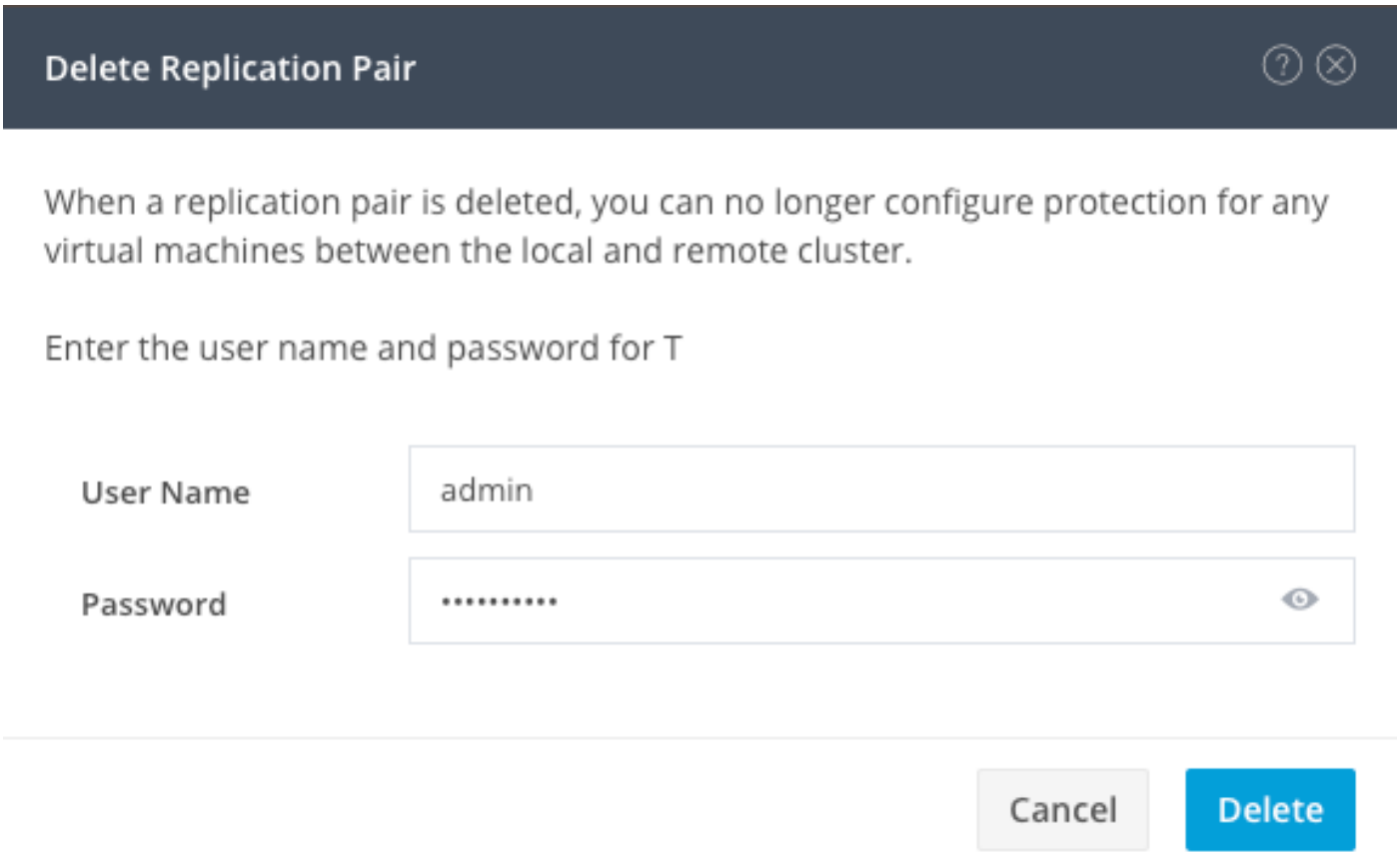
Note: Once the datastores are unmapped, the HX connect needs to be refreshed to proceed with the replication pair deletion.

Step 5. Delete the replication pairs the local and remote clusters. Select **Replication**>**Replication Pairs**>**Delete.**



Delete Pairs

You need remote cluster Admin credentials to remove the pair. Enter the credentials and click on **Delete**



Peer Deletion Confirmation

Behavior of Replication Pair

- When a replication pair is deleted, you can no longer configure protection for any virtual machines between the local and remote cluster.
- This action clears the protection in both clusters
- A replication network test is done when the replication pair is attempted to be done or modified.
- A replication network test is also done when the datastores are attempted to be unmapped.
- If the replication test does not pass, the changes are not allowed. Refer to the Troubleshoot session in this document to check connectivity if necessary.
- For further assistance regarding the eth2 connectivity, open a case with TAC.

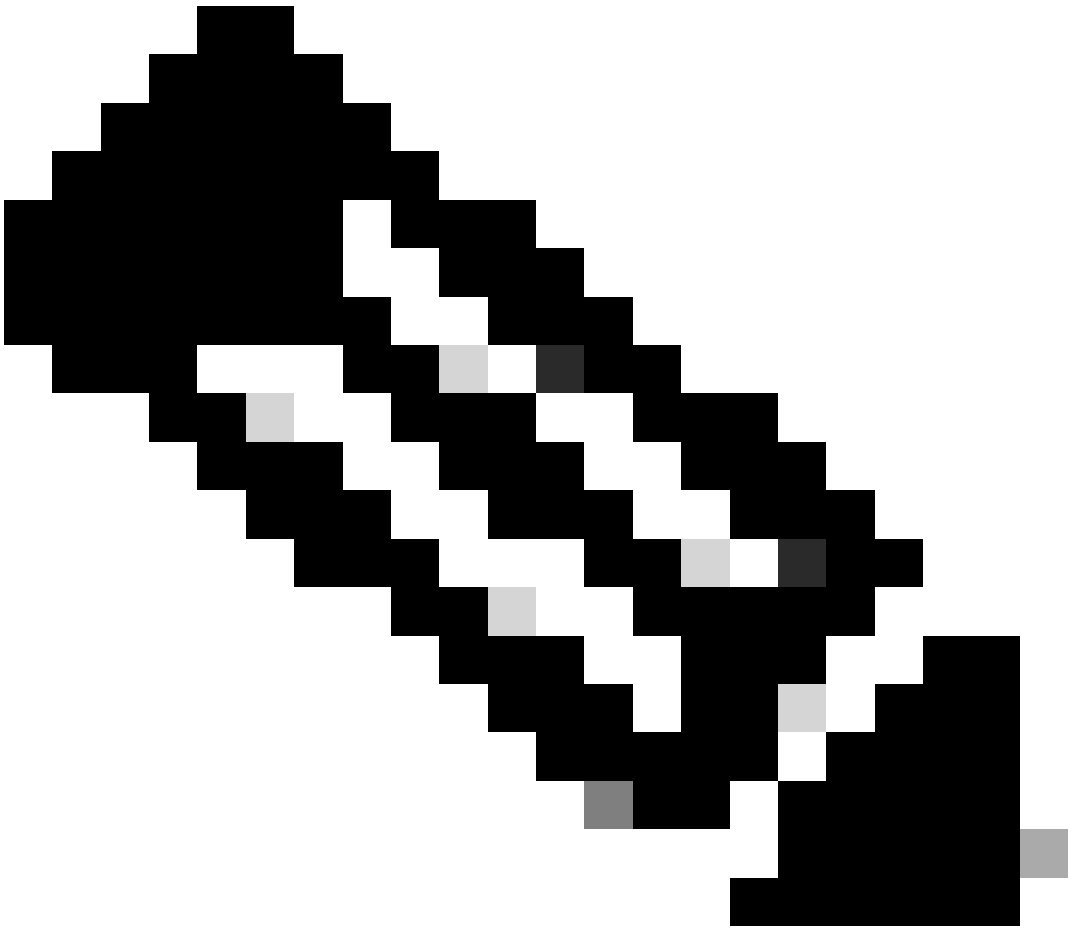
Step 6. To clear the replication network, use the command:

```
stcli drnetwork cleanup
```

CleanUp Local

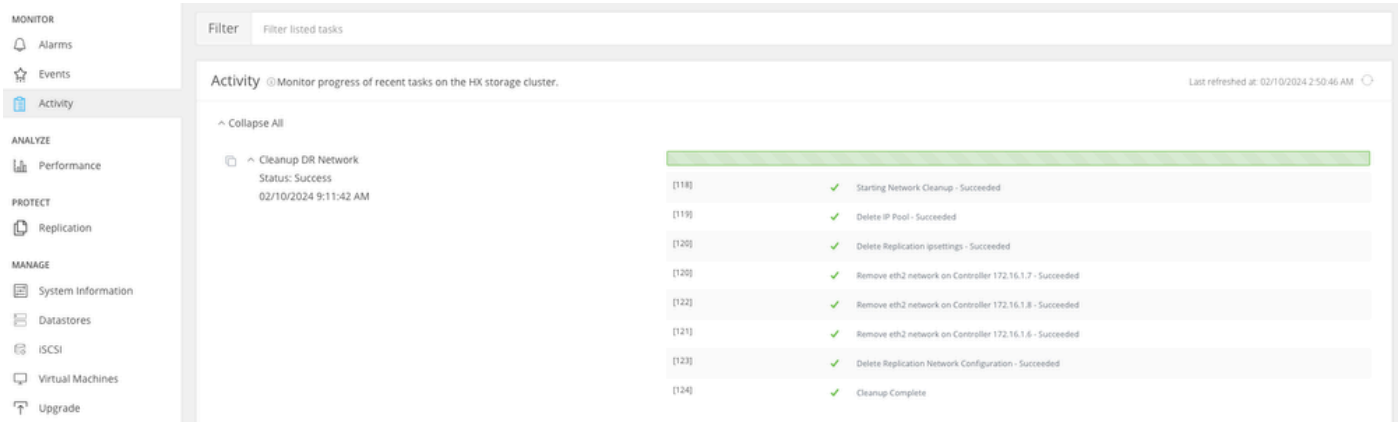
```
hxshell:~$ stcli drnetwork cleanup
DR network cleanup job db7e3ff7-cc27-4f42-b7af-2e8281893e2e started, check Activ
ity tab for status
hxshell:~$
```

CleanUp Remote



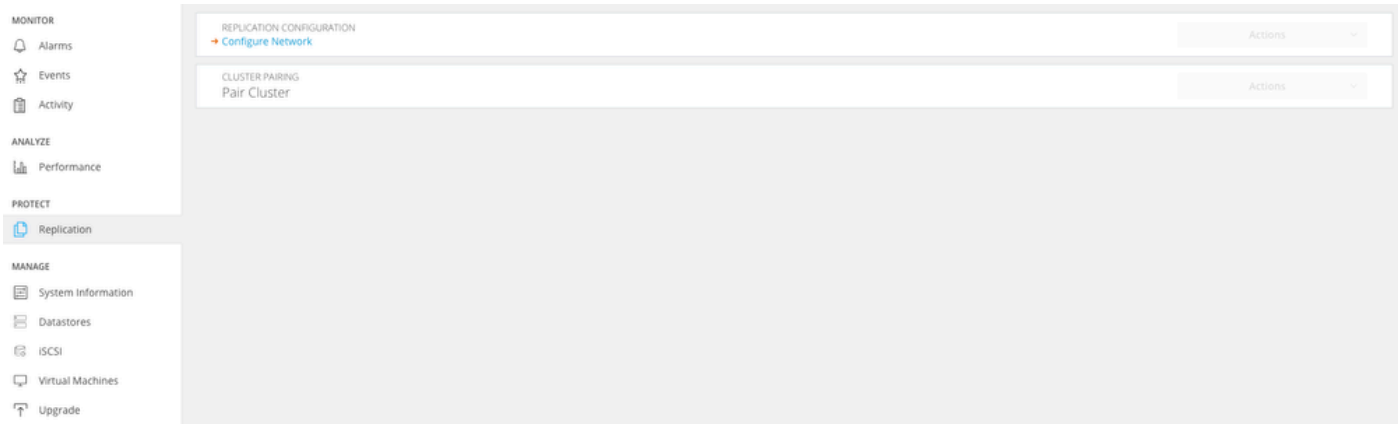
Note: Ensure the **stcli drnetwork cleanup** command is executed in both local and remote clusters.

Data replication network clean up can be monitored in the Activity tab in HX connect



Monitor Data Replication Network CleanUp

Refresh HX connect data replication network configuration appears unconfigured and ready to be configured again if required.



Data Replication Network Cleared

Troubleshoot

Verify VMs Protection

Ensure no VMs are being protected. To check this use the command:

```
stcli dp vm list --brief
```

Example with a protected VM:

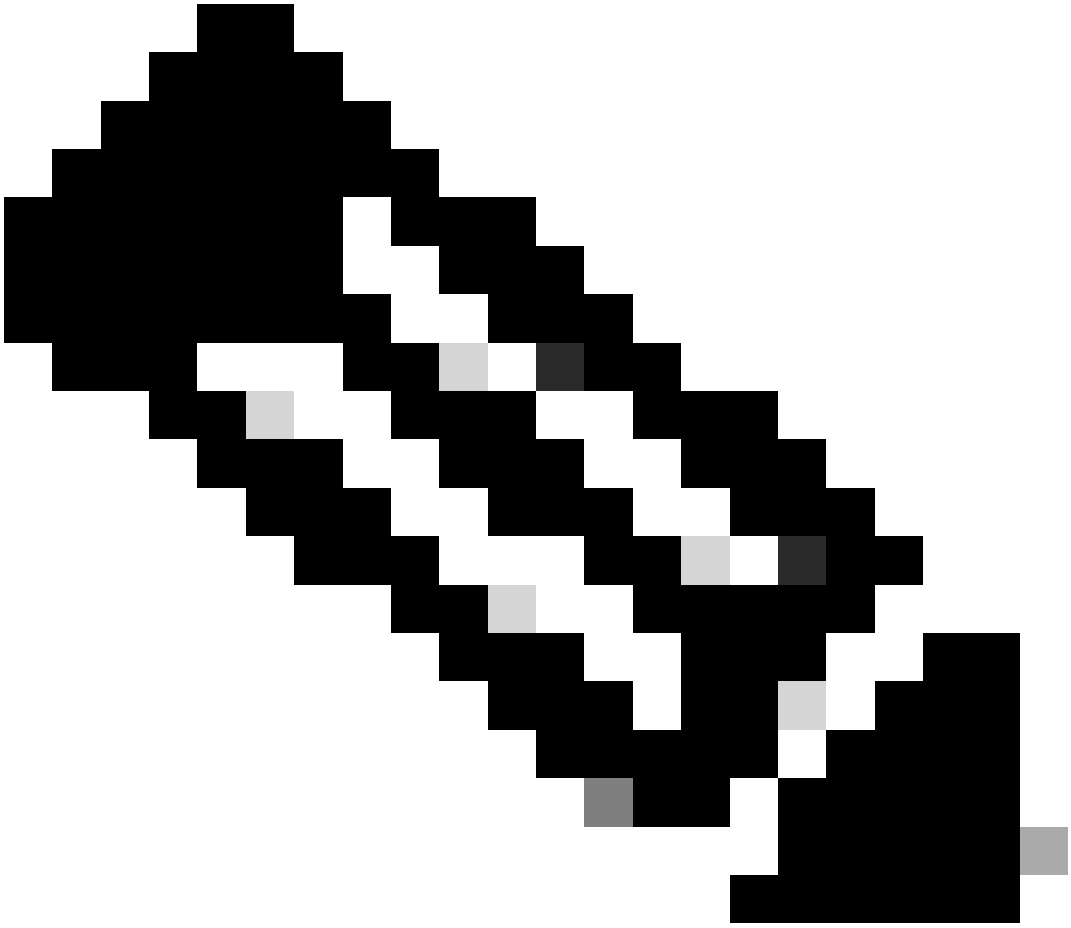
```
 HyperFlex StorageController 5.0(2d)
admin                password:
This is a Restricted shell.
Type '?' or 'help' to get the list of allowed commands.
hxshell:~$ stcli dp vm list --brief

vmInfo:
    name: Installer 4.5
    uuid: 564deba1
hxshell:~$
hxshell:~$
```

How to List Protected VMs

Example with no VM protected

```
hxshell:~$ stcli dp vm list --brief
hxshell:~$
```

No VM Protected



Note: Ensure no VMs are protected. The next image shows an example of the VM protection.

Check Data Protection Peer List

The Peer List can be checked. To ensure no entries appear when the replication is cleared, use the command:

```
stcli dp peer list
```

Example for data protection peer configured:

```
hxshell:~$ stcli dp peer list
Management IP:          .208
Replication IP:           .7
Description:
Name: ReplicationDemo
Datastores:
    quiesce: False
    storageOnly: False
    backupOnly: False
    aDs:
        clEr:
            id: 1453
            type: cluster
            name: T
        dsEr:
            id: 00000000c
            type: datastore
            name: Replication Demo T
    bDs:
        clEr:
            id: 7435
            type: cluster
        dsEr:
            id: 000000002
            type: datastore
            name: Replication Demo S
hxshell:~$
```

How to Check Peer List

This is an example for the cleared data protection peer:

```
hxshell:~$ stcli dp peer list
hxshell:~$
```

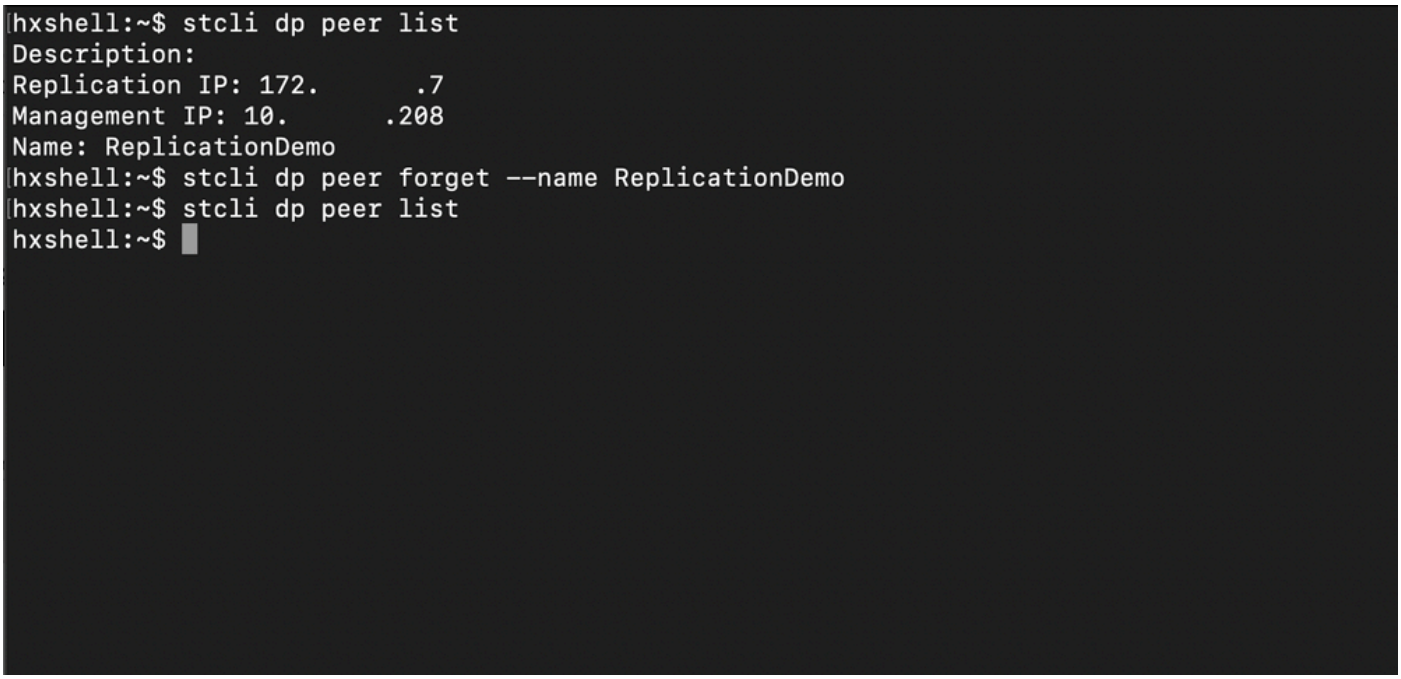
Peer Cleared Example

Delete Manually the Peer When Necessary

In case the remote peer is permanently unavailable, or not available for a long period of time, this command is for clearing the peer relation:

```
stcli dp peer forget --name <pair-name>
```

Example of the **peer forget** command:



Replication Peer Forget Command

Take into account

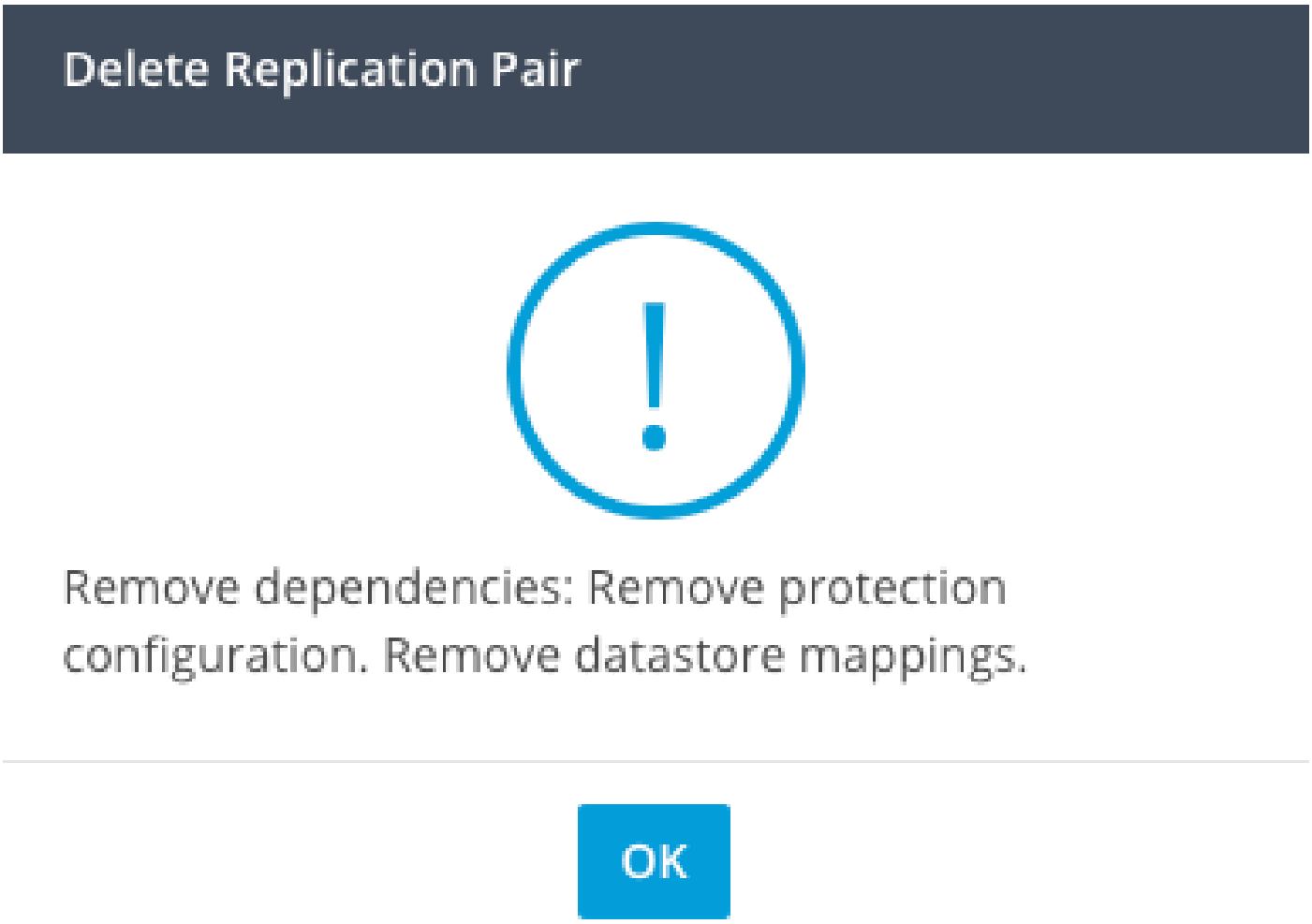
- The cluster pairing is cleared from the HX connect as shown in the procedure in this document
- If this command is issued by mistake in one of the clusters when they still have connectivity with each other, ensure it is executed in the other peer as well.
- The command only clears the peer details on the cluster where it is executed.

Common Issues

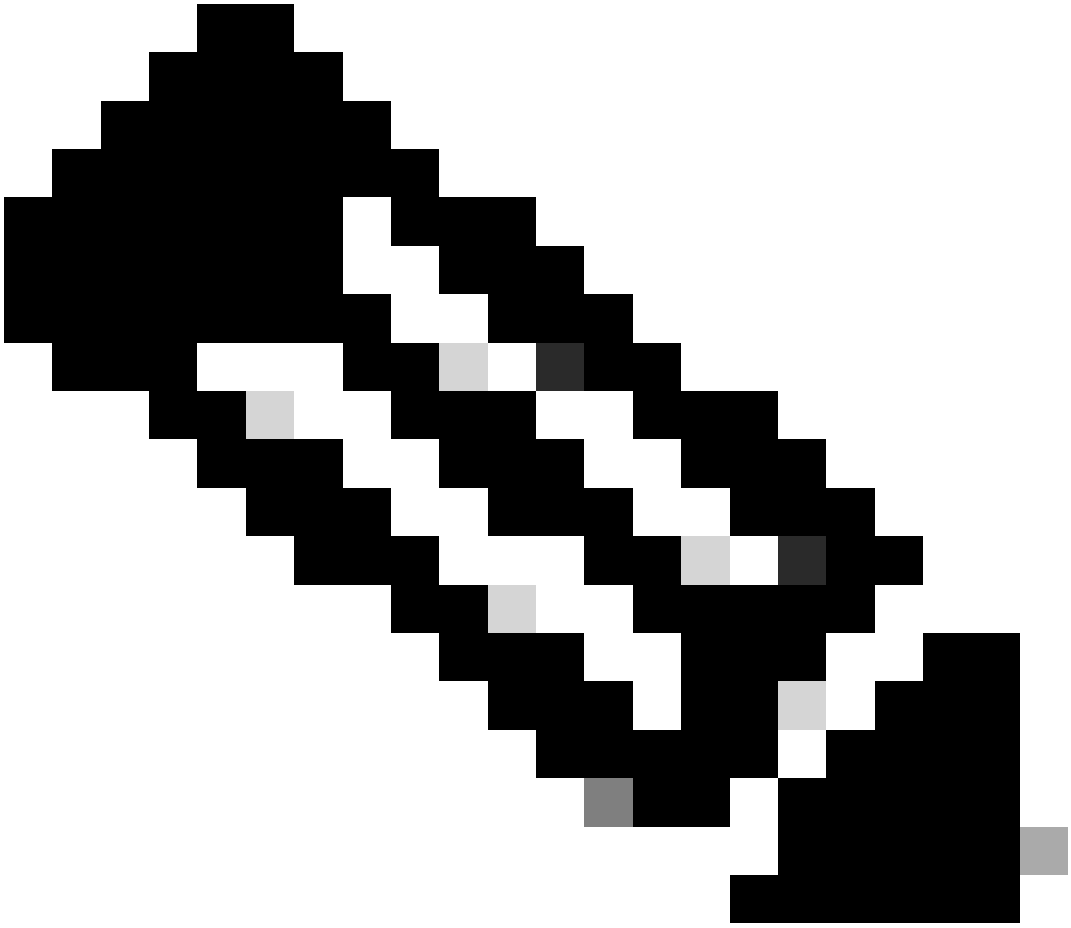
Dependencies issues

Ensure VM protection is removed along with datastore mapping.

When trying to delete a replication pair without removing the VM Protection/Datastore Mapping, a pop up window appears indicating the dependencies must be cleared.



Peer Deletion Error

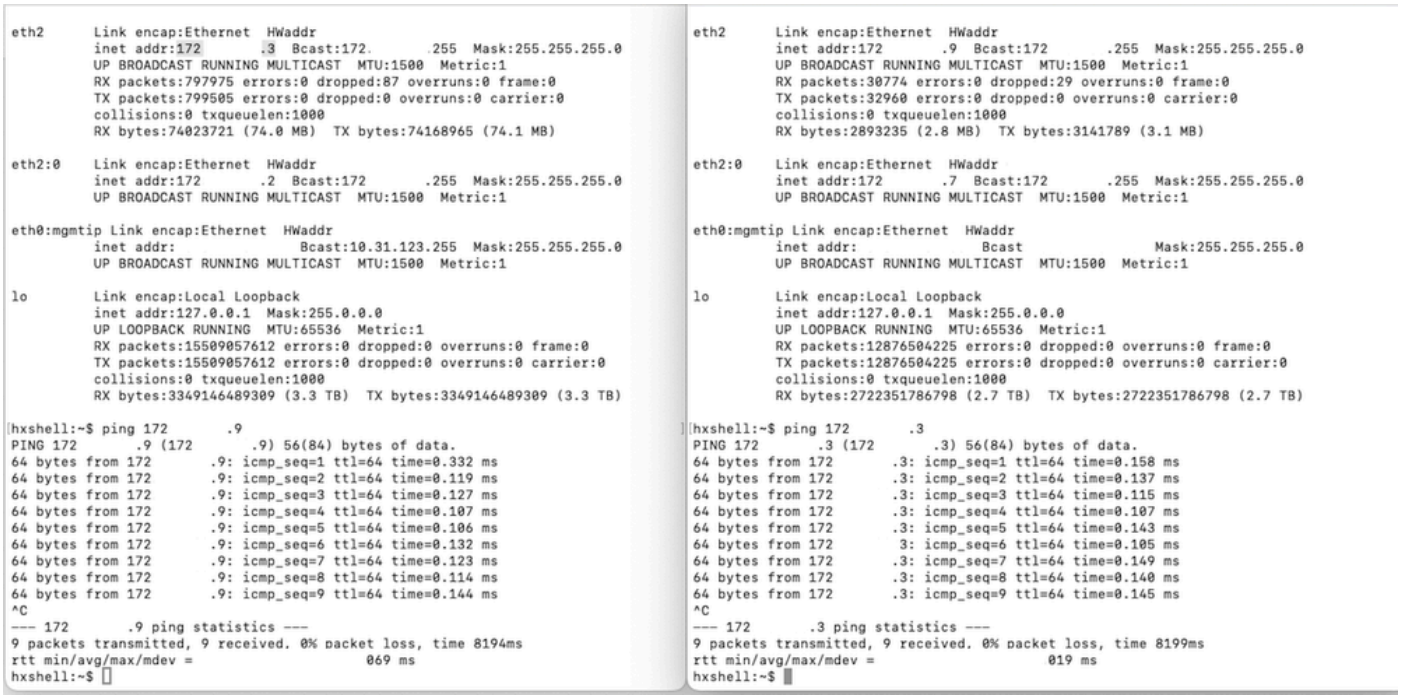


Note: It is expected this operation cannot be completed if communication issues are present between the cluster on the eth2 network.

Connectivity Issues

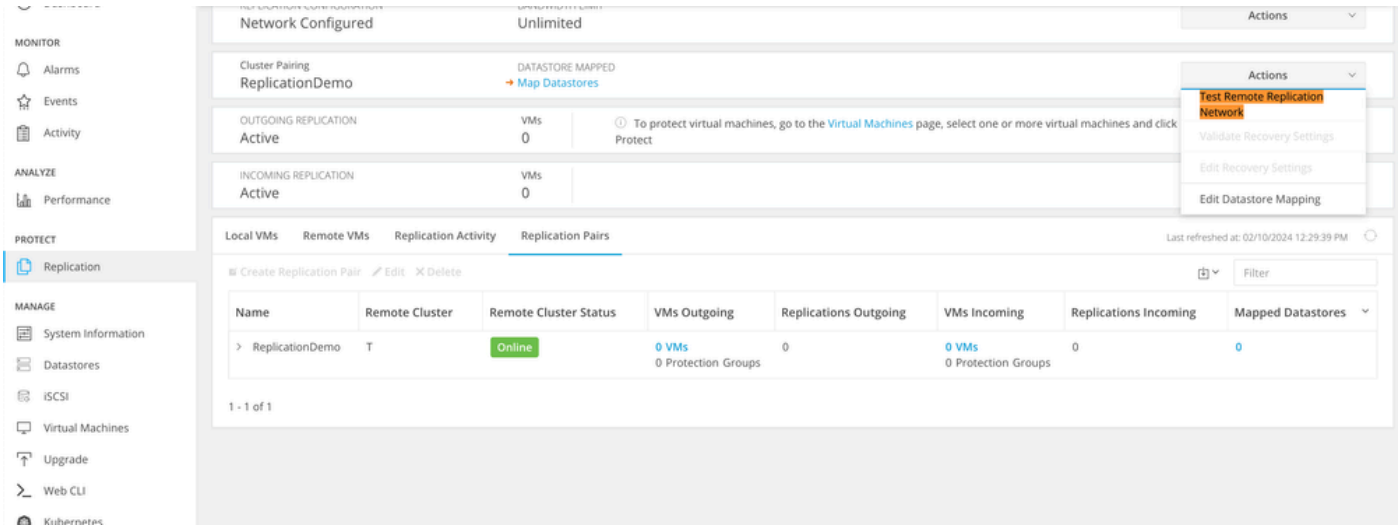
Connectivity issues can lead to difficulties with the clean up proccess because each of the storage controller virtual machines from each cluster are in active communication with their peers through the eth2. If at least one controller virtual machine does not response through the eth2 network, it can cause the replication and cleanup activities to fail.

- Verify the eth2 is present. Use the **ifconfig** command on **eachstorage** Controller virtual machines to confirm the eth2 appears up, if not up TAC intervention is needed.
- Use **ping** to test connectivity between the eth2 interfaces for each storage controller virtual machines.



Eth2 Ping Test Example

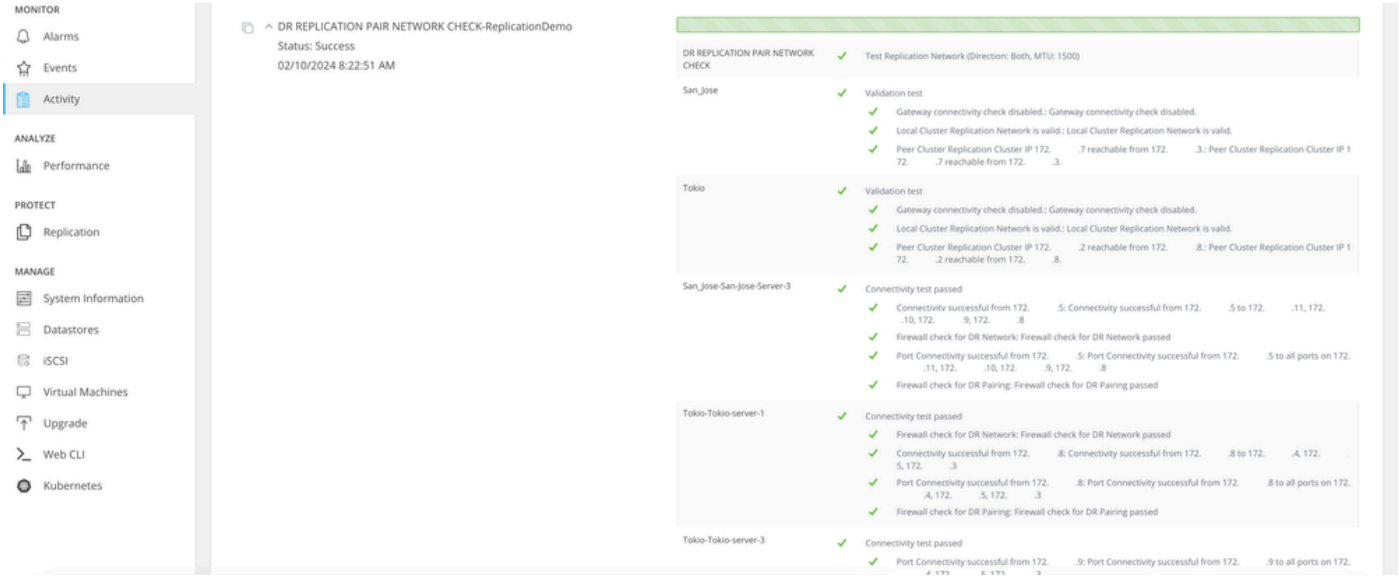
- Ensure the Replication VLAN in both clusters match.
- Ensure the replication VLAN is properly configured in all the paths between the clusters.
- Ensure the MTU matches in both clusters local and remote for the replication network
- Use the **Test Remote Replication Network** Option to verify connectivity. Select **Replication**, in the cluster pairing, select **Actions** > **Test Remote Replication Network**:



Test Remote Replication Network

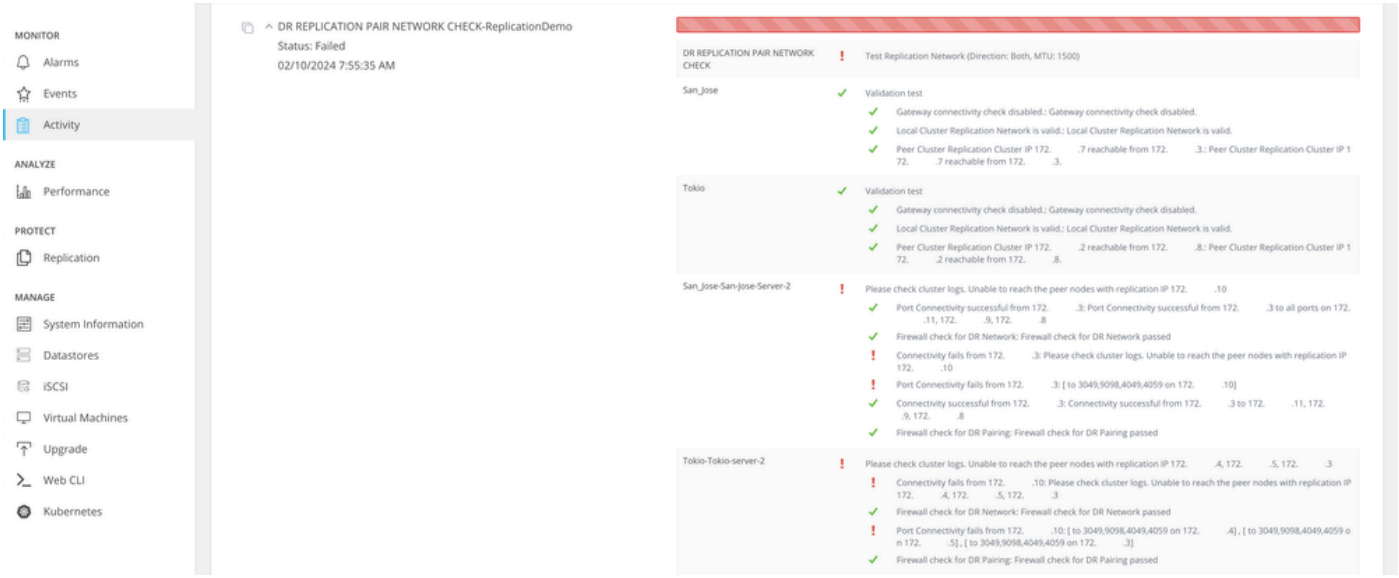
- Monitor this operation in the **Activity** tab.

Example of a successful test:



Successful Test Example

Example of a failed test:



Unsuccessful Test

Related Information

- Cisco HyperFlex Data Platform Administration Guide, Release 5.0
- Cisco HyperFlex Data Platform CLI Guide, 5.0
- Cisco Technical Support & Downloads