

Mount HyperFlex Datastore on Non-Hyperflex ESXi Hosts

Contents

[Introduction](#)

[Scenario](#)

[Requirements](#)

[Detailed Procedure](#)

[Hyperflex Nodes](#)

[Storage Controller](#)

[Legacy ESXi Hosts](#)

[Related Information](#)

Introduction

This document describes how to mount HyperFlex (HX) datastore on Non-HX ESXi Hosts.

Scenario

- Migrate the Virtual Machine (VM) from a legacy ESXi cluster to an HX cluster.
- The VM needs to move to an HX datastore since existing datastores are part of a legacy storage array to be decommissioned/repurposed.

Requirements

- Root access to legacy ESXi hosts and HX converged nodes.
- Root access to storage controllers.
- Ensure Quality of Service (QoS) and jumbo frames are configured correctly end-to-end.
- The Storage Data Network VLAN uses Platinum with a Class of Service (CoS) value of 5.
- Storage Data Network VLAN must be reachable by the legacy ESXi hosts.
- Legacy ESXi hosts must be able to ping, using jumbo frames, the IP address of the HX storage cluster data (not the management IP address).

Detailed Procedure

Hyperflex Nodes

Step 1: SSH to one of the HX nodes.

Enter the `esxcfg-nas -l` command in order to list the mounted datastores.

```
<#root>
```

```
[root@hx-esxi-01:~]
```

```
esxcfg-nas -l
```

```
hx-nfs-1 is 192.168.255.254:hx-nfs-1 from 1234567890987654321-9876543210123456789 mounted available
hx-nfs-2 is 192.168.255.254:hx-nfs-2 from 1234567890987654321-9876543210123456789 mounted available
hx-nfs-3 is 192.168.255.254:hx-nfs-3 from 1234567890987654321-9876543210123456789 mounted available
```

Step 2:

Enter the `cat /etc/hosts` command and note the output for the HX cluster universally unique identifier (UUID). Look for the line that contains the word `springpath`.

```
<#root>
```

```
[root@hx-esxi-01:~]
```

```
cat /etc/hosts
```

```
# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1      localhost.localdomain localhost
::1          localhost.localdomain localhost
172.16.255.101 hx-esxi-01.cnmi.local hx-esxi-01
127.0.0.1      1234567890987654321-9876543210123456789.springpath 1234567890987654321-9876543210123456789
```



Note: The HX cluster UUID matches the output from the command `stcli cluster info`.

```
<#root>
```

```
root@SpringpathControllerABC7DEFGHI:~#
```

```
stcli cluster info |less
```

```
entityRef:
```

```
  type: cluster
```

```
  id:
```

```
1234567890987654321-9876543210123456789
```

```
  name: hx-cluster
```

```
config:
```

```
  clusterUuid:
```

```
1234567890987654321-9876543210123456789
```

```
  name: hx-cluster
```

Step 3:

Enter the `esxcli network firewall unload` command on all HX converged nodes.

```
<#root>
[root@hx-esxi-01:~]
esxcli network firewall unload
[root@hx-esxi-02:~]
esxcli network firewall unload
[root@hx-esxi-03:~]
esxcli network firewall unload
[root@hx-esxi-04:~]
esxcli network firewall unload
```

Storage Controller

Step 4: SSH to one of the storage controllers.

Enter the `stcli security whitelist add --ips <vmkernel IP Address on the storage data network for legacy ESXi Hosts>` command.

```
<#root>
root@SpringpathControllerABC7DEFGHI:~#
stcli security whitelist add --ips 192.168.255.201 192.168.255.202 192.168.255.203 192.168.255.204
```

The previous example demonstrated how to add four legacy ESXi hosts to the whitelist.

Review the whitelist.

```
<#root>
root@SpringpathControllerABC7DEFGHI:~#
stcli security whitelist list

-----
192.168.255.201
-----
192.168.255.202
-----
192.168.255.203
-----
192.168.255.204
-----
```

Legacy ESXi Hosts

Step 5: SSH to each of the legacy ESXi hosts.

Enter the `vi /etc/hosts` command in order to edit the `/etc/hosts` file.

```
<#root>
[root@legacy-esxi-01:~]
vi /etc/hosts

# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1    localhost.localdomain localhost
::1        localhost.localdomain localhost
172.16.255.201 legacy-esxi-01.cnmi.local legacy-esxi-01
```

Step 6:

Copy the entry from `/etc/hosts` file of the HX node taken earlier and paste it into the `/etc/hosts` file of the legacy ESXi host and save the changes.

```
<#root>
[root@legacy-esxi-01:~] vi /etc/hosts

# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1    localhost.localdomain localhost
::1        localhost.localdomain localhost
172.16.255.201 legacy-esxi-01.cnmi.local legacy-esxi-01

127.0.0.1    1234567890987654321-9876543210123456789.springpath 1234567890987654321-98765432101234567
```

Step 7:

Change 127.0.0.1 to the HX cluster data IP address.

```
<#root>
[root@legacy-esxi-01:~] vi /etc/hosts

# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1    localhost.localdomain localhost
::1        localhost.localdomain localhost
172.16.255.201 legacy-esxi-01.cnmi.local legacy-esxi-01

192.168.255.254 1234567890987654321-9876543210123456789.springpath 1234567890987654321-98765432101234567
```

Step 8:

Enter the `esxcfg-nas -a -o <host> -s <share_name> <datastore_name>` command.

```
<#root>
```

```
[root@legacy-esxi-01:~]
```

```
esxcfg-nas -a -o 1234567890987654321-9876543210123456789 -s 192.168.255.254:hx-nfs-1 hx-nfs-1
```

```
[root@legacy-esxi-01:~]
```

```
esxcfg-nas -a -o 1234567890987654321-9876543210123456789 -s 192.168.255.254:hx-nfs-2 hx-nfs-2
```

```
[root@legacy-esxi-01:~]
```

```
esxcfg-nas -a -o 1234567890987654321-9876543210123456789 -s 192.168.255.254:hx-nfs-3 hx-nfs-3
```

Step 9:

Enter the `esxcfg-nas -l` command in order to confirm the HX datastore successfully mounted on the legacy ESXi host.

```
<#root>
```

```
[root@legacy-esxi-01:~]
```

```
esxcfg-nas -l
```

```
hx-nfs-1 is 192.168.255.254:hx-nfs-1 from 1234567890987654321-9876543210123456789 mounted available  
hx-nfs-2 is 192.168.255.254:hx-nfs-2 from 1234567890987654321-9876543210123456789 mounted available  
hx-nfs-3 is 192.168.255.254:hx-nfs-3 from 1234567890987654321-9876543210123456789 mounted available
```

The HX datastores are now mounted on the legacy ESXi host.

Related Information

- [Managing Datastores](#)
- [Technical Support & Documentation - Cisco Systems](#)