Managing HyperFlex Stretched Clusters

Overview

You can view do the following for the sites and the witness node in a stretched cluster using HX Connect:

- View the Operational Status and Resiliency Status of the HyperFlex cluster on both the sites and the witness node.

- View the Functional status of the sites and the witness node, and the IP address of the witness node. View HX storage cluster system-related information, including node and disk data.

- Enter/Exit HX maintenance mode.

- Associate a datastore with one of the sites in a stretched cluster, when creating the datastore.

Monitoring the Health of a Stretched Cluster

You can view the Operational Status and Resiliency Status of the HyperFlex cluster on both the sites and the witness node in HX Connect on the Dashboard page.

Important   If you are a read-only user, you may not see all the options available in the Help. To perform most actions in HX Connect, you must have administrative privileges.

Step 1   Log in to HX Connect.

a) Enter the HX Storage Cluster management IP address in a browser. Navigate to *https://<storage-cluster-management-ip>*.
b) Enter the administrative username and password.
c) Click **Login**.

Step 2   On the left navigation pane, click **Dashboard**.

Step 3   On the **Dashboard** you can view the following details for the HyperFlex Stretched Cluster:

Displays a status summary of your HX storage cluster for the sites across the stretched cluster.

UI Element	Essential Information
Operational Status section	Provides the functional status and application performance of the HX storage cluster on Site A and Site B.
	Provides the functional status and application performance of the witness node.
	Click **Information** (ⓘ) to access the HX storage cluster name and status data.
Resiliency Health section	Provides the data health status and the ability of the HX storage cluster on Site A and Site B to tolerate failures.
	Click **Information** (ⓘ) to access the resiliency status, replication and failure data. This also provides information about data replication compliance, caching device failures tolerable, and device failures tolerable on each node in both the sites.
Capacity section	Displays a breakdown of the total storage versus how much storage is used or free.
	Also displays the storage optimization, compression-savings, and deduplication percentages based on the data stored in the cluster.
Nodes section	Displays the number of nodes and the division of converged versus compute nodes across Site A and Site B in the Stretched Cluster.
	Hovering over a node icon displays that node's name, IP address, node type, and an interactive display of disks with access to capacity, usage, serial number, and disk type data.
Performance section	Displays an HX storage cluster performance snapshot for a configurable amount of time, showing IOPS, throughput, and latency data.
	For full details, see **Performance Page**.
Cluster Time field	System date and time for the cluster.

Several tables in HX Connect provide one or more of the following three fields that affect the content displayed in the table.

UI Element	Essential Information
Refresh field and icon	The table automatically refreshes for dynamic updates to the HX Cluster. The timestamp indicates the last time the table was refreshed.
	Click the circular icon to refresh the content now.

UI Element	Essential Information
Filter field	Display in the table only list items that match the entered filter text. The items listed in the **current** page of the table are automatically filtered. Nested tables are not filtered.

Type in the selection text in the **Filter** field.

To empty the **Filter** field, click the **x**.

To export content from other pages in the table, scroll to the bottom, click through the page numbers, and apply the filter. |
| **Export** menu | Save out a copy of the **current** page of table data. The table content is downloaded to the local machine in the selected file type. If the listed items are filtered, the filtered subset list is exported.

Click the down arrow to select an export file type. The file type options are: `cvs`, `xls`, and `doc`.

To export content from other pages in the table, scroll to the bottom, click through the page numbers, and apply the export. |

Viewing System Information

On the **System Information** page, you can view HX storage cluster system-related information, including node and disk data. You can also Enter or Exit Maintenance Mode for the sites.

Step 1 Log in to HX Connect.

a) Enter the HX Storage Cluster management IP address in a browser. Navigate to *https://<storage-cluster-management-ip>*.

b) Enter the administrative username and password.

c) Click **Login**.

Step 2 On the left navigation pane, select **System Information**.

Step 3 Under the **System Overview** tab you can view the following information for both the sites and the witness node:

HX Storage Cluster Configuration Data tab

Displays the basic configuration information the HX storage cluster on the stretched cluster sites.

Field	Description
HX storage cluster field	Name of this storage cluster.

Field	Description
HX storage cluster status field	Provides functional status of the HX storage cluster in Site A and Site B: • **Online**—Cluster is ready. • **Offline**—Cluster is not ready. • **Read Only**—Cluster is out of space. • **Unknown**—Transitional state while the cluster is coming online.
vCenter link	Secure URL to the VMware vSphere associated with this HX storage cluster. Click the link to remotely access the vSphere Web Client.
Hypervisor field	Hypervisor version installed on this HX storage cluster.
HXDP Version field	Installer package version installed on this HX storage cluster.
Data Replication Factor field	Number of the redundant data replicas stored on this HX storage cluster.
Uptime field	Length of time this HX storage cluster has been online.
Total Capacity field	Overall storage size of this cluster.
Available Capacity field	Amount of free storage in this cluster.
DNS Server(s) field	IP address for the DNS server(s) for this HX storage cluster.
NTP Server(s) field	IP address for the NTP server(s) for this HX storage cluster.
Witness IP Address field	Provides the IP address of the Witness VM.

Step 4   Under the **Nodes** tab, you can view the following information:

Displays data about individual nodes in this HX storage cluster. To see this information in tabular format, go to the **Nodes** page.

UI Element	Essential Information
Node field	Name of a node on this cluster.
Model field	Physical hardware model number of this node.
Disks field	Number of caching versus persistent disks in this node.
Node status field	• **Online** • **Offline** • **In Maintenance** • **Healthy** • **Warning**
HXDP Version field	Installer package version installed on this node.

UI Element	Essential Information
Hypervisor Status field	• **Online** • **Offline** • **In Maintenance** • **In Progress**
Hypervisor Address field	IP address for the management network for this HX storage cluster.
Controller Address field	IP address of the controller VM on this HX storage cluster.
Controller Status field	Status of the controller VM on this HX storage cluster.

Step 5   Under the **Disks** tab, you can view the following information:

For nodes with disks, an interactive display of disks is included with the following pop-up data:

Table 1: Caching Disks

UI Element	Essential Information
Slot Number field	Location of the drive.
Serial Number field	Physical serial number of this disk.
Disk State field	• **Ready**
Capacity field	Total disk size.
Storage Usage field	Percentage of disk storage used.
Locator LED action	Activates a physical light on the host to help locate a disk; options are **On** and **Off**.

Table 2: Persistent Disks

UI Element	Essential Information
Slot Number field	Location of the drive.
Serial Number field	Physical serial number of this disk.
Disk State field	• **Ready** • **Blacklisted** • **To Be Removed**
Used / Total Capacity field	Amount of the disk used versus the total disk size.
Storage Usage field	Percentage of disk storage used.

UI Element	Essential Information
Locator LED action	Activates a physical light on the host to help locate a disk; options are **On** and **Off**.

Create Datastore

To associate a datastore with one of the sites in a stretched cluster, do the following:

Step 1 Log in to HX Connect.

a) Enter the HX Storage Cluster management IP address in a browser. Navigate to *https://<storage-cluster-management-ip>*.

b) Enter the administrative username and password.

c) Click **Login**.

Step 2 On the left navigation page, click **Datastores**.

Step 3 In the work pane, click **Create Datastore**.

Step 4 Enter a datastore name and capacity.

UI Element	Essential Information
Datastore Name field	Enter a unique datastore name for this HX Storage Cluster.
Size field	Enter the quantity of the datastore. Select the unit of measure. Options are: **GB** and **TB**. Ensure it is sufficient to support the virtual machines in this HX Storage Cluster.
Block Size	Select a block size. • 8K—Default • 4K
Site Affinity	Choose a site from the drop-down list to associate the datastore with the site.

Step 5 Click **Create Datastore**.

HX Data Platform creates a datastore and mounts it on every node in this HX Storage Cluster.