

# Dell PowerStore Setting Up PowerStore Manager

After completing the Initial Configuration Wizard (ICW), use this guide to configure your support settings and learn how to use the primary features of your system.


Topics:

- [Configuration walkthrough](#)
- [Common tasks](#)
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## Configuration walkthrough

### Prerequisites

Log in to the PowerStore Manager with your browser using the IP address of the cluster.

 **NOTE:** You can log in with the Administrator (**admin**) account. The service user account cannot log in to PowerStore Manager.

### About this task

It is recommended that you complete the following one-time setup activities for the best experience and take full advantage of your PowerStore system.

### Steps

1. [Configure support connectivity](#)  
If you have already configured Support Connectivity from the ICW, you can skip this step.
2. [Provide contact information for remote support](#)
3. [Configure storage network](#)
4. [Configure email and SMTP alert notification preferences](#)
5. [Enable CHAP](#)
6. [Enable SSH management](#)
7. [Enable HTTP Redirect](#)

### Next steps

This guide also provides an overview of many common tasks you can perform on your PowerStore system.

- [Customize table views](#)
- [Customize login message](#)
- [Add users](#)
- [Import data from external storage systems](#)
- [Create data protection policies](#)
- [Configure storage resources](#)
- [Configure host access](#)
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## Configure Support Connectivity

To resolve problems more quickly and easily, enable Support Connectivity.

### About this task

For more information about Support Connectivity, including the benefits it provides and details about configuration types, see the context-sensitive help entry for this feature. For in-depth information about how this feature works, see the *PowerStore Security Configuration Guide*.

### Steps

1. Select the **Settings** icon, and then select **Support Connectivity** in the **Support** section.
2. Select the **Connection Type** tab.
3. Enable Support Connectivity.
4. If you would like to enable CloudIQ, keep the option selected.
5. Select the Support Connectivity configuration to use: **Connect Directly** or **Connect via Secure Connect Gateway**. Depending on the type of configuration that is selected, different information is required.
6. Enter the information that is required for your configuration type.
7. Select whether you would like to enable **Remote Support**, then click **Apply**.

### Results

When Support Connectivity is enabled, you can click **Send Test Alert** to verify connectivity.

## Provide contact information for remote support

To ensure that Support can contact you quickly in response to an issue, ensure that your contact information is accurate and current.

### Steps

1. Select the **Settings** icon, and then select **Support Connectivity** in the **Support** section.
2. On the **Support Contacts** tab, enter your contact information details and then click **Apply**.

## Configure storage network

Configure the storage network for your cluster.


### About this task

For detailed information for configuring storage networks, refer to the networking guide for your model.

### Steps

1. Select the **Settings** icon, and then select **Network IPs** in the **Networking** section.
2. On the **Storage** tab under **Available Networks**, click **Create** to launch the **Create Storage Network** wizard.
3. Enter the network details, then map each appliance as needed.

### Next steps

 **NOTE:** You can add up to 32 Storage networks per appliance. You can configure up to 8 networks on each port of the 4-port card.

## Configure email notification preferences

You can configure your system to send alert notifications through email using an SMTP server.

### About this task

Use this procedure to configure an SMTP server and email recipients. For more information about SMTP server settings, see the context-sensitive help entry for this feature.

### Steps


1. Select the **Settings** icon, and then select **SMTP Server** in the **Networking** section.
2. To access the SMTP server settings, change the status to **Enabled**.
3. Add the SMTP server address and the email address that notifications should be sent from and click **Apply**.  
(Optional) Send a test email to verify that the SMTP server is set up correctly.
4. Select the **Settings** icon, and then select **Email Notifications** in the **Support** section.
5. To add email recipients, click **Add** in the **Email Subscribers** area and type the email address that you want to send alert notifications to.  
When you add an address, you can select the severity level of the alert notifications that are sent to that address.  
(Optional) To verify whether email addresses are entered correctly, select the target email addresses and then click **Send Test Email**.

## Configure CHAP authentication

Challenge Handshake Authentication Protocol (CHAP) authenticates iSCSI initiators (hosts) and targets (volumes and snapshots) to expose iSCSI storage while ensuring a secure, standard storage protocol.

### About this task

Without CHAP authentication, any host that is connected to the same IP network as the system iSCSI ports can read from and write to the system. If your system is on a public network, it is strongly recommended that you use CHAP authentication.

 **NOTE:** If you plan to use CHAP authentication, you must set up and enable CHAP authentication before preparing volumes to receive data. If you prepare drives to receive data before you set up and enable CHAP authentication, you could lose access to the volumes.

For more information about CHAP authentication, including the benefits that it provides and details about implementation types, see the context-sensitive help entry in PowerStore Manager.

For in-depth information about how this feature works, see the *PowerStore Security Configuration Guide*.


### Steps

1. Select the **Settings** icon, and then select **iSCSI CHAP** in the **Security** section.
2. Enable CHAP authentication.  
Additional configuration details are displayed.
3. Select the type of CHAP implementation to use and click **Apply**.

## Configure external SSH access

### About this task

To determine the status of SSH on appliances within a cluster, in the PowerStore Manager, click **Settings** and under **Security** select **SSH Management**.

 **NOTE:** For maximum appliance security, leave the external SSH service interface disabled unless it is needed to perform service operations on the appliance. After performing the necessary service operations, disable the SSH interface to ensure that the appliance remains secure.

For more information about SSH access, see the context-sensitive help entry for this feature. For in-depth information about how this feature works, see the *PowerStore Security Configuration Guide*.

### Steps

1. Select the **Settings** icon, and then select **SSH Management** in the **Security** section.
2. Select the appliance or appliances on which to enable SSH.
3. Click **Enable SSH**.

### Next steps

Once the SSH service has been successfully enabled, use any SSH client to log in to the appliance IP address. Accessing the appliance requires service user credentials.

The service account enables users to perform the following functions:

- Perform specialized appliance service scripts for monitoring and troubleshooting appliance system settings and operations.
- Operate only a limited set of commands that are assigned as a member of a nonprivileged Linux user account in restricted shell mode. This account does not have access to proprietary system files, configuration files, or user or customer data.

To disable SSH access, follow the same procedure, but click **Disable SSH** instead.

## Enable HTTP Redirect

### About this task

For security reasons, PowerStore does not support accessing the PowerStore Manager using the 'http' prefix. Instead, users can access the PowerStore Manager with the more secure 'https' prefix.

Enabling HTTP Redirect automatically redirects the browser session to 'https'.

### Steps

1. Select the **Settings** icon, and then select **HTTP Redirect** in the **Security** section.
2. Enable HTTP Redirect.


# Common tasks

## Customize table views in PowerStore Manager

Customize PowerStore Manager table views by selecting which columns to display, filter, and sort.

### Steps

1. To show or hide columns:
  - a. Click **Show/Hide Table Columns** icon.
  - b. Select the check boxes of the columns that you want to show, or clear the check boxes of columns that you do want to hide.

 **NOTE:** Some columns are shown by default and cannot be hidden.
  - c. To automatically adjust the column widths to the size of the table contents, click **Autofit Columns**.
  - d. To reset the columns back to the default view, click **Reset Columns**
2. To filter tables:
  - a. Click the **Show Filters** icon to display the filter options for the table.
  - b. Select one of the available default filters that appear above the table columns, or select specific filters from the **Add Filters** drop-down menu.
  - c. To reset the filters back to the default view, click **Restore Default Filters**.
3. To sort a table by one or more columns:
  - a. To sort the table by a single column, click the column name on which to sort the table.

A column is sorted in ascending order by default. To change the sort order of a column, click the column name.

    - An up arrow is displayed next to the column name of a column that is sorted in ascending order.
    - A down arrow is displayed next to the column name of a column that is sorted in descending order.
    - If an up or down arrow is not displayed next to any column name, the table is not sorted by any column.
  - b. To sort a table by a second column, hold the Shift key and click the column name of second column on which to sort the table.

When a table is sorted by two columns, the number **2** is displayed next to the column name of the second column that is sorted.
  - c. To sort a table by a third column, hold the Shift key and select the column name of third column on which to sort the table.

When a table is sorted by three columns, the number **3** is displayed next to the column name of the third column that is sorted.
  - d. Continue to hold the Shift key and click column names to sort by additional columns, as needed.
  - e. To reset a multiple column sort, click any column name.

For example, to sort the table on the **Volumes** page by multiple columns, hold the Shift key, and click the **Provisioned** column name and **Logical Used** column name. The table is sorted by the Provisioned column first and Logical Used column second.

## Customize the login message

### About this task

The login message is displayed when the user logs in to the PowerStore system for compliance and security. The system administrator can provide a login message informing users on authorized and acceptable use of the system.

### Steps

1. Select the **Settings** icon, and then select **Login Message** in the **Security** section.
2. Enable Login Message (if not enabled).
3. Write the login message and click **Apply**.

## Add users

Add user accounts with specific roles and privileges for different management tasks.

### About this task

PowerStore ships with a default **admin** account that has the Administrator role. Use this account to create additional accounts to enable user access. To grant users privileges to perform specific tasks, select the corresponding role for those actions.

For more information about user account types, roles, and privileges, see the context-sensitive help entry for this feature. For in-depth information about how this feature works, see the *PowerStore Security Configuration Guide*.

### Steps

1. Select the **Settings** icon, and then select **Users** in the **Security** section.
2. Click **Add**.
3. In the **Add User** panel:
  - Enter a **User Name**.
  - Select a **User Role** for the account.
  - Enter a password in both password fields.
4. Click **Apply**.

## Import data from external storage systems

Use the Importing External Storage to PowerStore tool to import data from your existing supported storage systems.

You can import data from the following storage platforms to a PowerStore cluster:

- Dell EqualLogic Peer Storage (PS) Series
- Dell Compellent Storage Center (SC) Series
- Dell Unity Series
- Dell VNX2 Series
- XtremIO X1
- XtremIO X2
- PowerMax
- VMAX3
- NetApp

Import of the following block storage resources is supported:

- LUNs and volumes
- Consistency groups and volume groups
- Thin and thick clones
- VMFS datastores

PowerStore 3.x supports import of file storage resources.

Before beginning the import process, ensure that you review the prerequisites and take necessary preconfiguration actions. For more information, see the context-sensitive help entry for this feature. For in-depth information about how this feature works, see the *PowerStore Importing External Storage to PowerStore Guide*.

## Create data protection policies

Use snapshot and data replication rules to protect your data.


### About this task

Snapshots are point-in-time copies of data that are stored in an application, volume, or volume group. You can take snapshots manually or configure the system to automatically take snapshots on a schedule with snapshot rules.

Data replication duplicates storage data to a remote system to protect against failure of the production storage system. To use data replication, you must create a remote system connection. You can configure the system to automatically start a replication session to meet a specified recovery point objective (RPO) with replication rules.

You can combine a replication rule with up to eight snapshot rules to create a protection policy for a storage resource. The protection policy automatically manages snapshots or replication operations according to the selected rules. You can apply a specific policy to a storage resource based on the business need or criticality of the data.

For more information about user snapshots, replication, and protection policies, see the context-sensitive help entries for these features. For in-depth information about how this feature works, see the *PowerStore Protecting Your Data Guide*.

 **NOTE:** This workflow is a suggestion; the order that is shown is not required.

### Steps

1. Under **Protection**, select **Protection Policies**.
2. To configure a snapshot rule, click **Snapshot Rules** and then click **Create**.  
On the **Create Snapshot Rule** panel, enter a name for the rule and configure the settings that you want to use.
3. To configure a replication rule, click **Replication Rules** and then click **Create**.  
On the **Replication Rule Properties** screen, enter a name for the rule and configure the settings that you want to use.  
You can configure a remote replication destination from this screen.
4. To configure a protection policy, click **Protection Policies** and then click **Create**.  
On the **Policy Properties** screen, enter a name and description for the policy. Select the rules that you want to assign to the policy.  
You can configure new snapshot and replication rules from this screen.

## Configure storage resources

PowerStore provides a unified platform on which multiple types of storage resources can be configured.

To configure storage resources, click **Storage**, select the type of storage resource you want to configure, and then click **Create** on the page for that resource type.

You can configure the following types of storage resources:

- Volumes
- Volume groups
- Storage containers
- File systems
- NAS servers

For more information about configuring storage resources, see the context-sensitive help entries for these resource types. For in-depth information about configuring and managing storage resources types, see the following PowerStore guides:

- *PowerStore Configuring Volumes Guide*
- *PowerStore Configuring NFS Guide*
- *PowerStore Configuring SMB Guide*

## Configure host access

To enable a host to access storage, define a configuration for the host and associate it with a storage resource.

### About this task

For more information about hosts and host groups, see the context-sensitive help entries for this feature. For in-depth information about how to configure your hosts for connection, see the *PowerStore Host Configuration Guide*.

### Steps

1. Under **Compute**, select **Host Information**.

2. To connect to a host, click **Add Host**.
3. Complete the steps in the **Add Host** wizard.  
The host appears in the **Hosts and Host Groups** table.
4. To add hosts to a host group, click **Add Host Group**.  
This option is only available if there are hosts that can be added to a host group.
5. Enter a name and description for the host group, select the hosts to include, and then click **Create**.  
The host group appears in the **Hosts and Host Groups** table.

## Upgrading PowerStore software

For the latest features and improvements, upgrade to the latest available version of the PowerStore software.

For instructions on upgrading PowerStore software, see the *PowerStore Software Upgrade Guide*.

## Additional Resources

As part of an improvement effort, revisions of the software and hardware are periodically released. Some functions that are described in this document are not supported by all versions of the software or hardware currently in use. The product release notes provide the most up-to-date information about product features. Contact your service provider if a product does not function properly or does not function as described in this document.

## Where to get help

Support, product, and licensing information can be obtained as follows:

- **Product information**

For product and feature documentation or release notes, go to the PowerStore Documentation page at <https://www.dell.com/powerstoredocs>.



- **Troubleshooting**

For information about products, software updates, licensing, and service, go to <https://www.dell.com/support> and locate the appropriate product support page.

- **Technical support**

For technical support and service requests, go to <https://www.dell.com/support> and locate the **Service Requests** page. To open a service request, you must have a valid support agreement. Contact your Sales Representative for details about obtaining a valid support agreement or to answer any questions about your account.

## Online help

In PowerStore Manager, many features have dedicated help topics in the online help system. If context-specific help is available for the screen that you are viewing, a link to that help page appears above **Online Help** in the  menu. You can access help topics from  > **Online Help**.



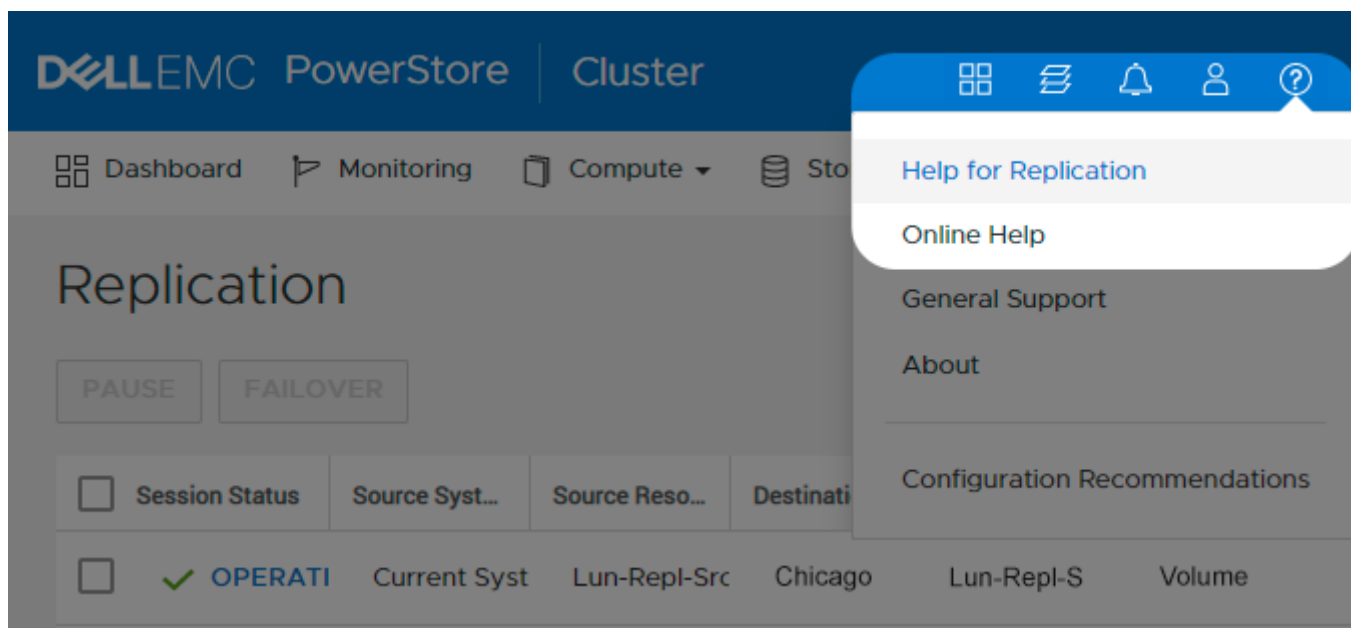



Figure 1. PowerStore Manager screen showing the specific help link for a feature

## Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.