



# **Performing a protection relationship failover and failback**

**Active IQ Unified Manager 9.9**

NetApp  
February 20, 2023

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# Performing a protection relationship failover and failback

When a source volume in your protection relationship is disabled because of a hardware failure or a disaster, you can use the protection relationship features in Unified Manager to make the protection destination read/write accessible and fail over to that volume until the source is online again; then, you can fail back to the original source when it is available to serve data.

## Before you begin

- You must have the Application Administrator or Storage Administrator role.
- You must have set up OnCommand Workflow Automation to perform this operation.

## Steps

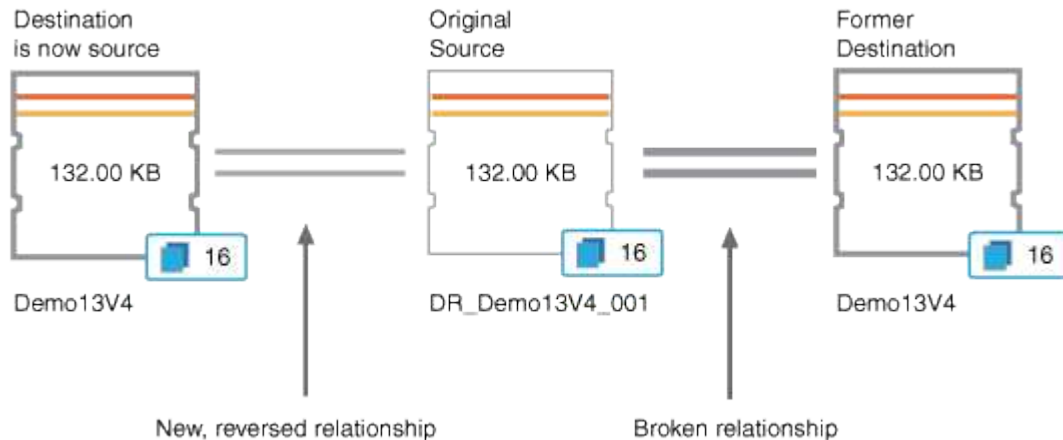
### 1. Break the SnapMirror relationship.

You must break the relationship before you can convert the destination from a data protection volume to a read/write volume, and before you can reverse the relationship.

### 2. Reverse the protection relationship.

When the original source volume is available again, you might decide to reestablish the original protection relationship by restoring the source volume. Before you can restore the source, you must synchronize it with the data written to the former destination. You use the reverse resync operation to create a new protection relationship by reversing the roles of the original relationship and synchronizing the source volume with the former destination. A new baseline Snapshot copy is created for the new relationship.

The reversed relationship looks similar to a cascaded relationship:



### 3. Break the reversed SnapMirror relationship.

When the original source volume is resynchronized and can again serve data, use the break operation to break the reversed relationship.

#### 4. [Remove the relationship.](#)

When the reversed relationship is no longer required, you should remove that relationship before reestablishing the original relationship.

#### 5. [Resynchronize the relationship.](#)

Use the resynchronize operation to synchronize data from the source to the destination and to reestablish the original relationship.

## Breaking a SnapMirror relationship from the Volume / Health details page

You can break a protection relationship from the Volume / Health details page and stop data transfers between a source and destination volume in a SnapMirror relationship. You might break a relationship when you want to migrate data, for disaster recovery, or for application testing. The destination volume is changed to a read-write volume. You cannot break a SnapVault relationship.

### Before you begin

- You must have the Application Administrator or Storage Administrator role.
- You must have set up Workflow Automation.

### Steps

1. In the **Protection** tab of the **Volume / Health** details page, select from the topology the SnapMirror relationship you want to break.
2. Right-click the destination and select **Break** from the menu.

The Break Relationship dialog box is displayed.

3. Click **Continue** to break the relationship.
4. In the topology, verify that the relationship is broken.

## Reversing protection relationships from the Volume / Health details page

When a disaster disables the source volume in your protection relationship, you can use the destination volume to serve data by converting it to read/write while you repair or replace the source. When the source is again available to receive data, you can use the reverse resynchronization operation to establish the relationship in the reverse direction, synchronizing the data on the source with the data on the read/write destination.

### Before you begin

- You must have the Application Administrator or Storage Administrator role.

- You must have set up Workflow Automation.
- The relationship must not be a SnapVault relationship.
- A protection relationship must already exist.
- The protection relationship must be broken.
- Both the source and destination must be online.
- The source must not be the destination of another data protection volume.

## About this task

- When you perform this task, data on the source that is newer than the data on the common Snapshot copy is deleted.
- Policies and schedules created on the reverse resynchronization relationship are the same as those on the original protection relationship.

If policies and schedules do not exist, they are created.

## Steps

1. From the **Protection** tab of the **Volume / Health** details page, locate in the topology the SnapMirror relationship on which you want to reverse the source and destination, and right-click it.
2. Select **Reverse Resync** from the menu.

The Reverse Resync dialog box is displayed.

3. Verify that the relationship displayed in the **Reverse Resync** dialog box is the one for which you want to perform the reverse resynchronization operation, and then click **Submit**.

The Reverse Resync dialog box is closed and a job link is displayed at the top of the Volume / Health details page.

4. Click **View Jobs** on the **Volume / Health** details page to track the status of each reverse resynchronization job.

A filtered list of jobs is displayed.

5. Click the Back arrow on your browser to return to the **Volume / Health** details page.

The reverse resynchronization operation is finished when all job tasks are completed successfully.

## Removing a protection relationship from the Volume / Health details page

You can remove a protection relationship to permanently delete an existing relationship between the selected source and destination: for example, when you want to create a relationship using a different destination. This operation removes all metadata and cannot be undone.

## Before you begin

- You must have the Application Administrator or Storage Administrator role.
- You must have set up Workflow Automation.

## Steps

1. In the **Protection** tab of the **Volume / Health** details page, select from the topology the SnapMirror relationship you want to remove.
2. Right-click the name of the destination and select **Remove** from the menu.

The Remove Relationship dialog box is displayed.

3. Click **Continue** to remove the relationship.

The relationship is removed from the Volume / Health details page.

## Resynchronizing protection relationships from the Volume / Health details page

You can resynchronize data on a SnapMirror or SnapVault relationship that was broken and then the destination was made read/write so that data on the source matches the data on the destination. You might also resynchronize when a required common Snapshot copy on the source volume is deleted causing SnapMirror or SnapVault updates to fail.

## Before you begin

- You must have the Application Administrator or Storage Administrator role.
- You must have set up OnCommand Workflow Automation.

## Steps

1. From the **Protection** tab of the **Volume / Health** details page, locate in the topology the protection relationship that you want to resynchronize and right-click it.
2. Select **Resynchronize** from the menu.

Alternatively, from the **Actions** menu, select **Relationship > Resynchronize** to resynchronize the relationship for which you are currently viewing the details.

The Resynchronize dialog box is displayed.

3. In the **Resynchronization Options** tab, select a transfer priority and the maximum transfer rate.
4. Click **Source Snapshot Copies**; then, in the **Snapshot Copy** column, click **Default**.

The Select Source Snapshot Copy dialog box is displayed.

5. If you want to specify an existing Snapshot copy rather than transferring the default Snapshot copy, click **Existing Snapshot Copy** and select a Snapshot copy from the list.

6. Click **Submit**.

You are returned to the Resynchronize dialog box.

7. If you selected more than one source to resynchronize, click **Default** for the next source for which you want to specify an existing Snapshot copy.

8. Click **Submit** to begin the resynchronization job.

The resynchronization job is started, you are returned to the Volume / Health details page and a jobs link is displayed at the top of the page.

9. Click **View Jobs** on the **Volume / Health** details page to track the status of each resynchronization job.

A filtered list of jobs is displayed.

10. Click the Back arrow on your browser to return to the **Volume / Health** details page.

The resynchronization job is finished when all job tasks successfully complete.

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