



Use group snapshots for data protection

Element Software

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Using group snapshots for data protection task

You can create a group snapshot of a related set of volumes to preserve a point-in-time copy of the metadata for each volume. You can use the group snapshot in the future as a backup or rollback to restore the state of the group of volumes to a previous state.

Find more information

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Group snapshot details

The Group Snapshots page on the Data Protection tab provides information about the group snapshots.

- **ID**

The system-generated ID for the group snapshot.

- **UUID**

The unique ID of the group snapshot.

- **Name**

User-defined name for the group snapshot.

- **Create Time**

The time at which the group snapshot was created.

- **Status**

The current status of the snapshot. Possible values:

- **Preparing:** The snapshot is being prepared for use and is not yet writable.
- **Done:** This snapshot has finished preparation and is now usable.
- **Active:** The snapshot is the active branch.

- **# Volumes**

The number of volumes in the group.

- **Retain Until**

The day and time the snapshot will be deleted.

- **Remote Replication**

Indication of whether or not the snapshot is enabled for replication to a remote SolidFire cluster. Possible values:

- Enabled: The snapshot is enabled for remote replication.
- Disabled: The snapshot is not enabled for remote replication.

Creating a group snapshot

You can create a snapshot of a group of volumes, and you can also create a group snapshot schedule to automate group snapshots. A single group snapshot can consistently snapshot up to 32 volumes at one time.

Steps

1. Click **Management > Volumes**.
2. Use the check boxes to select multiple volumes for a group of volumes.
3. Click **Bulk Actions**.
4. Click **Group Snapshot**.
5. Enter a new group snapshot name in the Create Group Snapshot of Volumes dialog box.
6. **Optional:** Select the **Include Each Group Snapshot Member in Replication When Paired** check box to ensure that each snapshot is captured in replication when the parent volume is paired.
7. Select a retention option for the group snapshot:
 - Click **Keep Forever** to retain the snapshot on the system indefinitely.
 - Click **Set Retention Period** and use the date spin boxes to choose a length of time for the system to retain the snapshot.
8. To take a single, immediate snapshot, perform the following steps:
 - a. Click **Take Group Snapshot Now**.
 - b. Click **Create Group Snapshot**.
9. To schedule the snapshot to run at a future time, perform the following steps:
 - a. Click **Create Group Snapshot Schedule**.
 - b. Enter a **New Schedule Name**.
 - c. Select a **Schedule Type** from the list.
 - d. **Optional:** Select the **Recurring Schedule** check box to repeat the scheduled snapshot periodically.
 - e. Click **Create Schedule**.

Editing group snapshots

You can edit the replication and retention settings for existing group snapshots.

1. Click **Data Protection > Group Snapshots**.
2. Click the Actions icon for the group snapshot you want to edit.
3. In the resulting menu, select **Edit**.
4. **Optional:** To change the replication setting for the group snapshot:
 - a. Click **Edit** next to **Current Replication**.
 - b. Select the **Include Each Group Snapshot Member in Replication When Paired** check box to ensure that each snapshot is captured in replication when the parent volume is paired.
5. **Optional:** To change the retention setting for the group snapshot, select from the following options:
 - a. Click **Edit** next to **Current Retention**.
 - b. Select a retention option for the group snapshot:
 - Click **Keep Forever** to retain the snapshot on the system indefinitely.
 - Click **Set Retention Period** and use the date spin boxes to choose a length of time for the system to retain the snapshot.
6. Click **Save Changes**.

Deleting a group snapshot

You can delete a group snapshot from the system. When you delete the group snapshot, you can choose whether all snapshots associated with the group are deleted or retained as individual snapshots.

If you delete a volume or snapshot that is a member of a group snapshot, you can no longer roll back to the group snapshot. However, you can roll back each volume individually.

1. Click **Data Protection > Group Snapshots**.
2. Click the Actions icon for the snapshot you want to delete.
3. In the resulting menu, click **Delete**.
4. Select from one of the following options in the confirmation dialog box:
 - Click **Delete group snapshot AND all group snapshot members** to delete the group snapshot and all member snapshots.
 - Click **Retain group snapshot members as individual snapshots** to delete the group snapshot but keep all member snapshots.
5. Confirm the action.

Roll back volumes to a group snapshot

You can roll back a group of volumes at any time to a group snapshot.

When you roll back a group of volumes, all volumes in the group are restored to the state they were in at the time the group snapshot was created. Rolling back also restores volume sizes to the size recorded in the original snapshot. If the system has purged a volume, all snapshots of that volume were also deleted at the time of the purge; the system does not restore any deleted volume snapshots.

1. Click **Data Protection > Group Snapshots**.

2. Click the Actions icon for the group snapshot you want to use for the volume rollback.
3. In the resulting menu, select **Rollback Volumes To Group Snapshot**.
4. **Optional:** To save the current state of the volumes before rolling back to the snapshot:
 - a. In the **Rollback To Snapshot** dialog box, select **Save volumes' current state as a group snapshot**.
 - b. Enter a name for the new snapshot.
5. Click **Rollback Group Snapshot**.

Editing members of group snapshot

You can edit the retention settings for members of an existing group snapshot.

1. Click **Data Protection > Snapshots**.
2. Click the **Members** tab.
3. Click the Actions icon for the group snapshot member you want to edit.
4. In the resulting menu, select **Edit**.
5. To change the replication setting for the snapshot, select from the following options:
 - Click **Keep Forever** to retain the snapshot on the system indefinitely.
 - Click **Set Retention Period** and use the date spin boxes to choose a length of time for the system to retain the snapshot.
6. Click **Save Changes**.

Clone multiple volumes

You can create multiple volume clones in a single operation to create a point-in-time copy of the data on a group of volumes.

When you clone a volume, the system creates a snapshot of the volume and then creates a new volume from the data in the snapshot. You can mount and write to the new volume clone. Cloning multiple volumes is an asynchronous process and takes a variable amount of time depending on the size and number of the volumes being cloned.

Volume size and current cluster load affect the time needed to complete a cloning operation.

Steps

1. Click **Management > Volumes**.
2. Click the **Active** tab.
3. Use the check boxes to select multiple volumes, creating a group of volumes.
4. Click **Bulk Actions**.
5. Click **Clone** in the resulting menu.
6. Enter a **New Volume Name Prefix** in the **Clone Multiple Volumes** dialog box.

The prefix is applied to all volumes in the group.

7. **Optional:** Select a different account to which the clone will belong.

If you do not select an account, the system assigns the new volumes to the current volume account.

8. **Optional:** Select a different access method for the volumes in the clone.

If you do not select an access method, the system uses the current volume access.

9. Click **Start Cloning**.

Cloning multiple volumes from a group snapshot

You can clone a group of volumes from a point-in-time group snapshot. This operation requires that a group snapshot of the volumes already exist, because the group snapshot is used as the basis to create the volumes. After you create the volumes, you can use them like any other volume in the system.

Volume size and current cluster load affect the time needed to complete a cloning operation.

1. Click **Data Protection > Group Snapshots**.
2. Click the Actions icon for the group snapshot you want to use for the volume clones.
3. In the resulting menu, select **Clone Volumes From Group Snapshot**.
4. Enter a **New Volume Name Prefix** in the **Clone Volumes From Group Snapshot** dialog box.

The prefix is applied to all volumes created from the group snapshot.

5. **Optional:** Select a different account to which the clone will belong.

If you do not select an account, the system assigns the new volumes to the current volume account.

6. **Optional:** Select a different access method for the volumes in the clone.

If you do not select an access method, the system uses the current volume access.

7. Click **Start Cloning**.

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