Volume restore management using SnapVault

System Manager Classic

NetApp
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Table of Contents

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Volume restore using SnapVault overview

This content describes how to quickly restore a volume from a SnapVault backup in ONTAP when there is a data loss.

You should use this content if you want to restore from the SnapVault backup in the following way:

- You are working with clusters running ONTAP 9.
- You are a cluster administrator.
- You have configured the SnapVault relationship following the procedure described in Volume backup using SnapVault
- You do not want to perform a single file or LUN restore.
- You want to use best practices, not explore every available option.
- You do not want to read a lot of conceptual background.
- You want to use the *Classic* System Manager UI for ONTAP 9.7 and earlier releases, not the ONTAP System Manager UI for ONTAP 9.7 and later.

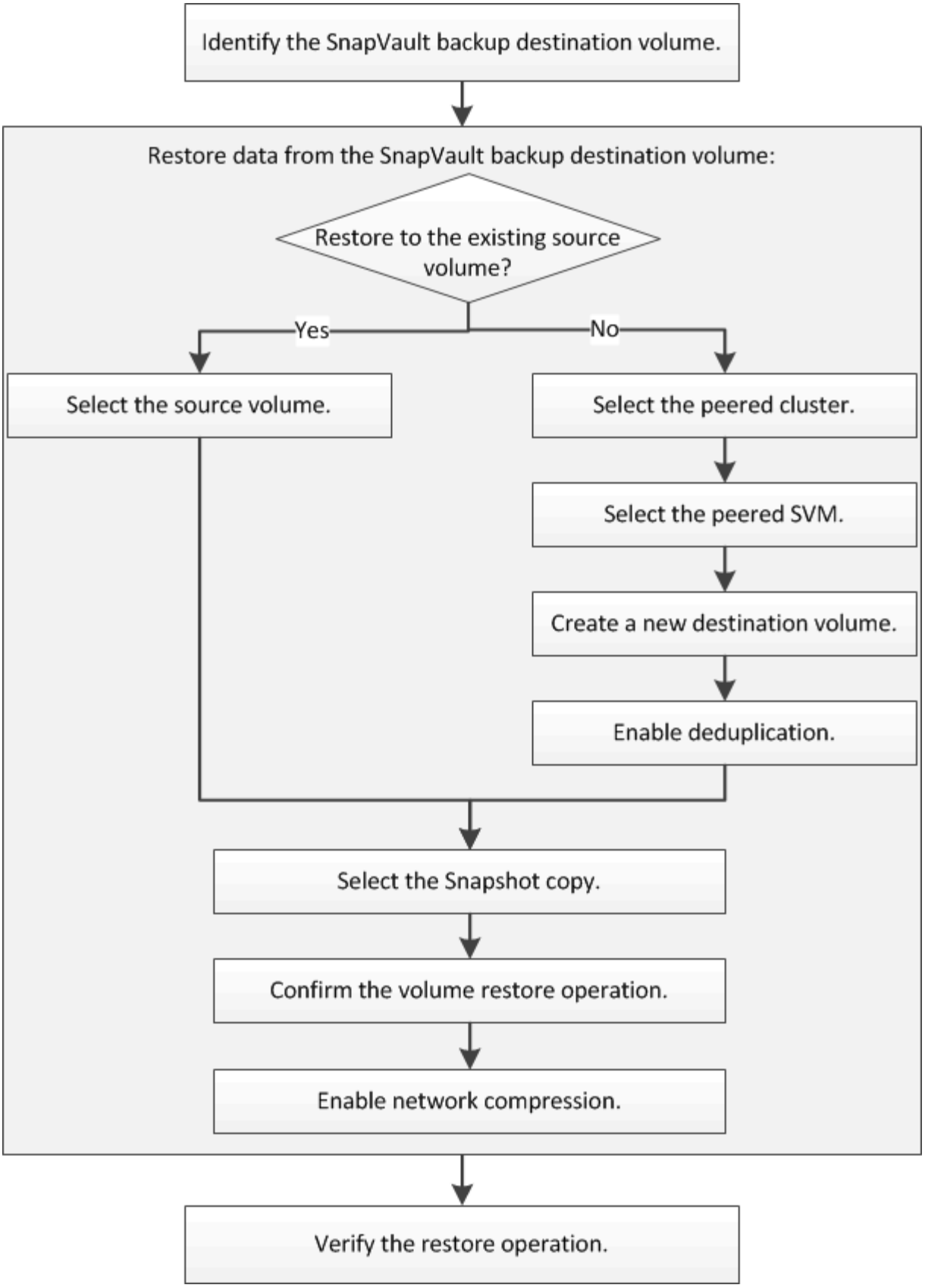
  ONTAP System Manager documentation

If these assumptions are not correct for your situation, or if you want more conceptual background information, you should see the following resources:

- Data protection
- NetApp Technical Report 4015: SnapMirror Configuration and Best Practices for ONTAP 9.1, 9.2
- NetApp Technical Report 4183: SnapVault Best Practices

Volume restore workflow

When your source volume is unavailable or data is corrupted, you can perform a restore from a SnapVault backup. Restoring a volume from a SnapVault backup involves selecting the SnapVault destination volume, restoring either to a new volume or existing volume, and verifying the restore operation.



Identify the SnapVault backup destination volume

You must identify the SnapVault backup destination volume from which you want to restore data when the data in the source volume is corrupted or lost.

About this task

You must perform this task from the **source** cluster.

Steps

1. Enter the URL `https://IP-address-of-cluster-management-LIF` in a web browser and log in to System Manager using your cluster administrator credential.
2. Navigate to the **Volumes** window.
3. Identify the destination volume in the SnapVault relationship and the name of the SVM that contains the volume:
   - ONTAP 9.3 or later: Double-click the volume to view the details, and then click **PROTECTION**.
   - ONTAP 9.2 or earlier: Click the **Data Protection** tab at the bottom of the Volumes window.

Restore data from a SnapVault backup

After selecting the SnapVault backup destination volume, you must perform the restore operation either to a new volume to test the backed-up data or to an existing volume to restore the lost or corrupted data.

About this task

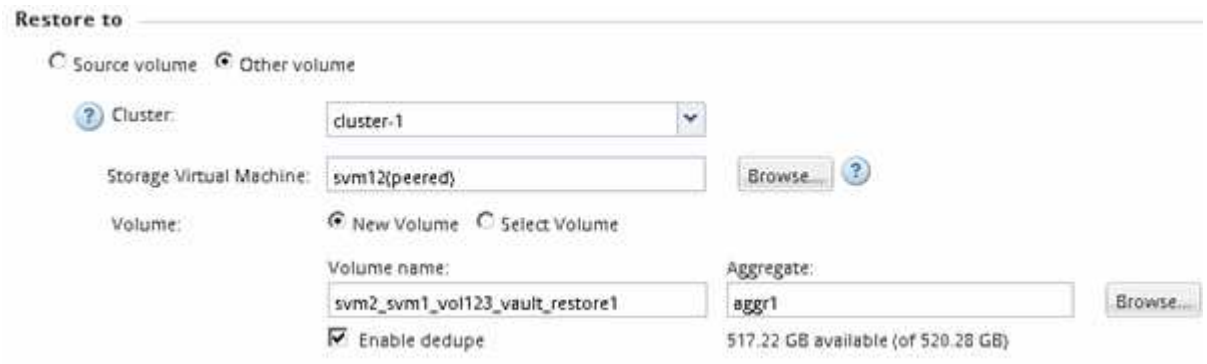
You must perform this task from the **destination** cluster.

Steps

1. Depending on the System Manager version that you are running, perform one of the following steps:
   - ONTAP 9.4 or earlier: Click **Protection** > **Relationships**.
   - Starting with ONTAP 9.5: Click **Protection** > **Volume Relationships**.
2. Select the SVM that contains the SnapVault backup destination volume, and then click **Operations** > **Restore**.
3. In the **Restore** dialog box, restore the data to the original source volume or a new volume:

If you want to restore to…	Then…
The original source volume	Select **Source volume**.

If you want to restore to…	Then…
A new volume	a. Select **Other volume**. b. Select the peered cluster and the peered SVM for the volume. c. Select a peered SVM from the list. d. If the SVM is not peered, create the SVM peer relationship: i. Select the SVM. ii. Click **Authenticate**. iii. Enter the cluster administrator's credentials of the peered cluster, and then click **Create**. e. Select **New Volume**. f. If you want to change the default name, displayed in the format `destination_SVM_name_destination_volume_name_restore`, specify a new name and select the containing aggregate for the volume. g. Select the **Enable dedupe** check box.



4. Select either the latest Snapshot copy or select a specific Snapshot copy that you want to restore.
5. Select the **OK to restore the volume from the Snapshot copy** check box.
6. Select the **Enable Network Compression** check box to compress the data that is being transferred during the restore operation.
7. Click **Restore**.

   During the restore process, the volume being restored is changed to read-only. After the restore operation finishes, the temporary relationship is removed and the restored volume is changed to read/write.

8. Click **OK** in the message box.

Verify the restore operation

After performing the restore operation from the SnapVault backup destination volume, you must verify the status of the restore operation on the source cluster.

About this task

You must perform this task from the **source** cluster.

Steps

1. Navigate to the **Volumes** window.
2. Select the source volume in the volumes list and perform one of the following actions, depending on your ONTAP version:
   - Starting with ONTAP 9.3: Double-click the source volume to view the details, and then click **PROTECTION** to identify the destination volume in the SnapMirror relationship and the name of the SVM that contains the volume.
   - ONTAP 9.2 or earlier: Click the **Data Protection** bottom tab to identify the destination volume in the SnapMirror relationship and the name of the SVM that contains the volume. The Type field displays `Restore` temporarily. After the restore operation is completed, the field displays `Vault`.

     You should troubleshoot any issues in the SnapVault relationships. The troubleshooting procedures for SnapMirror relationships are also applicable to SnapVault relationships.

     NetApp Technical Report 4015: SnapMirror Configuration and Best Practices for ONTAP 9.1, 9.2

Where to find additional information

Additional information is available to help you to manage the SnapVault backup relationships and to use other methods of data protection to protect the availability of your data resources.

- Volume disaster recovery preparation

  Describes how to quickly configure a destination volume on a different ONTAP cluster in preparation for disaster recovery.

- Volume disaster recovery

Describes how to quickly activate a destination volume from a different ONTAP cluster after a disaster, as well as how to restore the SnapMirror relationship to its original state by reactivating the source volume after its recovery.

- Data protection

  Describes how to prevent data loss using Snapshot copies and SnapMirror replication to a remote system

- Data protection using tape backup

  Describes how to back up and recover data using tape backup and recovery features in clusters, using NDMP and dump technologies.

- ONTAP concepts

  Describes conceptual information about ONTAP clusters in preparation for disaster recovery.