Serve data from a SnapMirror DR destination volume

ONTAP 9

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March 08, 2024
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Serve data from a SnapMirror DR destination volume

Make the destination volume writeable

You need to make the destination volume writeable before you can serve data from the volume to clients. You can use the `snapmirror quiesce` command to stop scheduled transfers to the destination, the `snapmirror abort` command to stop ongoing transfers, and the `snapmirror break` command to make the destination writeable.

About this task

You must perform this task from the destination SVM or the destination cluster.

Steps

1. Stop scheduled transfers to the destination:

   ```bash
   snapmirror quiesce -source-path SVM:volume|cluster://SVM/volume, ...
   -destination-path SVM:volume|cluster://SVM/volume, ...
   
   For complete command syntax, see the man page.
   
   The following example stops scheduled transfers between the source volume `volA` on `svm1` and the destination volume `volA_dst` on `svm_backup`:
   ```
   ```bash
   cluster_dst::> snapmirror quiesce -source-path svm1:volA -destination-path svm_backup:volA_dst
   ```

2. Stop ongoing transfers to the destination:

   ```bash
   snapmirror abort -source-path SVM:volume|cluster://SVM/volume, ...
   -destination-path SVM:volume|cluster://SVM/volume, ...
   
   For complete command syntax, see the man page.
   
   This step is not required for SnapMirror Synchronous relationships (supported beginning with ONTAP 9.5).
   
   The following example stops ongoing transfers between the source volume `volA` on `svm1` and the destination volume `volA_dst` on `svm_backup`:
   ```
   ```bash
   cluster_dst::> snapmirror abort -source-path svm1:volA -destination-path svm_backup:volA_dst
   ```

3. Break the SnapMirror DR relationship:

   ```bash
   snapmirror break -source-path SVM:volume|cluster://SVM/volume, ...
   -destination ...
   ```
For complete command syntax, see the man page.

The following example breaks the relationship between the source volume `volA` on `svm1` and the destination volume `volA_dst` on `svm_backup`:

```
cluster_dst::> snapmirror break -source-path svm1:volA -destination-path svm_backup:volA_dst
```

### Other ways to do this in ONTAP

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### Configure the destination volume for data access

After making the destination volume writeable, you must configure the volume for data access. NAS clients, NVMe subsystem, and SAN hosts can access the data from the destination volume until the source volume is reactivated.

**NAS environment:**

1. Mount the NAS volume to the namespace using the same junction path that the source volume was mounted to in the source SVM.
2. Apply the appropriate ACLs to the SMB shares at the destination volume.
3. Assign the NFS export policies to the destination volume.
4. Apply the quota rules to the destination volume.
5. Redirect clients to the destination volume.
6. Remount the NFS and SMB shares on the clients.

**SAN environment:**

1. Map the LUNs in the volume to the appropriate initiator group.
2. For iSCSI, create iSCSI sessions from the SAN host initiators to the SAN LIFs.
3. On the SAN client, perform a storage re-scan to detect the connected LUNs.

For information about NVMe environment, see [SAN administration](#).

### Reactivate the original source volume

You can reestablish the original data protection relationship between the source and
destination volumes when you no longer need to serve data from the destination.

**About this task**

- The procedure below assumes that the baseline in the original source volume is intact. If the baseline is not intact, you must create and initialize the relationship between the volume you are serving data from and the original source volume before performing the procedure.
- Background preparation and the data warehousing phase of an XDP SnapMirror relationship can take a long time. It is not uncommon to see the SnapMirror relationship reporting the status "preparing" for an extended time period.

**Steps**

1. Reverse the original data protection relationship:

   ```
   snapmirror resync -source-path SVM:volume -destination-path SVM:volume
   ```

   For complete command syntax, see the man page.

   You must run this command from the original source SVM or the original source cluster. Although resync does not require a baseline transfer, it can be time-consuming. You might want to run the resync in off-peak hours. The command fails if a common Snapshot copy does not exist on the source and destination. Use snapmirror initialize to re-initialize the relationship.

   The following example reverses the relationship between the original source volume, volA on svm1, and the volume you are serving data from, volA_dst on svm_backup:

   ```
   cluster_src::> snapmirror resync -source-path svm_backup:volA_dst -destination-path svm1:volA
   ```

2. When you are ready to reestablish data access to the original source, stop access to the original destination volume. One way to do this is to stop the original destination SVM:

   ```
   vserver stop -vserver SVM
   ```

   For complete command syntax, see the man page.

   You must run this command from the original destination SVM or the original destination cluster. This command stops user access to the entire original destination SVM. You may want to stop access to the original destination volume using other methods.

   The following example stops the original destination SVM:

   ```
   cluster_dst::> vserver stop svm_backup
   ```

3. Update the reversed relationship:

   ```
   snapmirror update -source-path SVM:volume -destination-path SVM:volume
   ```

   For complete command syntax, see the man page.
You must run this command from the original source SVM or the original source cluster.

The following example updates the relationship between the volume you are serving data from, volA_dst on svm_backup, and the original source volume, volA on svml:

```
cluster_src::> snapmirror update -source-path svm_backup:volA_dst
-destination-path svml:volA
```

4. From the original source SVM or the original source cluster, stop scheduled transfers for the reversed relationship:

```
snapmirror quiesce -source-path SVM:volume -destination-path SVM:volume
```

For complete command syntax, see the man page.

You must run this command from the original source SVM or the original source cluster.

The following example stops scheduled transfers between the original destination volume, volA_dst on svm_backup, and the original source volume, volA on svml:

```
cluster_src::> snapmirror quiesce -source-path svm_backup:volA_dst
-destination-path svml:volA
```

5. When the final update is complete and the relationship indicates "Quiesced" for the relationship status, run the following command from the original source SVM or the original source cluster to break the reversed relationship:

```
snapmirror break -source-path SVM:volume -destination-path SVM:volume
```

For complete command syntax, see the man page.

You must run this command from the original source SVM or the source cluster.

The following example breaks the relationship between the original destination volume, volA_dst on svm_backup, and the original source volume, volA on svml:

```
cluster_scr::> snapmirror break -source-path svm_backup:volA_dst
-destination-path svml:volA
```

6. From the original source SVM or the original source cluster, delete the reversed data protection relationship:

```
snapmirror delete -source-path SVM:volume -destination-path SVM:volume
```

For complete command syntax, see the man page.
You must run this command from the original source SVM or the original source cluster.

The following example deletes the reversed relationship between the original source volume, `volA` on `svm1`, and the volume you are serving data from, `volA_dst` on `svm_backup`:

```
cluster_src::> snapmirror delete -source-path svm_backup:volA_dst -destination-path svm1:volA
```

7. Release the reversed relationship from the original destination SVM or the original destination cluster.

```
snapmirror release -source-path SVM:volume -destination-path SVM:volume
```

You must run this command from the original destination SVM or the original destination cluster.

The following example releases the reversed relationship between the original destination volume, `volA_dst` on `svm_backup`, and the original source volume, `volA` on `svm1`:

```
cluster_dst::> snapmirror release -source-path svm_backup:volA_dst -destination-path svm1:volA
```

8. Reestablish the original data protection relationship from the original destination:

```
snapmirror resync -source-path SVM:volume -destination-path SVM:volume
```

For complete command syntax, see the man page.

The following example reestablishes the relationship between the original source volume, `volA` on `svm1`, and the original destination volume, `volA_dst` on `svm_backup`:

```
cluster_dst::> snapmirror resync -source-path svm1:volA -destination-path svm_backup:volA_dst
```

9. If needed, start the original destination SVM:

```
vserver start -vserver SVM
```

For complete command syntax, see the man page.

The following example starts the original destination SVM:

```
cluster_dst::> vserver start svm_backup
```

After you finish
Use the `snapmirror show` command to verify that the SnapMirror relationship was created. For complete command syntax, see the man page.